

Datta Meghe Institute of Higher Education and Research
(Deemed to be University)
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Mahatma Gandhi Ayurved College, Hospital & Research Centre,
Salod (H), Wardha

CLINICAL RESEARCHES IN AYURVEDA

CLINICAL ADVANCES IN AYURVEDA

e- Book



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CLINICAL ADVANCES IN AYURVEDA - 2023



**Mahatma Gandhi Ayurved College, Hospital & Research Centre,
Salod (H), Wardha, Maharashtra**

Constituent Unit of



**Datta Meghe Institute of Higher Education and Research
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CLINICAL RESEARCHES IN AYURVED

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About DMIHER (Deemed To Be University)

A Datta Meghe Institute of Medical science currently as a Datta Meghe Institute of Higher Education and Research (Deemed to be University) was granted the status of Deemed to be University by University Grants Commission, on 24th May, 2005. Immediately after getting the Deemed to be University status, the DMIHER DMIMS (DU), has opted for inspection by National Assessment & Accreditation Council, and accordingly Peer Team from NAAC inspected the DMIHER DMIMS (DU), campus and its constituent units and accredited the DMIHER DMIMS (Deemed to be University) with 'A' Grade, in March 2007. Thereafter, Datta Meghe Institute of Medical Sciences (Deemed to be University) was conferred 'A' Grade status by the Ministry of HRD, Government of India amongst the Deemed Universities in the Country, in the month of May 2013. It has been re-accredited with the 'Grade A' by the National Assessment and Accreditation Council (NAAC) for a period of five years, in March 2013. Thereafter, in the 3rd cycle of re-accreditation by the NAAC, the University has been re-accredited with "A+" Grade making it a unique Health Sciences University in the Country to have such a unique distinction, in the 3rd cycle of its re-accreditation, in the year 2017. In the 4th cycle of re-accreditation by the NAAC, the University has been re-accredited with "A++" Grade making remarkable position of distinction, in the 4th cycle of its re-accreditation, in the year 2023 with 3.78 CGPA grade. The university topped in NIRF & Times Higher Education Impact Rankings 2022 rankings.

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Preface

This book addresses the clinical researches in Ayurveda, identifies the research hunting potential of faculties which requires an understanding of how political, social and scientific factors intersect to express Ayurveda in today's era as a unique science. The content of this book is according updates in research and advances in clinical methods. All the types of clinical researches are covered in this book regarding case reports, original research and clinical research review.

Along with the book also included one special 35 chapters regarding current and emergent medicinal cases, dermatology cases, rare cases, pre clinical studies, new lifestyle disorders, I hope the book will fulfill the need of every research scholar, and Post graduate students & faculties in Ayurveda.

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First we thank all our family members specially our 14 yrs daughter Ku. Nakshtra for her unconditional love, immense support and encouragement. Without her help it would not have been possible for us to finish the task smoothly. We express my sincere thanks to our Mahatma Gandhi Ayurved College Management Team specially our inspiration Our Honorable Chancellor Shri. Dattaji Meghe, Respected Honorable Shri. Sagarji Meghe sir, Shri. DR.Abhyuday Meghe sir, Shri. Ravi Meghe sir and I also express sincere thanks to our DMIHER executives Pro-chancellor, Dr Vedprakash Mishra sir, our V.C. Dr. Lalit Waghmare sir, Pro-V.C. Dr. Gaurav Mishra sir, Our Deputy general Dr.Rajiv Borle sir, Chief Co-coordinator Dr.S.S. Patel sir, Respected Registrar Dr.Shweta Kale-Pisulkar, We also express our sincere thanks to Mahatma Gandhi Ayurved college teachers and colleagues specially our Dean Dr.Vaishali Kuchewar madam, Dean Academics Dr. Anita Wanjari madam, sir, Vice Dean Dr.Gaurav Sawarkar sir. We immensely thankful to Dr. Bhushan Mhaiskar who and make all necessary techno support for making this book.



Dr.Arun Uttam Wankhede
Dr. Bhushan Deoraoji Mhaiskar
Dr.Sushama R Khirodkar
Wardha | 29 Sept 2023



Dr. Vaishali Kuchewar
Dean
MGACH&RC

Message

Warm and Happy greeting to all.

I am immensely happy that **Clinical Researches In Ayurveda**; e-book was published online.

Every year, Our DMIHER University offers some academic enriching activities like Seminar, workshop, Quiz etc. and promoting publishing books and research articles to enhance the knowledge of Faculties, Postgraduates Undergraduates under the able guidance of our management, MGAC continues to walk on the way of success with confidence.

I also congratulate editors, authors and chapter contributors for their chapter publishing in this e book.

Dr. Vaishali Kuchewar
Dean
MGACH&RC
Salod (H), Hirapur, Wardha.

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1.

**CONTRIBUTION OF AYURVEDA FOR THE MANAGEMENT OF
AVABAHUK (ADHESIVE CAPSULITIS) -A CASE REPORT*****¹Dr.Sawarkar Gaurav,²Dr.Sawarkar Punam**

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ABSTRACT

Adhesive Capsulitis (Frozen shoulder) is a clinical condition that causes pain and restricted shoulder joint movement. It puts a massive strain on patients in their most productive years. The etiology of frozen shoulder is unknown, but diabetic patients may suffer more frequently. To date, no definite treatment is available for Adhesive Capsulitis. In classical texts of Ayurveda, *Avabahukis aUrdhwaJatrugataVikara* occurring due to *Dhatukshayajanya Vata Prakopah* has been correlated with Adhesive Capsulitis that different modalities can be treated in Ayurveda such as *Nasya* or *Patra-PindaSwedana*, etc. This case report aims to assess the efficacy of *Ayurvedic* management for a patient with adhesive capsulitis. A single case study of a 70 years old female presented with pain in the right shoulder with limited range of motion (R.O.M.) and headache for two months. The Patient has been prescribed an external therapy consisting of local *Snehana* with *Dhanvantari Taila*, local *PatraPottali Sweda*, and *Marsh Nasya* with *Ksheerbala Taila* for seven consecutive seven days. Simultaneously, internal therapy (*Rasnasaptak Kwatha*, *Asthiposhak Vati*, *Chandraprabha Vati*) was also advised for 21 days. After successfully combining intervention with *Shodhana* and *Shaman Chikitsa*, the Patient demonstrated increased shoulder R.O.M., decreased pain, reduction in stiffness & improvement in muscle power, and various diagnostic signs. Utilizing the basic concepts of Ayurveda (*Nidanpanchaka*), drugs with properties such as *Vata-Kaphahara*, *Snigdha*, *Guru*, and *Bruhana*, but *Ushna Veerya* were used to manage this condition which showed promising results. *Ayurvedic* management with *Shodhana* & *Shamana Chikitsa* based on the fundamentals of Ayurveda is effective in managing *Avabahuka* (Adhesive Capsulitis).

Keywords- Adhesive Capsulitis, Frozen shoulder, *Avabahuka*, *Nasya*, *UrdhwJatrugataVikara*, *Dhatukshaya*, *Ksheerbala Taila*, *Snehana*, *Swedana*.

Introduction:

Adhesive capsulitis is a nonspecific chronic inflammatory reaction of tissues in the glenohumeral joint which causes synovial thickening. This thickening results in a limited range of motion (R.O.M.) of the shoulder joint, especially its abduction and external rotation. Other signs and symptoms include severe pain at night that is aggravated by palpation of the anterolateral aspect of the shoulder^[1]. Adhesive capsulitis is also termed frozen shoulder syndrome, periarticular adhesions, pericapsulitis, irritative capsulitis, periarthritis of the shoulder, scapulohumeral periarthritis, humeroscapular fibrositis, bursitis calcarea, Duplay's syndrome, the shoulder portion of the shoulder-hand syndrome, and stiff and painful shoulder^[2].

People with frozen shoulders have limitations in both active and passive ranges of motion. They also tend to have the most trouble rotating their arm or shoulder outward, away from their body, and putting the affected arm behind their back.

The onset of this clinical entity can be insidious or occurs after an injury. Secondary adhesive capsulitis can result from a shoulder pathology such as a dislocation, fracture, osteoarthritis, or a neurological condition leading to muscular imbalances^[3]. Its risk factors include Diabetes, trauma, hypertriglyceridemia, and thyroid disease^[4]. The incidence of adhesive capsulitis in the general population is 2-5% and 10-20% in patients with diabetes^[5]. It affects females slightly more than males and is usually seen in ages 40-70^[6,7]. The non-dominant arm is more likely to be involved^[5,6]. About 12% of individuals affected develop the condition bilaterally. Recurrence is rare in the same shoulder^[8]. Diabetes can alter collagen formation and delay healing following traumatic events or surgery. Individuals with adhesive capsulitis generally progress through 4 stages: Pre-freezing (1-3 months), Freezing (3-9 months), Frozen (9-14 months), and Thawing (12-14 months)⁸. Treatment measures for adhesive capsulitis in conventional medicine include Painkillers, Non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen to reduce inflammation and alleviate mild pain; hot or cold compression packs, and subside pain and swelling.

Moreover, corticosteroid injections routinely advised for such patients are discouraged due to their specific adverse effects, including further damage to the shoulder. Transcutaneous electrical nerve stimulation (TENS) is one of the treatment modalities in physiotherapy, which works to manage adhesive capsulitis by numbing the nerve endings in the spinal cord to control the pain. Other techniques in physical therapy consist of some exercises & specific manipulations skills, and those maintain the mobility and flexibility of the joint up to the maximum extent without straining the shoulder or causing too much pain. Surgical measures

such as anesthesia and Shoulder arthroscopy are rarely used in a small percentage of cases to enhance the joint's mobility due to their invasive nature^[9]. However, all these measures have to be used cautiously or have limited use in geriatric Patients considering their high chances of side effects and contraindications.

Therefore, various treatment measures in Ayurveda can become a ray of hope for such patients due to their non-invasive nature. According to the classics of Ayurveda, *Avabahuk* is a disease that can be correlated with Frozen Shoulder. This paper aims to focus on the efficacy of *Panchakarma & Shamana Chikitsa* for a patient with adhesive capsulitis.

Patient's Information:-

A 70-year-old female patient was clinically diagnosed as *Avabahuk*, who presented with chief

S. N.	Nature of complaint of Patient	Duration
1.	Pain in right shoulder during shoulder abduction and flexion	Two months
2.	Constant pain in the backside of the neck and upper back region	Two months
3.	Stiffness in the right shoulder	Two months
4.	Restricted movement of the right shoulder (especially abduction and flexion)	Three days
5	Headache(due to lack of sleep)	Three days

complaints mentioned in table no.1.

Table No 1: Chief complaints

Progression of disease:-

The Patient was well for two months. Later, she complained about chief complaints such as pain in the right shoulder, the backside of the neck, and restricted movement of the right shoulder. Recently for three days, she had a headache due to disturbed sleep. She visited many allopathic physicians and orthopedic surgeons but did not get significant and complete relief. Therefore, she visited Mahatma Gandhi Ayurveda College Hospital and Research Centre, Salod, Wardha, Maharashtra, for *Panchkarma* & further treatment. After going through the history; the Patient was diagnosed with a case of *Avabahuk*.

HISTORY OF THE PATIENT:

Details of the Patient's history are given in table no.2.

Table No.2: History of Patient

S. N.	Past History	Duration
1.	Medical history	K/c/o/ Hypertension for two years No history of Diabetes mellitus
2.	Surgical history	<ul style="list-style-type: none"> • H/o-Cataract surgery before two years • Angiography before one year • No history of falls or trauma
3.	Family history	History of Diabetes mellitus from the maternal side
4.	Ahara (Diet)	Pure veg (Poor appetite)
5.	Vihara (Lifestyle)	Daily exercise (Brisk walking for half-hour), Ratri jagran
6.	Sleep	6-7 hours but disturbed
7.	Addiction	Nil

CLINICAL FINDINGS:

The Patient was diagnosed with adhesive capsulitis based on the clinical findings mentioned in table no.3, 4; 5. The diagnosis of adhesive capsulitis was made based on clinical examination and evaluation. The details of the general & systemic Examination of the Patient are mentioned in table no.3. At the same time, local examinations specific to the disease diagnosis are provided in table no.4. A decrease in a particular range of motions of shoulder Joints is depicted in table no.5. Specific examinations to assess the muscle strength of the shoulder joints are tabulated in table no.6.

Table No.3: General & systemic Examination of the Patient

S.N.	Examination	Finding
1.	Pulse rate	74/min
2.	Respiratory rate	16/min
3.	Blood pressure	110/80mm hg
4.	Body weight	53kg
5.	Built	Moderate
6.	Pallor	Absent
7.	Icterus.	Absent
8.	Cyanosis & Clubbing	Absent
9.	Lymphadenopathy	Absent
10.	Tongue coating	Mild coated
11.	CVS	S1 & S2 audible
12.	RS	NVBS, No added sound
13.	P/A	No organomegaly & No tenderness
14.	C.N.S.	No detected clinically

Table No. 4: Local examinations specific to the diagnosis of the disease

S. N.	Type of Examination	Findings
1.	Inspection	<ul style="list-style-type: none"> • The swelling was present over the affected site. • Decreased range of motion, especially abduction and external rotation of the right shoulder joint • Decreased Functional external rotation of the right shoulder joint • + Spurling's sign (cervical compression test) on the right side • + Apley scratch test on right shoulder joint • + Empty can test • + Neer's Impingement • No redness & any demonstrable deformities over the local region. • - ve Drop arm sign • - ve Hawkin's Kennedy • - ve coracoid impingement • - ve cross-arm • - ve apprehension tests
2.	Palpation	<ul style="list-style-type: none"> • Tenderness is present at the right scapular region & along the right biceps tendon and coracoid process +++ • Tenderness over right shoulder ++ • No raised local temperature.

Table No. 5: Range of Motion of Shoulder Joint

S.N.	Specific Motion of Shoulder joint	Right	Left
1	Flexion	155 degree	155 degree
2	Functional External rotation	C6-C7, pain	T4
3	External Rotation	50 degrees with Pain	90 degrees (Active)
4	Functional Internal Rotation	T12, pain	T12
5	Abduction	120 degrees with Pain	170 degree

Table no.6: Examinations of Muscle strength of the shoulder joint

S.N.	Motion of Shoulder	Right	Left
1	Flexion	$\frac{3}{4}$	$\frac{4}{4}$
2	External Rotation	$\frac{1}{3}$	$\frac{3}{3}$
3	Internal Rotation	$\frac{1}{2}$	$\frac{2}{2}$
4	Abduction	$\frac{1}{3}$	$\frac{3}{3}$

INVESTIGATIONS:-

The Patient was advised for radiological investigations such as a Plain X-ray and U.S.G. of the right shoulder joint. However, the Patient was not willing to undergo these investigations.

DIAGNOSIS:-

Frozen shoulder- Frozen state (*Avabahuk*)

Therapeutic interventions:-

The line of treatment adopted in this Patient is given in Tables' no. 7 & 8.

Table No. 7:- Type of Panchakarma procedures adopted

S.N.	Name of procedure	Material	Duration
1.	Local <i>Snehana</i>	<i>Dhanvantar Taila</i>	07 days
2.	Local <i>Swedana</i>	<i>Patra Pottali Swedana</i>	07 days
3.	<i>Marsha Nasya</i>	<i>Ksheerbala Taila</i> (8 drops in each nostril)	07 days

Table no.8: Shamana Chikitsa

S.N.	Name of drug	Dose & frequency	Time of administration	Anupana	Duration
1.	<i>Asthiposhak Vati</i>	250 mg 1 B.D.	After food	Lukewarm Milk	21 days
2.	<i>Rasnasaptak Kwath</i>	10 ml B.D.	1 hour before the food	Lukewarm water	21 days
3.	<i>Punarnavadi Guggulu</i>	250 mg 3 BD	After food	Lukewarm water	21 days

THERAPEUTIC OUTCOME:

The therapeutic outcome of the adopted afore-said *Panchakarma* and *Shamana Chikitsa* are given in Table no.9.

**Table no.9: Therapeutic Outcome with Comparative assessment of
signsandsymptomsofthePatient**

S.N.	Assessment of signs and symptoms of the Patient	Before treatment	After treatment	
			After seven days	After 21 days
A	Symptoms of the Patient			
1	Pain in right shoulder during shoulder abduction and flexion	8(VAS)	2	0
2	Constant pain in the back side of the neck and upper back region	6 (VAS)	1	0
3	Stiffness in the right shoulder	+++	Absent	Absent
4	Headache(due to lack of sleep)	3 (VAS)	Absent	Absent
B	Signs of the Patient			
1	Tenderness at the right scapular region & along the right biceps tendon and coracoid process	+++	Absent	Absent
2	Tenderness over the right shoulder	++	Absent	Absent
3	Swelling over the right shoulder joint and surrounding region	Present	Absent	Absent
4	Spurling's sign(cervical compression test) on the right side	Positive	Negative	Negative
5	Apley scratch test on right shoulder joint	Positive	Negative	Negative
6	Empty can test	Positive	Positive	Negative
7	Neer's Impingement	Positive	Positive	Negative
C	Restricted movement of right shoulder			

1	Flexion	155 degree	155 degree	155 degree
2	Functional External rotation	C6-C7, pain	C6-C7, without pain	T4 9 No pain)
3	ExternalRotation	50 degrees with Pain	60 degrees without Pain	90degree(Active)
4	Functional InternalRotation	T12, pain	T12, without pain	T12
5	Abduction	120 degrees with Pain	140 degrees without pain	170 degrees without pain
D	Muscle strength of the shoulder joint			
1	Flexion	¾	4/4	4/4
2	ExternalRotation	1/3	3/3	3/3
3	InternalRotation	½	2/2	2/2
4	Abduction	1/3	3/3	3/3

DISCUSSION:

The shoulder joint has the greatest range of motion among all joints in the body and is vital to daily activities. Adhesive capsulitis is one of the painful clinical conditions occurring in this joint. There are three phases of frozen shoulder, i.e., Freezing, Frozen, and Thawing. The pathogenesis of *Avabahuk* in the context of Ayurveda is described in fig no. 1.

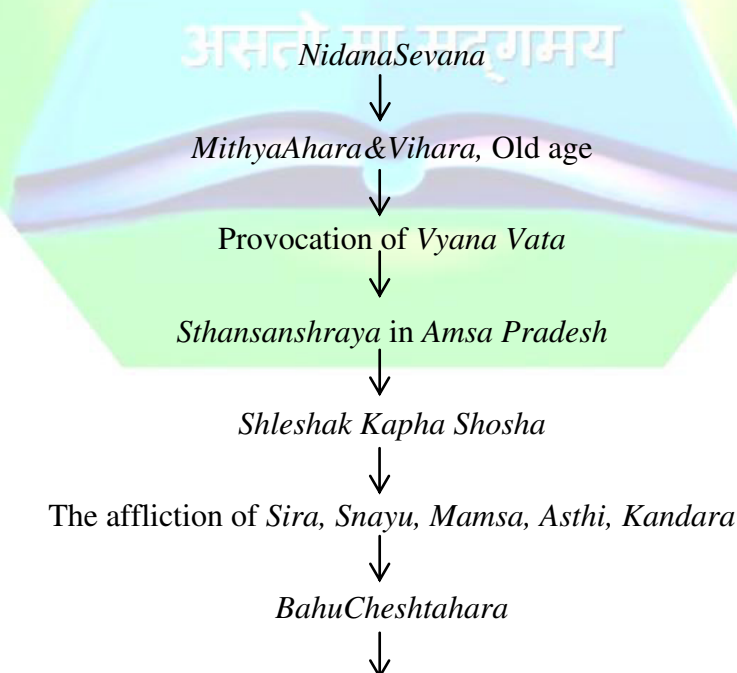
Figures:-

Fig No.1: Samprapti of Avabahuk

The specific *SampraptiGhataka* involved in its pathogenesis is tabulated in table no.10.

Table no.10: Samprapti Ghataka of Avabahuk

S. N.	Component of <i>Samprapti</i>	Findings
1.	<i>Dosha</i>	<i>Vyana Vata, Shleshak Kapha</i>
2.	<i>Dushya</i>	<i>Asthi , Mamsaas Dhatu &Sira ,Snayu, Kandaraas Upadhatu</i>
3.	<i>UdbhavaSthana</i>	<i>Pakwashaya</i>
4.	<i>VyaktaSthana</i>	<i>Bahu</i>
5.	<i>SancharaSthana</i>	<i>Amsa Pradesh</i>
6.	<i>Strotas</i>	<i>Mamsavaha, Asthivaha</i>
7.	<i>Marga</i>	<i>MadhyamaRogaMarga</i>

The Patient in the current study, diagnosed with a **Frozen** state of frozen shoulder, was approached at the *Panchkarm* center. There was a greater extent of stiffness and persistent limitations for the right shoulder joint motion due to inflammation. Therefore, treatment was primarily focused on reducing pain, stiffness, and residual inflammation with the help of specific *Panchakarma* procedures and drugs having analgesic and anti-inflammatory properties. A mild form of procedure i.e. Local *Patra-Pinda Swedana* and *Marsha Nasya* were used along with minimum internal medicines considering the old age of the Patient, Local *Snehana & Patra-Pinda Swedana* was selected first for her. As *Swedana* is an excellent procedure to reduce stiffness, *Patra-Pinda Swedana* having *Ruksha Snigdha* properties was preferred. It helps to restore the normal range of motion and shoulder functions. *Patra-Pinda Swedana* & local *Snehana* with *Dhanavanatara* Oil [10] have corrected restrictions in the hand's range of motion and strength. Local *Snehana* & *Swedana* reduces pain intensity and induces improved extremity arm movement, which is also supported by our previous clinical trials [11]. Both of these procedures may enhance drug absorption by increasing blood circulation. As the efferent vasodilator nerves are spread to the superficial surface of the face, they receive stimulation by fomentation and may increase the blood supply to the brain. *Dhanvantaram* Taila, used for local *Snehana* purposes, has excellent analgesic and anti-inflammatory effects that subsides muscle cramps, numbness, pain, and swelling [12].

According to Ayurveda, *Avabhaṅka* is considered one of the *Nanatmaja Vatavyadhi*. Therefore, *Bruhana Chikitsa* was selected here in the form of *Marsha Nasya*. *Nasya* is considered the best therapy for all *Urdhwajatrugata* and *BahuShirshagata Vatavikara*^[13]. It can be administered in the old age group also. So, *Marsha Nasya* with *Ksheerbala Taila* offers significant and encouraging results to correct any degenerative pathology in the cervical region, associated musculature, and joints. It yields excellent results in adhesive capsulitis by strengthening muscular tissues & facilitating the mobilization of the joint due to the lubricant action of *Ksheerbala Taila*. Raj GA et al. 2020[14] prove its role in the frozen shoulder. *Bala* (*Sidacordifolia*) is the main ingredient of *Ksheerbala Taila*. It is generally popular in clinical practice due to its properties, such as *Vata Shamak*, *Balya*, *Rasayana*, *Indriyaprasadana*, *Jeevana*, *Brumhana*, and *Vata Shamana*^[15]. This oil provides the optimum nutrition to the muscle tissues involved in the pathogenesis of the frozen shoulder due to its *Madhura Rasa* and *Madhura Vipaka*, *Guru*, *Snigdha*, *Pichchila Guna*, along with *Vata-Kaphahara* properties. *Vata-Pitta Shamak* property of *Goksheer* used in the preparation of *Ksheerbala Taila* reduces the inflammation and other degenerative processes in the shoulder joint. Its penetrating capacity at the deeper tissue, such as *Mansa*, *Asthi*, and *Sandhi*, is increased due to *Sukshma* and *Ashukari Guna* of *Til Taila*. It helps all essential herbs to penetrate the ten systems. The *Vata-Kaphahara* action of *Ksheerbala Taila* may positively impact either *Kaphavruta Vata* or *Vata* directly involved in the *Samprapti* of *Avabhaṅka*. It also acts as an anti-inflammatory drug and nourishes, helping the early recovery of the symptoms of a frozen shoulder.

Asthiposhak Vat i & *Punarnavadi Guggulu* is helpful in the frozen shoulder due to its anti-inflammatory nature^[16, 17]. *Rasnasaptak Kwath* reduces the stiffness and pain that occur as a result of *Samavastha*. It induces *Niramavastha* due to its *Dipana-Pachana* properties. It also offers a significant role in reducing pain and stiffness due to its pain-relieving and anti-inflammatory properties. According to Ayurveda's perspective, *Avabhaṅka* is a disease characterized by morbid *Vata-Dosha* localizing around the shoulder joint, thereby causing constriction of the *Siras* at this site, leading to loss of movements of the arm. *Rasnasaptak Kwath* induces encouraging results in this clinical condition due to its excellent *Vata Shamaka* property^[18].

CONCLUSION:

The collaborative treatment approach consists of Local oleation, sudation (*Patra-Pottalli Swedana*) & *Nasya Karma* with *Ksheerbala Taila* added with specific shaman *Chikitsa*. Ayurveda is a very easy, safe, and effective modality that can be adopted in the treatment of *Avabhaṅka*. Due to the same intervention, the Patient with a frozen shoulder was cured entirely.

without any adverse effects. The appropriate selection of procedures & drugs in Ayurveda can offer significant results in pain, stiffness in frozen shoulders, and improvement in the range of motion of shoulder joints without physiotherapy. The Patient can benefit from the treatments at O.P.D. levels with no extra burden over the Patient's pocket. Further clinical trials with a large sample size should be planned to enhance its wide use and generate clinical evidence.

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CONFLICTS OF INTEREST: There are no conflicts of interest.

SOURCE OF FINDING: Datta Meghe Institute of medical sciences, Deemed to be University, Wardha, Maharashtra.

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2.

A COLLABORATIVE APPROACH OF PANCHAKARMA & PANCHAGAVYA CHIKITSA FOR THE MANAGEMENT OF ATOPIC DERMATITIS INDUCED BY DUSHTA STANYA IN MALE CHILD- A CASE REPORT***¹Dr.Sawarkar Punam, ²Dr.Sawarkar Gaurav, ³Dr. Bhojaraj Nandini**

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Abstract

Atopic dermatitis is a common dermatological condition in children consisting of ongoing skin pathological changes that cause dry, red, itchy skin. At least one in 10 children has such type of eczema. Its prevalence is 2–5% in children and young adults. In Ayurveda, this clinical condition can be correlated with *Vicharchika*, i.e., type of *Kustha*. A single case study of 2.5 years old male child presented himself predominantly with *Pidaka*, *Kandu*, *Vedana*, *Vaivarnyata*, and *Srava & Rukshata*. Those started at the age of 1 and a half months. He was anxious & and uncomfortable with mental irritation due to these lesions. After examination, treatment was started with (*Gomutra Asava*, *Gomutra Arka*, *Raktashodhaka Kadha*, *Janmaghuti* internally & *Matravasti* with *Panchtikta Ghrita*. The patient was asked to apply *Gomutra+Panchgavya Ghrita* externally. After the successfully combined intervention of *Shaman Chikitsa*, including *Panchgavya* formulations, *Matra Vasti* & local application for a consecutive one & half years, the patient got complete relief from all complaints. Utilizing the basic concepts of *Ayurveda (Nidanpanchaka)*, drugs with properties such as *Stanyashodhak*, *Kaphaghna*, *Vatanulomaka*, *Raktaprasadak*, *Twachyya*, *Bruhana but Ushna Veerya* were utilized to manage this condition which showed the promising result. *Ayurvedic* management with *Shodhana & Shamana Chikitsa* based on the fundamentals of *Ayurveda* is effective in managing *Vicharchika* (Atopic dermatitis) in children.

Keywords: Atopic dermatitis, *Vicharchika*, *Dushta Stanya*, Unwholesome, food, *Panchagavya*, *Matravasti*, *Gomutra Arka*, *Bahya Chikitsa*.

Chapter**Introduction**

Eczema is an inflammatory, pruritic, chronic, relapsing skin disease. Its prevalence is 2–5% in children and young adults [1]. It severely affects the quality of the child and his mother due to

its irritating nature of pain & itching, which ultimately affects the overall nutrition & growth of the child. Suppose it is not treated in the early stages. In that case, it can induce social stigma due to the appearance of lesions, discomfort & recurrent attacks, which prevents the patient from mingling with society. Children with eczema have more sensitive skin than other people. In *Ayurveda*, there is some satisfactory answer to tackle such entities. This paper reflects that treatment based on fundamentals in *Ayurveda* can effectively and safely treat such challenging skin disorders, even in pediatric cases where modern science has some limitations.

Material & Methods-

It is a single Case study. Demographic details of the patient are given in the table. No. 1.

Table No.1. : Demographic detail of the patient

S.N.	Name- X.Y.Z.	S.N.	Phone no. :- *****6807
1	Sex:- Male	4	Socioeconomic status:- Middle Class
2	Age :- 2 ½ (30 months)	5	O.P.D. No. :- 5673/2017
3	Address :- Nagpur	6	Phone no. - *****6807

Chief complaints of the patient with duration are described in table no.2.

Table No.2. : Chief complaints

S.N.	Nature of Complaint	Duration
1	<i>Pidaka</i> (Rashes), Multiple eruptions overhead, face .leg & hands	At the birth & aggravated after one & half months of the birth
2	<i>Kandu</i> (Itching)	
3	<i>Vedana</i> (Pain)	
4	<i>Vaivarnyata</i> (Discoloration of Skin)	
5	<i>Srava</i> (Secretions)	
6	<i>Rukshata</i> (Dryness)	
7	Recurrent indigestion or constipation	
8	Sticky motions	At the age of 2 months
9	Breathlessness after exposure to the cold environment	Five times nebulization done

➤ History of the present illness:

At the time of birth, the child had dyspnea, so he nebulized & then he turned to normal. However, the sudden onset of multiple eruptions overhead, face .leg & hands & was diagnosed as atopic dermatitis. However, the severity of the symptoms was getting worsened day by day. The patient was quite irritable & restless due to itching & pain. He & his mother couldn't sleep

well due to that itching & pain. These symptoms were usually worsened due to exposure to a cold environment & after touching with both cold & hot water at bath time. Therefore, the parents preferred allopathic treatment followed by homeopathic treatment but received temporary relief, so they started it. That's why they approached Govidnyan Anusandhana Kendra Deolapar, Maharashtra. The detailed history of the patient is narrated in table no.3.

Table No.3: History of patient

1	Birth History	<ul style="list-style-type: none"> • L.S.C.S. Oligo-hydramnios. Amniotic fluid washed out • History of nebulization at the time of birth
2	Past Medical history	History of breathlessness at the time of birth
3	Personal history	<ul style="list-style-type: none"> • Intake of milk (4-5 times daily, even at the age of 2.5 years) • Intake of solid food is less • Negligible intake of vegetables
4	Drug History	Use of steroid for nebulization (episodes of 5-6 times since birth)
5	Family history	<ul style="list-style-type: none"> • Father K/C/O Bronchial asthma & Hypertension (On regular Rx of only H.T.N.) • Mother & father –Both obese • Mother-K/C/O/Hypothyroidism on regular R.X.
6	Garbarini Paricharya	Intake of jack Fruit & papaya twice in A.N.C. Intake of <i>Nagavalli Patra</i> (ripened) betel leaves daily after meals.

➤ **Clinical examinations**

- The general condition of the patient was fair
- No Icterus /swelling found
- Pallor +
- Weight – 9.5 kg
- Height- cm
- *Prakriti- Vata pradhana Pitta Prakriti*

✓ **Ashtavidha Parikshana:**

Ashtavidha Parikshana of the patient is given in Table No. 4.

Table No. 4: Ashtavidha Parikshana

S.N.	Head	Observation	S.N.	Head	Observation
1	<i>Nadi</i> (Pulse)	82/min	5	<i>Shabda</i> (Speech)	Clear
2	Mala	<i>Sam-</i> sticky	6	<i>Sparsha</i> (Touch)	<i>Ruksha, Khara, Krishnabh, stsutira</i>

3	Mutra(Urine)	Samyak	7	Druka (Vision)	-
4	Jivha(Tongue)	Niram	8	Akruti (Posture)	Krishna

➤ **Diagnosis***Eczema (Dushta Stanyajanya Vicharchika)*➤ **Treatment prescribed**

All types of treatment prescribed to this patient are given in the table no.5. & 6

Table No. 5: Bahya & Panchkarma Chikitsa prescribed

S.N.	Type of Chikitsa	Drug	Duration
1	Bahya Chikitsa	Gomutra Ark + Panchgavya Ghrita	B.D. after bath & evening
		Panchagavya Ghrita + Vasti Taila	after breakfast weekly twice
2	Panchkarma Chikitsa (MatraVasti)	Panchgavya Ghrita (5ml)	After breakfast Weekly twice regularly for seven months

Table No. 6: Type of Shamana Chikitsa prescribed

S. N.	Internal medication	Dose	Anupana	Time of administration	Duration
1	Gomutra Arka	Five drops	5ml Luke warm water	B.D. after food	10months
2	Gomutra Asava	2.5ml	5ml Luke warm water	B.D. after food	Ten months
3	Raktashodhaka Kadha (Freshly prepared with coarse powder)	250mg 2BD	2-3- drops of Gomutra Arka	empty stomach	5 Months
4	Janma Ghuti (Freshly prepared)	5ml	Luke warm water	O.D. Morning	6 Months
5	Panchtikta Ghrita	2.5 ML	Luke warm water	B.D. before each food	8 Months

➤ **Result & observations (Therapeutic outcome)**

The therapeutic outcome obtained in the patient after the treatment administration is elaborated in table no.7. After starting the treatment, itching significantly decreased within 2-3 days. The total E.A.S.I. score showed a considerable reduction of up to 100% and the S.C.O.R.A.D. The

index was also significantly reduced by 100% [2, 3, 4, and 5]. After the successfully combined intervention of *Shaman Chikitsa*, including *Panchgavya* formulations, *Matra Vasti* & local application for a consecutive one & half years, the patient got complete relief in all complaints.

Table No. 7: Assessment of Subjective & objective variables

S.N.	Type of Objective variables	Before treatment	After two months	After eight months	After one 1/2/Yr
1	<i>Ruja /Vedana</i> (Pain)VAS	7	3	2	Absent
2	E.A.S.I./Eczema index	8.83	6.8	2.62	0
	Burning Sensation	1.10	0.70	0.13	Absent
	scratching	3.1	2.4	1.2	Absent
	Lichenification	3.2	2.6	0.89	Absent
	% of area	1.43	1.1	0.40	Absent
3	SCORAD Index	28.07	21.71	8.28	0
	Extent criteria	4.8	3.5	1.19	Absent
	intensity criteria	10.55	4.30	1.89	Absent
	subjective symptoms	12.72	6.7	2.1	Absent
4	Dermatology Life Quality Index((DLQI))	9.74	7.21	3.1	1.1



Figure No.1. Improvement after treatment

Discussion

Vicharchika is *Kapha* dominant *Trodoshaja* & *Raktapradoshaja* *Vyadhi* with involvement of vitiation of *Dushya* like *Rasa*, *Rakta*, *Mamsa*, and *Kleda*. Utilizing the basic concepts of *Ayurveda*(*Nidanpanchaka*), drugs having as *Kaphaghna*, *Vatanulomaka*, *Rakta Shodhaka* & *Rakta Prasadak* properties with *Ushna Veerya* were used to manage this condition which showed promising result due to their vivid actions, e.g., *Krimighna*(antibacterial/antifungal), *Stanyashodhak*, *Kushthaghna*, *Kandughna*(anti-pruritic), *Twachyya*, *Shothhar*, *Shulahar*, *Vranashodhaka* (wound cleaning), *Vranaropaka* (wound healing) *Bruhana*.

Raktashodhaka Kadha is prepared from various drugs such as *Daruharidra*, *Manjistha*, *Sariva*, *Amalaki*, *Gokshura*, *Guduchi*, *Khadir*, *Haridra*, *Chopchini*, and *Neem* seeds. All these herbs have *Kushthaghna*, *Raktaprasadan*, *Raktashodhak*, and *Jantughna* properties which help treat all *Tvakavikara* [6].

Janma Ghuti, prepared from drugs, e.g., *Kharjura*, *Almond*, *Vacha*, *Vidanga*, *Haridra*, *Ativisha*, *Aavartani*, and *Raktachandana*, acts as a cooling and soothing agent for the stomach and has high nutritional value. It also acts as an expectorant, laxative, and blood purifier. It is useful in fever and colds arising due to thrush in children [7].

All drugs in the *Panchtikta Ghrita* (*Guduchi*, *Vasa*, *Nimba*, and *Kantakari* & *Patola*) have *Tikta Rasa*, *Laghu*, and *Ruksha Guna*, which helps to break *Samprapti* of *Vicharchika* by reducing *Kleda* and *Vikrut Meda* & brings *Vrana Ropana*. It has *Kandughna* (antipruritic) action. It causes a reduction in increased *Kleda*, *Lasika* (plasma), *Rakta* (blood), *Pitta*, and *Shleshma* due to its *Tikta Katu Rasa* and *Ruksha Lekhana* properties. *Nimb* (*Azadirachta indica*) has phytochemicals such as *Nimbin* and *Nimbidin* having antimicrobial and anti-inflammatory activity. *Guduchi* (*Tinospora cordifolia*) contains phytochemicals such as *tinosporin* and *berberine*, anti-oxidative and immune-modulatory [8, 9, 10, 11].

Gomutra Asava is *Kaphaghna* in nature, which removes the obstruction of Strotasas and normalizes Pachaka Pitta's function. Ultimately, *Ranjaka Pitta* and *Bhrajaka Pitta* are also corrected due to their *Katu Rasa*, *Katu Vipaka*, and *Ushna Virya*. It decreases the *Kandu* (Itching) & discoloration in *Vicharchika* through its internal and external application. Local application with *Gomutra Arka* induces the scrapping of morbid tissues & reduces pruritus by pacifying *Kapha* [12].

Matra Vasti with *Panchgavya Ghrita* induces *Vata Anulomana* and *Kapha-Pitta Shamana* [13]. The antioxidant property of *Panchgavya Ghrita* is proved by Athavale A et al.2012 that it helps heal lesions & controls the symptoms of *Vicharchika* by rejuvenating skin over the affected part [14].

In a nutshell, the Combination of *Matravasti* & *Panchagavya* formulations alleviates all symptoms of *Vicharchika* by balancing all *Tridoshas* as a result of their antioxidant, antifungal, anti-inflammatory, and antimicrobial properties that help in scavenging free radicals that help in the alleviation of symptoms of *Vicharchika*¹ [1]. Significant improvement in the patients may occur due to cumulative effects, e.g., *Kushthaghna*, *Krimighna* (antibacterial/antifungal), *Kandughna* (anti-pruritic), *Rakta Shodhana*, *Shothhara*, *Shulahara*, *Vranashodhaka* (wound cleaning), *Vrana Ropaka* (wound healing), and *Tridoshaghna* properties of the drugs used for the treatment. These properties balance all *Tridoshas* & result in the subsidence of signs & symptoms.

Conclusion

Ayurvedic management with *Matra Vasti* & *Shamana Chikitsa* based on the fundamentals of *Ayurveda* is effective in children *Vicharchika* (Atopic dermatitis). The overall planned treatment induces significant relief in all clinical symptoms of *Vicharchika* (eczema) with sustained relief. Administration of *Shamana* (pacifying) drugs significantly increases the cure rate and prevents recurrence. Administration of *Shamana Dravya*, including *Panchagavya* formulations, substantially increases the cure rate and prevents the recurrence of *Vicharchika* (Atopic dermatitis). Further clinical trials with a large sample size are expected to plan to flourish the *Ayurvedic* practices in pediatric dermatology.

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The Conflict Of Interest-Nil

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3.

**THERAPEUTIC CARDIO PROTECTIVE EFFECT OF ARJUNA
DECOCTION AND JATAMANSI SHIRODHARA IN ESSENTIAL
HYPERTENSION -A CASE REPORT*****¹Dr.Bhushan Mhaiskar, ²Dr. Rutuja Mhaiskar**

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(Kh), Jalgaon, Maharashtra, India.

Abstract:

Despite significant improvements in our knowledge of its pathophysiology and the availability of efficient treatment options, essential hypertension continues to be a significant modifiable risk factor for cardiovascular disease (CVD). Millions of individuals worldwide are at an increased risk of CVD due to high blood pressure (BP), and there is evidence that the issue is only growing worse. Age-adjusted rates of stroke incidence have increased during the past ten years, whereas the slope of the age-adjusted rate of reduction in coronary disease has flattened off. Heart failure is more common, and end-stage renal illness is becoming more common. Lack of BP control in the hypertensive population is a significant factor in these changes. Pitta-dominant Raktagat Avrutta Vaat is Raktapradoshaja Vyadhi with participation of Dushya-vitiating Rakta and Kleda. Using the fundamental principles of Ayurveda (Nidanpanchaka), medications with properties such as pittavirachak, mruduvirechak, mansa doshhar, Vatanulomaka, Rakta gat vatshamak & bharamhar with sheet Veerya were used to manage this condition. These medications showed promising results because of their vivid actions, such as Hrudyā (cardio protective). Arjun qwath is made from the raw churna of Arjun Twak and has the qualities Manadoshhar (Brain Calming Activity), Hridya (Cardio Protective Activity), and Raktashodhak to help treat all hriday vikar.

Keywords: Raktapradoshaja Vyadhi, Hridya, Raktashodhak, Raktagat Avrutta Vaat

INTRODUCTION:

Cardiovascular diseases (CVD) are the number one cause of death worldwide ¹ In addition to mortality, poorly managed CVD can lead to significant long term disability from their complications. In the past quarter century, much progress has been made in understanding the

molecular and cellular processes that contribute to CVD, leading to the development of effective therapies. Natural products due to their chemical diversity are receiving increased attention from scientific and pharmaceutical communities. The newer work on medicinal plants is mostly the rediscovery of traditional effects at cellular and molecular levels²

Prevalence rate of Essential hypertension

Essential hypertension is high blood pressure that doesn't have any known etiopathology. Most of sufferers (85%) are asymptomatic and as per available reports, in more than 95% cases of hypertension under lying cause is not found. It is estimated that 600 million people are affected worldwide. Hypertension is a major risk factor for the development of cardiovascular diseases (CVD).³

Essential hypertension remains a major modifiable risk factor for cardiovascular disease (CVD) despite important advances in our understanding of its patho-physiology and the availability of effective treatment strategies. High blood pressure (BP) increases the risk of CVD for millions of people worldwide, and there is evidence that the problem is only getting worse. In the past decade, age-adjusted rates of stroke incidence have risen, and the slope of the age-adjusted rate of decline in coronary disease has leveled off. The incidence of end-stage renal disease and the prevalence of heart failure have also increased. A major contributor to these trends is inadequate control of BP in the hypertensive population. 43 million people in the United States have hypertension or are taking antihypertensive medication, which is $\approx 24\%$ of the adult population. This proportion changes with (1) race, being higher in blacks (32.4%) and lower in whites (23.3%) and Mexican Americans (22.6%); (2) age, because in industrialized countries systolic BP rises throughout life, whereas diastolic BP rises until age 55 to 60 years and thus the greater increase in prevalence of hypertension among the elderly is mainly due to systolic hypertension; (3) geographic patterns, because hypertension is more prevalent in the southeastern United States; (4) gender, because hypertension is more prevalent in men (though menopause tends to abolish this difference); and (5) socioeconomic status, which is an indicator of lifestyle attributes and is inversely related to the prevalence, morbidity, and mortality rates of hypertension.⁴

Drug Review:

Terminalia Arjuna (T. Arjuna, -Family: Combretaceae), is an important medicinal plant widely used in medicinal formulations for several ailments. It is used in traditional medicine for treating ulcers, wound healing, and also for antibacterial, anti mutagenic/ anti carcinogenic, antioxidant and hypocholesterolemic activities⁵

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The use of T. Arjuna bark in the management of cardiovascular diseases has been widely reported ⁶

Case Report:

A 45-Year-old male patient came to Panchkarma OPD of Mahatma Gandhi Ayurved College Hospital and research centre, Department of Samhita and Siddhant, Salod Hirapur, Wardha, Maharashtra, India, constituent unit of Datta Meghe Institute of Medical Sciences (DU), with the chief complaints of Headache dizziness and insomnia since 7 days with no associated symptoms. His Hypertension was diagnosed before 8 years ago when blood pressure measured on the routine medical check-up around 170/100 mm Hg on three checks up sessions and a pulse recorded 84 bpm.

Patient was initially on therapy of propranolol 5 mg daily for 4 years than he advised on treatment of combination of Telesartan 50 mg and Hydrochlorothiazide 12.5 mg. Yet his BP is not responded to new drugs. On examination His family history is positive for Hypertension. Physical assessment is unremarkable except for the presence of moderate obesity (145.4 cms & 122 kg.) On Biochemical laboratory investigations and vital signs were abnormal as he had hypercholesterolemia from past 3 year.

Vitals before Treatment:

Clinical examination:

Table No.1. : Demographic detail of the patient

S.N.	Name- X.Y.Z.	S.N.	Phone no. :- *****6985
1	Sex:- Male	4	Socioeconomic status:- Middle Class
2	Age :- 57 Years	5	O.P.D. No. :- 5687/2023
3	Address :- Wardha	6	Phone no. - *****6985

Table No.1 General examination:⁷

Clinical	Condition:
Weak	
Height	145.4 cms
Weight	122 kg
BMI	57.7 kg/m ²
Tongue	Mild coated

Blood pressure	170/100 mmHg
Pulse Rate	82/ minute
Temperature	- 98.9 F, Afebrile
Respiratory Rate	- 22/ minute
Edema/ pallor/ icterus/ Spleen/	Absent
Liver/focal lymphadenopathy	
General condition	Normal
Systemic Examination:	NAD
Rest of the systemic examination	NAD

Dashvidh Pariksha:

1. Prakriti	Kapha Pittaj
2. Vikriti	Vata pittaj
3. Saar	Meda Rakta
4. Samhanan	Madhyama
5. Satmaya	Vyamishra
6. Satva	Pravara
7. Pramaan	Madhyama
8. Aahar Sakti	Madhyama
9. Vyayaam Shakti	Avar
10. Vaya	Prodhavastha H/O Past Illness: NAD, ICU Stay: NAD

MATERIALS AND METHODS:

Source of Data: A diagnosed case of was selected from Kayachikitsa-OPD of Jain AGM Ayurvedic Medical College and Hospital, Varur (Karnataka). Written consent was taken from the patient to conduct and to publish the work”

Sr. No.	Drug Name	Dose	Anupaan /Sahpan	Days	Time	Specific
1	Arjun Twak Choorna Decoction	10gm	Milk (As Ksheer Paak)	15 days	OD	In Breakfast
2	Jatamansi Phant Shirodhara	300 ml	--	Every Three day	At Once	At Morning

He had given mild purgation with *Almond* oil⁸ 50ml with hot milk on 1st day. Patient had been followed up every 3 days for 3 months.

Table 2: Biochemical Laboratory Investigation

S.No.	Biochemical Parameters	Before Treatment	After Treatment
1	S. Cholesterol	221 mg/dl	160 mg/dl
2	Triglyceride	151 mg/dl	138 mg/dl
3	HDL	39 mg/dl	31 mg/dl
4	LDL	132 mg/dl	119 mg/dl
5	VLDL	31 mg/dl	28 mg/dl
6	Blood Urea	38.5 mg/dl	24.6 mg/dl
7	S. Creatinine	1.0 mg/dl	0.1 mg/dl
8	Uric Acid	7.4 mg/dl	5.8 mg/dl

Table 3: Vitals during treatment

Biochemical Laboratory Investigations and parameters were becomes normal after the treatment of *Jatamansi Shirodhara*

Chief complaints

Case Report:

A 57-Year-old male patient came to Panchkarma OPD of Mahatma Gandhi Ayurved College Hospital and research centre, Department of Samhita and Siddhant, Salod Hirapur, Wardha, Maharashtra, India, constituent unit of Datta Meghe Institute of Medical Sciences (DU), with the chief complaints of Headache dizziness and insomnia since 7 days with no associated symptoms.

➤ History of the present illness:

- His Hypertension was diagnosed before 8 years ago when blood pressure measured on the routine medical check-up around 170/100 mm Hg on three checks up sessions and a pulse recorded 81 bpm.

Table No.3: History of patient

1	Birth History	• NAD
2	Past Medical history	History of Trauma and hospitalization for uncontrolled Hypertension
3	Personal history	<ul style="list-style-type: none"> • Intake of milk (4-5 times daily, even at the age of 2.5 years) • Intake of solid food is less • Negligible intake of vegetables

4	Drug History	Use of Antihypertensive and Sleeping pills
5	Family history	<ul style="list-style-type: none"> Father NAD & Hypertension (On regular Rx of only H.T.N.) Mother & father –Both obese Mother-K/C/O/ Hypertension on regular R.X.

➤ Clinical examinations

- The general condition of the patient was moderate
- No Icterus /swelling found
- Pallor +=
- Weight – 81 kg
- Height- 153 cm
- Prakriti- Vatapradhana Kapha Prakriti

✓ Ashtavidha Parikshana:

Ashtavidha Parikshana of the patient is given in Table No. 4.

Table No. 4: Ashtavidha Parikshana

S.N.	Head	Observation	S.N.	Head	Observation
1	Nadi (Pulse)	81/min	5	Shabda (Speech)	Clear
2	Mala	Sam-sticky	6	Sparsha (Touch)	Ruksha, Khara, Krishnabh, stutira
3	Mutra(Urine)	Samyak	7	Druka (Vision)	-
4	Jivha(Tongue)	Niram	8	Akruti (Posture)	Krishha

➤ Diagnosis

Siratgat avrutta vaat (Essential Hypertension)

➤ Treatment prescribed

All types of treatment prescribed to this patient are given in the table no.5. & 6

Table No. 5: Bahya & Panchkarma Chikitsa prescribed

S. No.	Variables	0 day	3 day	6 day	9 day	12 day	15 day	18 day
1	Blood pressure (Systolic BP /Diastolic BP in mmHg)	170/100	160/90	150/90	140/80	134/80	125/82	110/72
2	Pulse rate (bpm)	82	83	72	82	81	70	72
3	Pulse Pressure (in	70	70	60	60	46	43	38

	mmHg)							
4	Respiratory Rate (per Minute)	20	20	22	18	18	20	18

Result & observations (Therapeutic outcome)

The therapeutic outcome obtained in the patient after the treatment administration is elaborated in table no.7. After starting the treatment, itching significantly decreased within 2-3 days. The total SLEEP scale score showed a considerable reduction of up to 91% and the Hypertension scale the index was also significantly reduced by 100% [2, 3, 4, and 5]. After the successfully combined intervention of *Shaman chikitsa* including *panchkaram shirodhara* formulations, local application for consecutive one & half years, and the patient got complete relief in all complaints.

Discussion

Raktagat avrutta vaat is pitta dominant *vataj* & *Raktapradoshaja* Vyadhi with involvement of vitiation of *Dushya* like *Rakta* and *Kleda*. Utilizing the basic concepts of *Ayurveda* (*Nidanpanchaka*), drugs having as *pittavirachak*, *mruduvirechak*, *mansa doshhar*, *Vatanulomaka*, *Rakta gat vatshamak* & *bharamhar* properties with *sheet Veerya* were used to manage this condition which showed promising result due to their vivid actions, e.g., *Hrudya* (cardioprotective), *Manadoshhar* (Brain calming activity), *Hridya* (Cardio protective activity),

Arjun qwath is prepared from raw churna of *Arjun Twak*, this herbs have *Hridya*, *Raktaprasadan*, *Raktashodhak*; properties which help treat all *hriday vikar*

The drug *Jatamnsi* in *shirodhara* in the helps to break *Samprapti* of *raktasiragat avrutta vaat* by reducing *vaat dosha* and *Vikrut kapha* & *pitta*. It has *mansa doshhar* activity (antipsychotic action). It causes a reduction in increased *Pitta* and *raktagat vaat*, *jatamansi* (*Narodotrachys Jatamansi*) has phytochemicals such as *jatamansin* having brain calming effects activity.

Conclusion

Ayurvedic management with *jatamansi Shirodhara* & *Shamana Chikitsa* based on the fundamentals of *Ayurveda* is effective in treating hypertension. The overall planned treatment induces significant relief in all clinical symptoms of *Raktgat avutta vaat* with sustained relief. Administration of *Shamana* (pacifying) drugs significantly increases the cure rate and prevents recurrence. Administration of *shamana Dravya* substantially increases the cure rate and

prevents the recurrence of Raktgat *avutta vaat*. Further clinical trials with a large sample size are expected to plan to flourish the *Ayurvedic* medical practices.

Acknowledgment- I offer sincere gratitude to *DMIHER (Sawangi Meghe), Wardha*

The Conflict Of Interest-Nil

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4.

**AYURVEDIC MANAGEMENT ON PAKSHAGHATA W.S.R TO
HAEMORRHAGIC HEMIPLEGIA A CASE REPORT****¹Shweta Parwe, ²Vivek Kumar Verma, ³Dr. Milind Nisargandha**¹Professor and Head, Department of Panchakarma²PG Scholar, Department of Panchakarma, Mahatma Gandhi Ayurveda College Hospital and Research Centre, Salod (H), Wardha. Datta Meghe Institute of Medical Sciences, Nagpur.³Department of Physiology, Ashwini Rural Medical College, Hospital and Research Centre Kumbhari, University of Health Sciences, Nashik, Maharashtra, India.**Abstract-**

Pakshaghata is a *Vatavyadhi* of *Nanatmaja vatavyadhi* and *Mahavatavyadhi*. The term *Pakshaghata* implies loss of motion of one portion of the body.

A 50 years male patient residing at Sawangi Meghe, Wardha, visited the O.P.D. of Panchakarma M.G.A.C.H. With a wheelchair and a history of R.T.A. 1 ½ years before. First, he was treated at a medical hospital, and afterward, he was shifted to an Ayurvedic hospital for further treatment. He was successfully managed by Panchakarma therapy and *shaman chikitsa* for 15 days, and he could stand and walk with support with the help of this procedure.

Keywords: *Pakshaghata, Hemiplegia, Vatavyadhi, Nanatmaja Vatavyadhi, Mahavatavyadhi*

Introduction:

Pakshaghata is a *Vatavyadhi* of *Nanatmaja vatavyadhi* and *Mahavatavyadhi*. The term *Pakshaghata* implies loss of motion of one portion of the body. The impedance of *Karmendriyas*, *Gnyanendriyas*, and *Manas* was seen. *Gnyanendriyas* is viewed as a component of the tangible framework, and *Karmendriyas* are viewed as a piece of the engine framework. *Pakshaghata* can correspond with Hemiplegia, which results after a head injury or stroke

The terminology of *Pakshaghata* indicates the main symptom of the disease.

पक्षस्य देहस्य घातम् विनाशनाम् यस्मात् यत्र वा। (शब्दकल्पद्रुम)

Here, the word “*paksha*” stands for

- 1) Flank or side or half of anything
- 2) One side of body 3) *Shareerardham* And Considering the word “*Aghata*,” The *Ghata* depicts different meanings, they are 1) *Vadha* 2) *Hanana*

Synonyms “*पक्षवध*” according to *Acharya Charak* and *Vagbhat*, according to *Acharya Sushruta* “*पक्षाघात*”

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Nidan of Pakshaghat, according to Acharya Charak, is

The Same *nidana* of *Vata Vyadhi* is mentioned as *Nidana* for *Pakshaghat* like *Aharaj Nidan* *Ruksha*, *Sheeta*, *Laghuguna*, *ALPA Ahara*, etc. *Vihara Nidan*

Ati Vyavay, *Ratri Jagran*, *Ati Langhana*, *Plavana*, *Vyayama*, *Diwa Swapna*, *Ushtra*, *Ashwa*, *Gaja*, *Shighra Yana*, *Abhighataj Nidanis* *Abhighata*, *Marmaghata*, *Manash Nidan* is *Krodha*, *Chinta*, *Shoka Vega Sandharana*,^[1]

Samprapti According To Acharya Charak

The *prakupit vayu* will take place in half of the body, and by the *vishoshana* of *Shira & Snayu* present there, it will produce *Sankocha* and *Toda* in one Hand and Leg. If the same symptoms are limited to one part only, then called *Ekanga Roga* & if the whole body is affected is called *Sarvanga Roga*.^[2]

Nidan sevan aharaj and *viharajadi nidan* *Vayu prakupit Vayu* take the place of half of the body *Vishoshana* of *Shira & Snayu Sankocha* and *Toda Utpatti* of *rupa Pakshavadh* (*ekang*, *sarvang*)

According to Acharya Sushruta:

According to Acharya Sushruta, when *prakupita Vayu* reaches *Urdhvagami*, *Adhogami*, and *Tiryaggami Dhamani*, this *prakupit vayu* will destroy any one half of the body, and the *sandhibandhana* also will be affected.^[3]

Prakupita Vayu → *Sthansanshraya* in *Urdhva*, *Ado*, *Tiryaga gami Dhamani* → *Vimoksha* of *sandhi bandhana* of any one half of the body → loss of function of half part of body → *Pakshaaghat*

According to Acharya Vagbhata:

According to *Ashtanga Hrudaya Nidan Sthana*, due to its *nidana*, the *prakupita Vayu* will take place in half of the body. It will do *Shithilan* of *Sandhi Bandhana* and *Vishoshana* of *Shira & Snayu* of that part. By this, *Kriya* and *Chetana* will be affected in half part of the body. It may be of two types 1) *Sarvanga* or 2) *Ekanga*.^[4]

Nidana sevana → *Vata Prakopa* → *Sthana Sanshraya* in *Shira & Snayu* →

Vishoshana of *Shira & Snayu* → *Shithilan* of *Sandhi Bandhana* → half part of the body → will not be able to work in *Pakshavadh* appropriately

Samprapti Ghataka Dosha: *Dosa* - *Vata Pradhana Tridosha*, *Dushya*- *Rasa*, *Rakta*, *Mansa*, *Meda*, *Adhisthana*- *Shariardha Bhaga*, *sarwang bhaga* *Srotas*- *Rasavah*, *Raktavaha*, *Mansavaha*, *Pranvaha*, *Srotodushti Prakara*- *Sang*, *Agni*- *Vishmagni*

Vyadhi Swabhava- *Chirkari*, *Ashukari*, *Sadhy/Asadhyata*- *Krucchasadhyata*, *Asadhyata*

According to Acharya Charak Poorvarupa:

Purvarupa of Pakshaghata is not described in any Ayurvedic text. But *purvarupa* represents the initial stage of disease manifestation, one among the *vata-vyadhis*, so that we can take *purvarupa* of *Vata vyadhis*, i.e., “*Avyakta Lakshana*,” as *purvarupa* of *pakshaghata*.^[5]

Case Presentation:

A 50 years male patient residing at Sawangi Meghe, Wardha, visited the O.P.D. of Panchakarma in M.G.A.C.H. with a wheelchair and a history of R.T.A. 1 ½ years before a check-up. After the clinical examination, the following symptoms were noted, unable to walk, slurred speech and muscle wasting in the upper and lower limb with stiffness upper shoulder joint, elbow joint, wrist and fingers joint unable to catch any object with the left hand, stiffness in left knee common and ankle weakness of the facial muscles involving the left side of face and Deviation of Mouth.

History of illness: The patient was asymptomatic before 1 ½ year. After 1 ½ year, he had R.T.A. (road traffic accident), a history of head injury. The patient was unconscious at the time. He was brought to the hospital, a C.T. scan of the Brain was done, and his report finding was (the right frontal and temporal lobes caused a diffuse mass effect in the form of sulcogyrar effacement of the right cerebral hemisphere) in head injury. He was taken previous treatment in an Allopathic hospital. He received conventional treatment but got relief from very few symptoms of hemiparalysis. Because of upper and lower limb weakness unable to walk, and he came to Panchakarma O.P.D. with the symptoms mentioned earlier. For further management, he was admitted to the I.P.D. section.

Personal history: The patient was habituated to spicy and dry food. No record of any addiction was found. He had disturbed sleep due to illness.

Clinical Examination:

Pulse – 72/min

B.P. – 125/80 mmHg

R.R.- 20/min

Temperature – 98 F

Weight - 65 kg

Asthavidha Pariksha:

Nadi – Vaat-kaphaja

Mala – Samyak Malapravritti, Niraama Mala

Mutra – 5-6 times a day, Samyak Pravritti

Jivha – Niraam

Shabda – Aspashta (slurred speech)

Sparsha – Anushna Sheet

Drik – Samyak

Akruti – Madhyama

Specific examination

Inspection: - both upper and lower limb

Discoloration: -absent

Muscle wasting: - present upper and lower limb

Deformity: -absent

Palpation: -

Stiffness: -present at left. The shoulder joint, elbow joint, wrist joint, and multiple finger joints

Temperature: -absent

Pain: -not feel

Investigation: C.T. –Head three times

Progress of Treatment and Assessment: In this case study, we administered the treatment with a list of internal Medicines with Panchakarma Therapy with doses and duration As in Table 2 and Table 3

Table No 2: *Shaman Aushadhi* - Treatment administered with a list of internal medicines with dose and duration, and time and *Anupana*

Table No. 2

Sr. No.	Medicine	Dose and Frequency	Duration	Anupana
1	Cap Neuron Plus	250 mg twice a day after a meal	15 days	water
2	Tab. Simhanada Guggulu	250 mg 2 tabs thrice a day after a meal	15 days	Lukewarm water
3	Tab. Amavatari Rasa	250 mg twice a day after a meal	15 days	Lukewarm water
4	Tab. Ashwagandha	250mg twice a day after a meal	15days	Lukewarm milk

Table No 3: *Panchakarma* Therapy: Treatment administered with the list of *Panchakarma*

therapy

Sr. No.	Procedure	Drugs used	Duration
1	<i>Abhyanga</i>	<i>Dashamula Taila + Mashadi Taila</i>	15 days
2	<i>Mukha Abhyanga</i>	<i>Navneet</i>	15 day
2	<i>Patra Pinda Swedana</i> Left upper and lower limb	<i>Eranda Patra, Bela Patra, Nirgundi Patra and Dashmoola Taila</i>	15 days
3	<i>Nasya Karma</i>	<i>Anu Taila 6-6 drops in each nostril</i>	Seven days
4	<i>Matra Basti</i>	<i>Ashwagandha Taila (50ml)</i>	Three days
5	<i>Niruha Basti</i>	<i>Guduchi Ashwagandha Dashmoola (800ml Kwath)+Saindhav 10 gram+ Honey 50gram +Sahchar tail 30ml</i>	Seven days
6	<i>Matra Basti</i>	<i>Ashwagandha Taila (50ml)</i>	Three days

Table No 4: Physiotherapy for 15 Days

Result	Before treatment	After treatment
Gait	Poor	Improved
Speech	Poor	Improved

Table No 5: Muscle power

Date	Muscle power Right side	Muscle power Left side
1 st day 25-1-2021	05	02
4 th day 28-1- 2021	05	02
8 th day 1-2-2021	05	03
12 th day 5-2-2021	05	04
16 th day 9-2-2021	05	04

Table No 6: Changes in Deep tendon reflexes

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Deep tendon reflexes	Side	Date				
		1 st day 25-1-2021	4 th day 28-1-2021	8 th day 1-2-2021	12 th day 5-2-2021	16 th day 9-2-2021
Biceps	Right	Brisk	Brisk	Brisk	Brisk	Brisk
	Left	Very Low Brisk	Very Low Brisk	Very Low Brisk	Very Low Brisk	Very Low Brisk
Triceps	Right	Brisk	Brisk	Brisk	Brisk	Brisk
	Left	Low Brisk	Low Brisk	Low Brisk	Low Brisk	Low Brisk
Brachioradialis	Right	Brisk	Brisk	Brisk	Brisk	Brisk
	Left	Low Brisk	Low Brisk	Low Brisk	Low Brisk	Low Brisk
Quadriceps	Right	Brisk	Brisk	Brisk	Brisk	Brisk
	Left	Low Brisk	Low Brisk	Low Brisk	Low Brisk	Low Brisk
Achillies	Right	Brisk	Brisk	Brisk	Brisk	Brisk
	Left	Low Brisk	Low Brisk	Low Brisk	Low Brisk	Low Brisk

Table No 7: Mode of Action

SR. NO	Shaman Aushdhi and Panchakarma Therapy	Mode of Action
1.	Cap Neuron Plus	Acts as <i>vatshamak</i> , <i>balya</i> to the nervous system.
2.	<i>Simhanada Guggulu</i>	<i>Vedanasthapana</i> , <i>Deepana-Pachana</i> , <i>Rasayana</i> and <i>Medhya Karma</i> . <i>Vatakaphashamaka</i> , <i>Amapachaka</i> , <i>Srotoshodhaka</i>
3.	<i>Amavatari Rasa</i>	<i>Vata Dosha</i> , <i>deepaka</i> , <i>pachaka</i> <i>Rasayana</i> , <i>anulomana</i>
4.	<i>Dashamula Taila</i>	<i>Vaatshamak</i> , <i>hrudya</i> , <i>vatnadi balprad</i> .
5.	<i>Mashadi Taila</i>	<i>Vataghna</i> , chronic <i>vatvyadhi</i> , <i>pakshaghat</i> , <i>hanustambh</i>
6.	<i>Anu Taila</i>	<i>Twakaraushya</i> , <i>Palita</i> , <i>Urdhvajatrugata roga</i> , <i>Skandha suskata</i> , <i>Griva suskata</i> , <i>Vaksa suskata</i>

7.	<i>Ashwagandhachurna</i>	<i>Balya vat kaphaj vicar me labhadayak, pushtikarak</i>
8.	<i>Guduchi</i>	fevers, skin diseases, Rheumatoid arthritis, Jaundice (Liverdisorders), Gout, Diabetes, Bleeding piles, Rejuvenator, Guduchi Sattva is a highly nutritious and digestive
9.	<i>Saindhav</i>	<i>Rochan, Dipana, Vrushya, Chakchushya</i> <i>Avidahi , Hrudya, Hikkashak</i>
10.	<i>Honey</i>	Honey is <i>madhurandkashay, Chedan,</i> and <i>ruksha</i> In <i>guna</i> and <i>ushna</i> , <i>Virya</i> It is <i>kaphahara</i> And <i>vran shodhana</i>
11.	<i>Sahchar tail</i>	<i>Stambha, Shotha, Kushta, Kandu, Kampa ,Vatadosha, Nasaroga</i>
12.	<i>Patra Pinda Swedana</i> Left upper and lower limb	stiffness, and Pain, <i>Asthi Sandhi Vikriti</i> or degenerative condition
13.	<i>Nasya Karma</i>	<i>Kaphahar, Kaphavilayan, urdhwajatrugat rog har, ma-nasdosahar, shirorogahar</i>
14.	<i>Matra Basti</i>	This can balance <i>vaat dosha, aajnama maranam shastam</i> (It can be used from birth to death) for <i>vaatpradhan vyadhi</i>
15.	<i>Niruha Basti</i>	stimulates the enteric nervous system and regulates the serotonin level, which is produced by the gut and responsible for various neurological and psychological activities The <i>Sneha</i> added in <i>Basti</i> will lubricate the colon, Soften the <i>malas</i> and help to eliminate it without strain.



Image : 1



Image : 2

First day of O.P.D. 15th day of I.P.D.

Discussion:

This case study was diagnosed as *vatavyadhi* “*pakshaghat*” due to a *high at* in *Shiro-murdha Pradesha Vata dosa Prokop*, *prakupita Vayu* takes place in half part of the body. *Shithilan* of *Sandhi Bandhana* and *Vishoshana* of *Shira & Snayu* of the left part of the body. Increased *ruksha guna* causes *rukshata* and *parushta*; this is mainly one crucial reason for the *samprapti* of *pakshaghat*.

So, according to *dosha*, we started *shaman* and *shodhana Panchakarma therapy*.

By *Abhyanga*, the force of muscle is increment, solidness eliminate, and muscle tone improves. *Swedana* is additionally best for the *Vata* problem; it mitigates the solidness of muscle and achieves the ordinary working of the veins, muscles, and ligaments. Spasticity, for example, *Sankocha*, is an element of *Vata - the Dosha* technique for treating *Vata* vitiation is by *Abhyanga* and *Swedana*. *Masha (Udad)* makes a total mix of nourishment for powerless muscles. *Pratiloma* kind of back rub renders *Vyana* and *Udana* to a typical utilitarian state. In this manner, all *Srotas* load up with the applied *Sneha*, which supports the body after processing by *Bhrajaka Pitta* ^[6].

Nasya is beneficial in *Pakshaghata* to nourish the Brain. According to Charak, *Nasa* is the portal gateway of *Shiras*. The drug administrated through the nose reaches the Brain (*Shringataka Marma*) ^[7].

The primary source of Hemiplegia is vitiated *Vata*. In the Ayurveda text, the decision to treat *Vata Dosha* is *Basti*, and *Avarana* is the principal causative factor in the pathophysiology of *Pakshaghata*. Hence, breaking this interaction of *Avarana* needs first thought in its administration. Charaka has focused on *Srotoshudhi*, *Vatanulomana*, and *Rasayana*, the overall way of *Avarana*. *Basti* accomplishes both objectives, for example, *Vatanulomana* and *Srotoshudhi*. *Basti* is the treatment of decision for *Madhyama Marga* and to ensure *Marmas*. The spot of activity of the medication is (*Pakvasaya*) gut ^[8].

By giving treatment through *Basti*, irritation is diminished, and the muscles' fit is calmed. This decrease in anger and fit encourages better blood flexibility and improved nerve conduction to the influenced territory, prompting further suggestive improvement ^[9].

Ashwagandha is Neuroprotective, Immunomodulatory, and Anti-inflammatory ^[10].

Ashwagandha is the best drug in *kevalavata*, *Krurakoshta*, *Dhatu kshaya*, and *Vridha* in *Apan Vayu Dushti*. It can be given the best relief and overall improvement of patients' health. *Ashwagandha Taila* is with *Madhur*, *Tikta Rasa*, *Snigdha Guna*, *Ushna Virya*, and *Madhura Vipaka* having *Vatapitta Shamak*, *Vatanulomana Balya*, *Brumhana*, *Rasayana*. ^[11]

Sahachar –is commonly used in Neurological disorders and *vatakaphahara*.

Masha (Udad) is an Anti-inflammatory and Nervine tonic ^[12].

According to Acharya, *Charak Basti* is the primary therapy of *Vata vyadhi*. It pacifies the vitiated *Vata*. It nourishes and strengthens the nervous system; *Nasya karma* gives significant results in *pakshaghat*, *matra*, and *sahsneha niruha Basti*, which offers very influential work in *Pakshaghat vatshamak shaman aushadhi* also gives very effective results.

Conclusion:

Based on clinical findings, it can be concluded that *Shamana aushdhi* with *Sinhanad Guggulu*, *Amavatari Rasa* and *Cap Neuron Plus* and *Dashamula Taila*, *Mashadi Taila*, *Anu Taila* *Ashwagandhachurna*, *Guduchi*, *Saindhav*, *Honey* and *Sahchar tail* is very effective for *Pakshaghat*. *Panchakarma* therapy such as *Sthanik Abhyanga*, *Patrapinda Swedana*, *Nasya karma*, *Matra Basti*, and *Niruha Basti* is highly effective in curing all symptoms of *Pakshaghat Hemiplegia*. This management was found to be effective in the patient.

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5.

**BLOODLETTING AS AN AYURVEDIC TREATMENT PRINCIPLE IN
MANAGEMENT OF DISEASE: A CASE REPORT**¹Chakole Dipika Arun, ²Manyala Shanti

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ABSTRACT:

Background- Bloodletting is gaining popularity through various measures. In various disease conditions this procedure can be done as part of treatment. In various *ayurvedic* reference books, there are many condition in which bloodletting is used. Bloodletting can be done with different methods. In *ayurvedic samhita*, there are methods like *Shruna*, *alaboo*, *siravedh* and *jalaaukavcharana* are mentioned in different disease according to conditions. There are detailed description bloodletting methods like *Jalaaukavcharan* and *siravedh* found in *Sushruta samhita* and *Ashtanghrudaya samhita*. Now-days *sirveda* and *jalaaukavcharan* i.e. medicinal leech therapy is gaining popularities. These methods are commonly used in many disease condition specially skin disease. **Aim and objective-** To use bloodletting principle in a particular disease condition. To assess the effect of bloodletting with leech therapy in condition of knee joint osteoarthritis. **Observation-** There is significant instant effect observed in patient in Knee joint pain and tenderness after leech therapy. **Conclusion-** This case report conclude that, bloodletting principle is effective in any disease according to disease condition.

INTRODUCTION:

“Donate blood to save life” is one of popular quote among the common people. Now-a-days bloodletting is being useful in two ways and this bloodletting term can be coined as blood donation. Donating blood helps to donor as well as receiver also. Donated blood can be useful in various conditions like thalassemia disorders, major surgery or any trauma cases. Moreover bloodletting helps donor to evacuating unwanted waste product in circulatory system through it. In covid-19 pandemic, many times blood plasma of covid-19 cured patient is used to treat another covid-19 suffered patient as plasma therapy. Bloodletting is now gaining in various streams also. Medicinal leech therapy is now commonly used is conventional medicine for various purpose. According *ayurvedic* treatment principles, bloodletting is one of the *Panchakarma* procedure explained. This bloodletting can be done with help of various

measures like *siraved*, *alaboo*, *shrunga*, *jalauka* etc. *Sushruta samhita* have more gathered and detailed information bloodletting and its various types. In *sushruta samhita sutrasthana*, there is separate chapter dedicated for various *raktamokshan* procedures, detailed procedure and related diseases and complications. Also in *Ashtang hrudaya sutrasthana*, there are two different chapters dedicated *siravedh* and leech therapy. Bloodletting procedures are getting importance now-a-days in most of the skin disease conditions. This procedure is regularly used by many *ayurvedic* physicians but only is skin condition. There are various disease conditions like arthritis, wound, haemorrhoids etc. in which bloodletting principle can be used and found effective. Bloodletting is commonly done in *Rakta dhatu* and *pitta dosha* born disease and related *strotas* is *raktavaha strotas*. The origin of this *strotas* is *Yakruta* (liver) and *Pliha* (spleen)¹. Thus all disease in which all above factors involved combined or solely bloodletting principle can readily use as treatment principle.

METHODOLOGY

Material:

1. A brief collective information of *Raktamokshana* in various disease conditions from *charak samhita*.
2. A case report of knee joint arthritis patient in which bloodletting used in pain management.
 - ❖ Importance of blood and blood letting

“तद्विशुद्धं हि रुधिरं बलवर्णसुखायुषा
युनक्ति प्राणिनं प्राणः शोणितं ह्यनुवर्तते”

This *shlok* is quoted in *charak samhita sutrasthana* 24th chapter named ‘*vidhishonitiya adhyay*’. This *shlok* state that, “Pure blood is responsible for *bala* (strength), *Varna*(complexion), *Sukha*(Happiness) in whole life of person. Thus humans’ vital force (*Prana*) is depending on *Rakta*.²

❖ Factors vitiating blood and caused disease³

This is well quoted in *Charak Samhita*. In *charaksamhita sutrasthana* chapter no 24, there is a list some common factors which cause ‘*rakta vitiation*’ and ultimately causing a genre of *rakta* vitiated disease.

1. Following factors are quoted in ‘*rakta vitiation* factors synonymy called as “*Rakta Dushti hetu*”

- A different types of wine which is Sharp in nature or improperly made’
- A verity types of food made with excessive Salt, alkalis, acidic factors

- A food grains like black lentils, sesame oil etc.
- A green leafy vegetables
- A meat from aquatic animals, pork meat, red meat,
- Curd, A water from curd, a special wine called sura.
- Eating combination food with different properties.
- A daytime sleep just after eating
- Working near fire, in sun
- Having anger issues
- Not having body toxins removal through *Panchakarma* procedure time to time
- Recurrent indigestion.
- In winter, blood becomes some extent to impure naturally.

❖ Diseases listed as *shonitaja vyadhee* in *Charak Samhita*⁴

- Stomatitis
- Redness in eyes
- Disease related to Mouth, nose.
- *Gulma*
- *Visarpa*
- *Raktapitta*
- *Pramilak*
- *Vidradhee*
- *Raktameha*
- *Vaivarnya*
- *Agnisada* and deformities related to Agni
- *Mada, Kampa, Swarakshaya*
- *Tandra, Atinidra* (Excessive sleep)
- Skin disease like *Kandu, kotha, Pidaka*, etc.

So In this, all spectrum of disease are mentioned. Also there is various condition in systemic diseases in which we can sue

- Blood letting in Fever⁵

In *charak samhita chikitsasthana*, there is chapter dedicated for fever, its causative and various treatments in different conditions. There is reference for bloodletting when there is no proper relief in *jwar* condition by using drugs of properties like *sheeta* (Cold), *ushna* (hot), *snigdha* (Oily)

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(unctuous) *ruksha* (dry) etc. Then use various bloodletting procedures like *siraved* (removing blood from vein)

There is quote “*Rakatsya soavasekat prashamyati*”

- Bloodletting in *Gulma*⁶

Gulma is one specific disease mentioned *ayurved samhitas* which is cause due tridosha vitiation and manifested in ‘abdominal area’. There is reference for Bloodletting when there is not relief by treatment by of vitiated *dosha* then *raktamokshan* i.e. bloodletting must be with different measure like *shrunga*, *siravedha* etc. Also there is reference for bloodletting *pittaj gulma* with *Daha* condition. Bloodletting is also mentioned in ‘*raktaj gulma* as ‘*raktapittahari kriya*’

- Bloodletting in Skin disease⁷

Bloodletting is one of the important treatment principles in skin disease. According ayurvedic principle, every skin has involvement of vitiated *rakta* i.e. blood in etiology of every skin condition. The main treatment principle of Skin disease i.e. *Kushta* have *raktamokshan*. There are several references for bloodletting in various conditions. Some of conditions are as follows:

1. Using leech therapy in rough, rounded and stable skin condition.
2. Leech therapy in *pittaj kushtha* condition.

- Bloodletting in *Rajyakshma*⁸

There is reference for bloodletting by different measures in this disease condition. There is reference for bloodletting by ‘*shrunga*’ in condition of *parshvashool*, *ansashool* and *shirashoola*.

- Bloodletting in *Arsha*⁹

Bloodletting is also stated in disease condition like *arsha* where surgical treatment is commonly used. There is common principle stated regarding bloodletting in *arsha* as procedure used when there is no proper result of medicinal treatment. With this, there is special reference for various bloodletting measures for process. Ex.- *shrunga*, *jalauka* and *siravedh*.

- Bloodletting in *Visarpa*¹⁰

Bloodletting is one main treatment in *visarpa*. There are following reference for *raktamokshana* in *visarpa* treatment. 1. *Raktamokshan* in *pittasthanagata visarpa*
2. Various bloodletting procedures like *shrunga*, *alaboo*, *siraved* and *jalauka* (leech therapy etc.)

- Bloodletting and related Published research articles

There are many research articles published regarding bloodletting in various disease conditions. There is systemic review articles present for Bloodletting therapy and its effect in hypertension¹¹. There is randomised clinical trial present on bloodletting (leech therapy) in *Vicharchika* (eczema) which shows highly effectiveness of this process¹². *Sarvesh kumar et al* published a review article regarding history, use and biomedicine information regarding it.¹³

Case report:-

- A 52-year-old female patient reported the symptoms of pain in knee joints at our *Kayachikitsa* O.P.D. of Institute. Having Chief complaints of :
 - Chronic pain in the right knee
 - Stiffness in the joint is noticeable upon awakening.
 - Tenderness when applying light pressure to it.
 - Loss of flexibility.
 - Swelling on the joints.
 - Crackling sound from the joints when functioning.

- Medicinal and other History

1. The Patient gives an h/o of trauma to the right knee.
2. H/O Hysterectomy (8yrs before)
3. No k/c/o – DM / HTN or Thyroid Disorders.

- Family History:-No any family history.

• Observation

On observation, movement patterns become limited owing to discomfort both at rest and when performing daily tasks like getting up and down from a chair.

Due to pain, using walking assistance is necessary since the knee joints are inflexible.

• General Examination

The Patient was afebrile, with blood pressure 130/80 mmHg, pulse 94/min, and respiratory rate 20/min.

• Systemic Examination

In the respiratory system, the chest is clear B/L AEBS; in the cardiovascular system, S1 S2

audible and no abnormal sounds are detected. She was conscious and well-oriented.

- Ashtavidh parikshana

(This is a general examination given Ayurvedic Principles.)

1. Nadi – Vata-pittadhya

2. Mala- Malavashthabha (Irregular bowel Habit)

3. Mootra- Samyak Pravatana

4. Jivha- Sama

5. Shabda- Spashta

6. Sparsha- Ushna

7. Druk- Prakruta

8. Aakruti- Madhyam

- Local Examination

On local examination of both knee Joints, minimal swelling over the right knee joint was observed with mild tenderness.

(Parameter of Patient assessment is given in Table no. 1)

- Diagnosis: **Knee Joint Osteoarthritis**

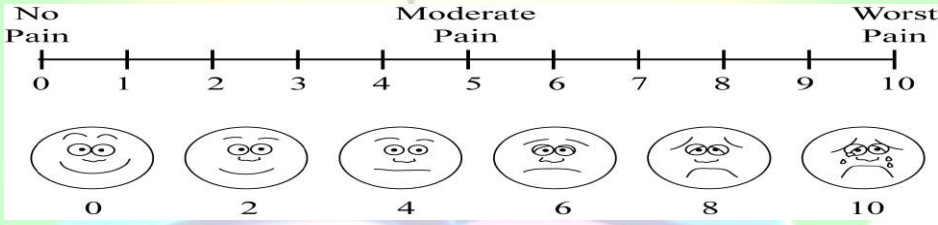
Patient Assessment					
Parameter	Graduation				
	Grade 0	Grade 1	Grade 2	Grade 3	Grade 4
Tenderness	Absent	Tenderness with no physical response	Tenderness with a grimace, wince, and/or flinch	Tenderness with withdrawal (positive jump sign)	Non-noxious stimuli
Pain (VAS Scale)					

Table 1: Assessment criteria used in Patient

- Treatment Given in this Patient

- In this Osteoarthritis patient internal medicine given with local oleation and sudation therapy.
- After 10 days of there is no effective relief observed in patient thus local leech therapy was planned in this patient.

Procedure:-

The *jalaukavacharana* procedure was done on the local site of the pain.

Step 1 - Inspection was done of knee joint.

Step 2 – comfortable position was given to the patient.

Step 3 – A *nirvish* and hungry *jalauka* had chosen the *jalauka* who speedily swim in water.

This *jalauka* put in *sarshapchurnajala* to make her potential to suck blood

Step 4 – By palpation, maximum tenderness area was located and prick was taken with the help of sterile needle.

Step 5 – *jalauka's* mouth was put over the part of prick where blood was coming. Step 6 – 30 min was taken by *jalauka* for bloodletting. It removed herself after sufficient amount of blood sucking. About 25ml of bloodletting was done.

Step 7 – dressing was done at *jalaukavacharana* site.

Step 8 – *Jalauka's vaman* was done with the help of turmeric powder. And it is kept in new fresh water bottle.

- Assessment done in Patient.

	Before Jalaukavacharan		After Jalaukavacharan		On next day	
Parameter	Pain	Tenderness	Pain	Tenderness	Pain	Tenderness
Observed Value (grade)	6	3	4	2	2	1

Table 2: Assessment and Observation in Patient.

Result: - In this above case report, medicinal leech therapy was used in management of pain in knee joint osteoarthritis. In above table 2 shows significant effect in reduction of pain and tenderness gradation. In this, Pain reduced from grade 6 to grade 4 just after leech therapy and reduced to grade 2 i.e. overall 66% effect was observed. Also tenderness gradation is reduced from grade 3 to grade 0 i.e. 70% effect was observed. This case report shows that, *Raktamokshana* treatment principle significantly used in pain management.

Discussion:-

This article is collective information of important reference for *raktamokshana* in various disease conditions from *charak samhita* and a case report of *Raktamokshana* used in pain management in knee joint osteoarthritis. This treatment is one the *panchakarma* treatment mentioned. This *raktamokshana* i.e. bloodletting having subtypes like *shrunga*, *alaboo*, *jalaukavacharan* and *siravedha* according to the removal method of blood. *Shrunga* is a method of bloodletting in which local blood is removed with the help of horns by creating

suction. *Alabu* is a method of bloodletting the same as above but with the help of halo pumpkin. *Jalakukavcharan* is mainstream method of bloodletting in which leech are used to remove vitiated blood. This is conventionally called medicinal leech therapy. There are plenty of study published regarding its properties and biomedical properties. *Siravedh* is one type of *raktamokshana* in which bloodletting is done through main veins in limbs. This is common done to remove vitiated *dosha* from system. Now-a-days blood donation is getting popularity among people for saving needful life. Bloodletting is most commonly used in skin conditions. In kushtha chikitsa there is detailed description regarding use of bloodletting in various skin conditions. This bloodletting can do within different measures as mentioned above. Bloodletting is also mentioned in different disease conditions also. These diseases are fever, *gulma*, *rajyakshma*, *vatarakta*, *visarpa*, *vidradhi*, *arsha* etc. A bloodletting treatment is effective used in pain management. In a complied review of various treatment modalities in pain management of various disease condition have reference quoted for bloodletting from *charak samhita*¹³. All various references for bloodletting in different disease in *ayurvedic* reference book are connectively linked to *rakta dushti* and its treatment principle explained in *charak samhita sutrasthana*. In this, there is a reference for using bloodletting as a treatment when simple medicinal treatment didn't shows any significant result in patient's condition¹⁴. This bloodletting principle is frequently used by many *ayurvedic* physicians in day to day practice and shows significant effect in disease condition.

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6.

IMPORTANCE OF LEKHAN KRMA IN ULCER- A CLINICAL CASE STUDY¹Dr .Pratapwar Aniket, ²Dr. Desai Rajdatta, ³Dr Tasare Prashant,¹Associate Professor, Dept.of Rognidan, M.A.D. Ayurveda college, Yevla²Associate Professor, Dept.of Rognidan, Annasaheb dange Ayurved college Ashta.³Associate Professor, Dept.of Kriya sharir, M.A.D. Ayurveda college, Yevla.

Introduction: Many times it is observed that when there is gross tissue loss, especially skin eburn / lacerated wounds (more than 10 cm area), in spite of all proper treatment there is a formation of unhealthy, granulation tissue on floor and edges get fibrotic in such cases of wounds or ulcers. Because of desolating agent microcirculation get damaged which can be also responsible for such condition. In Ayurveda such signs & symptoms are described as Dusta Verna ³

Fibrotic edges & unhealthy granulation tissue is one of the main cases of non- healing ulcer. According to Ayurveda Ulcer having sign symptoms like Ativistrut- More

dimensions, Unnatmasa, ShwetaPidika, Proud flesh granulation tissue with less blood supply, TshulavrittaOstha- Thick circular edges described in the DustaVrana^{1,2} can be co-relate with non- healing ulcer. Sushrutahas advised ShastiUpakram for Dusta Verna. Lekhan Karma is one of the ShastiUpakrama. Lekha Karma means scrapping of unhealthy, dead, bad tissues from the ulcer with the help of LekhanShalaka (Scoop like instrument) Lekhan Karma helps to improve the circulation of ulcer and heals the ulcer.

Clinical Features

A 32 years female having ulcer of size 14 cm X 12 cm on lateral aspect of right leg just 3 fingers above the lateral malleolus since 3 months. There is not discharge, no swelling or other systemic and local sign, symptoms except non-healing with very mild dull aching pain. Patient does not have history of any other systemic disease. All blood reports and X-ray reports are within normal limits. Ulcer was due to burn by silencer of bike and she was advised skin grafting. On examination for ulcer

Site: - 4 finger above lateral malleolus of right leg

Size: - 14cm X 12cm X ¼ cm Shape: - Elliptical

Discharge: - No Discharge

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Edges: -

- Fibrotic, hard, pale pink & blackish color
- Floor: - Covered with fibrotic unhealthy granulates tissue
- Base:- Freely movable with mild induration
- Smell: - No specific smell noted.
- Surrounding: - Mild hyperpigmentation with slight edema, No varicosity or local skin disease.
- Lymphadenopathy: - no inguinal Lymphadenopathy.

Treatment

After complete history and examination Lekhan karma was advocated in patient. For following setting and observation were noted below

Treatment	Observation
Day 1- Scrapping of 50% of fibrotic edges and unhealthy granulation tissue TriphalaKwath L.A. for dhawan	Fibrotic edematous edges unhealthy granulation tissue and hyperpigmentation around ulcer.
Day 2 - Scrapping of 90 % of fibrotic edges and unhealthy granulation tissue TriphalaKwath L.A. for dhawan	Floor clear and new formation of granulation tissue edematous reduced slopping edges
Day 16- Mild Scrapping done	Floor Covered with healthy granulation tissue, edges slopping pearly blackish in color.
Day 25- Only Triphala Kawath Dhawan	Healthy from edges noted. Floor-healthy granulation tissue covered with shiny mucosa size 12 X10cm Ulcer Size 8 X 6cm No inflammation.
Day 40- Only Triphala Kawath Dhawan	Hyperpigmentation reduced Ulcer healed completely with mild hyperpigmentation
Day 60- Only Triphala Kawath Dhawan	Normal pigmentation

Discussion

Non healing ulcer can be co-related with Dustavastha of Vrana. According to Charak and Sushruta many causes are responsible for non-healing of ulcers⁵. unhealthy tissue and also increase and develops new blood circulation i.e. Raktaprasadan which ultimately helps to heal ulcer.

In present case there was vitiation of vata and kaphadosha. Triphala is having Kashaya rasa Tridoshaghna activity vranropak and shodhak karma because of triphala vitiated dosha decreased which also helps for healing of ulcer.

With the help of proper hygienic dressing and just simple ayurvedic drug i.e. triphala and procedure Lekhan Karma the goal of healing is achieved.

Conclusion

With above mentioned treatment patient was fully cured and ulcer healed completely without any complications during the period of 2 months and skin grafting is avoided. Simple Lekhan Karma if done properly and timely non-healing ulcer can be cured, healed successfully by ayurvedic management

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7.

EFFICACY OF AYURVEDA INTERVENTIONS IN A CHILD WITH AUTISM CUM DEVELOPMENTAL DELAY- A PEDIATRIC CASE STUDY¹Renu Bharat Rathi,^{2*} Bharat J. Rathi^{1*}Professor, Head, Dept of Kaumarbhritya, ²Professor, Dept of Rasashastra & Bhaishajya Kalpana, Mahatma Gandhi Ayurved College Hospital & Research Centre, Salod, Datta Meghe Institute of Higher Education & Research, Deemed to be University, Wardha.**Abstract:**

Background: Autism comes under autism spectrum disorder (ASDs) which is characterized by a pervasive but restricted range of activities and behavioral functioning in the child. Autism is a heterogenous developmental neurological disorder characterized by discrepancies in social communication and interaction. **Aim and Objectives:** To propagate the need of early diagnosis and start of multimodal Ayurveda/CAM-Complementary and Alternative medicinal interventions in Autistic children. Objectives are to highlight the efficacy of Ayurveda management in context to augment the quality of life and reduce the dependency on parents to lead an independent life ahead. **Material and Methods:** This is an autistic, hyperactive case of 2 years old boy also suffering from delayed milestones treated by Ayurveda treatment modalities and other multimodal interventions. As he received fantastic results, hence presenting it as a case report. **Observations and Results:** At the end of 2nd sitting only within three months of short span, the patient was able to stand on his own and started a supportive walk. Simultaneously, due to early and multiple interventions, his understanding, non-verbal and slightly verbal communication started which provided immense satisfaction to his parents. Earlier they did not get any results after allopath treatment for around one year. **Discussion:** Ayurved is a life science having natural, herbal, safe medicines and a holistic approach towards the treatment of any disease with a focus on diet (*Ahara*), lifestyle change (*Vihara*), stress relief by yog, Panchakarma and *Sattvavajaya chikitsa* (Ayurved psychotherapy), *Marmatherapy* and many more. Resulting the good relief in multiple aspects of such autistic children. **Conclusion:** Autistic child has multiple issues in various aspects of personal, social, behavioral, motor, and cognitive domains. We received good improvement in each and every milestone in this case. Therefore, it may prove a torch-bearer to researchers and practitioners. The uniqueness of this case was a multi-dimensional approach which provides a synergistic and quick effect.

Keywords: Autism, communication, developmental neurological disorder, pervasive,
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hyperactive, behavioral, Ayurved, Yog

Introduction: The term autism, is derived from the Greek word *autos* (self) and *ismos* (action). Autism spectrum disorder is a neurological and developmental disorder in which the child is unable to communicate, remains engaged in swinging movements, has no or very poor concentration, has repetitive, hyperactive behavior, and has gastric upset [1-2]. Most teens and adults having autism have less severe symptoms as they get older. Not every adult gets better. Especially those with mental retardation may get worsen. ASDS has a tendency to flow in the family but the inheritance pattern is still unknown.[3]

Autism is caused by genetic factors, marriage between blood relations, the advanced age of parents, consumption of alcohol or drugs, exposure to metals and environmental toxins by an expecting mother, and some viral infections or many times by unknown etiology.[4] ASD can involve a wide range of symptoms and skills. Autism can affect one out of 54 children in US with boys being 4 times more prone to have autism than girls. About 40% of autistic children do not speak. It is the fastest-growing developmental disorder. Autism is not a hopeless condition. It is treatable but early prevention is key [2]. An early prevention plan for children with autism is found effective for improving IQ, language ability & social interaction. In addition, children with autism are prone to have sensory abnormalities, and lack of verbal-nonverbal communication too. They generally engaged in lonely play rather than with peers. Gender, family income and household structure are related to activity scores. The financial burden and lack of opportunities may be faced to undergo available treatment options [3]. Some researchers show a very low rate of symptomatic relief in delayed diagnosed cases than in cases in which early interventions started. Autism is a lifelong condition however, many children diagnosed with ASD go on to live self-dependent, fulfilling, productive and successful lives. As in Ayurveda, the range of medications and treatments can augment the quality of life of the child too much extent [4].

Case report: A mother of a 2-year-old boy came to Balrog OPD with complaints of delayed milestones, difficulty in communication and repetitive, hyperactive behavior of her child with lack of reactions while doing any activity. Due to such strange behavior of her Child, the mother has approached for further treatment. On examination, the boy was found with pervasive movements and lack in eye contact, not listening to his parent's instructions and poor in either verbal or nonverbal communication. Therefore, the case was diagnosed as Autism as per DSM IV & V criteria.[5]

Personal history:

Sleep-Disturbed

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Bowel-Irregular

Appetite-Lost, moody, not liking combination patterns of eating like for example-chapati with curry or lentil soup with boiled rice.

On examination:[6]

General- Patient has vitiated *TriDoshas* with Weight-9kg, Height-81cm and head circumference 45 cm. Not able to speak, stand and walk, power is 3/5, and reflexes were normal.

Systemic Examination:

- 1) *CVS-S1,S2 Audible*
- 2) *RS-Bilateral Air Entry, H/o recurrent respiratory infections.*
- 3) *CNS-Not well oriented, alert, and conscious but having behavioral & speech issues*
- 4) *GIT-Irregular Bowel Movement, Abdomen-Slightly tender and distended*

Treatment In Ayurveda:

Autism can be managed by 3 treatment categories according to Ayurveda

- 5) *Yukti Vyapashraya* ie. Medical Interventions
- 6) *Daiva Vyapashraya* ie. Psychological and Spiritual Method
- 7) *Sattvavajaya*- counselling, assurance, meditation, *manonigraha* (Ayurveda psychotherapy)

Observation & result: The patient was suffering from gastrointestinal upset, so the treatment was initiated with formulations to boost Agni and improve bowel movements. [6] The internal as well as external interventions are depicted in Table no. 1 & 2

Table no 1 depicts the medicinal and procedural treatment interventions given for 2 months in 2 sittings

Sr. No.	Type of treatment & purpose	Drug	Does & Anupana	Duration
1.	Oral medication to boost Agni & Medha	<i>Trikatu, Triphala & Hingwashtak churna+Rajanyadi churna yoga-RY with Bramhi ghrit & Suvarnaprashan</i> [7-9]	125 mg each RY-175 mg 5 ml 10 drops	Twice a day before meal
2.	For speech stimulation [10]	<i>Yashtimadhu+Vacha+Trikatu+Kantakari</i>	Paste with honey 100 mg each	Twice a day before a meal
3.	<i>Sattvavajaya chikitsa</i> [4, 11-13]	Counseling to parents, play therapy, <i>Marma</i> therapy (slowly increase and release of pressure till 1 min on <i>marma</i> points of brain & vertebral column), clapping hands and feet & om chanting	Once or as per need a day	Twice a day
4.	Procedures- <i>Nasya and Shiropichu, Sarvang abhyanga Sweda, Matrabasti</i> [14-18]	With Biiiii tail, With <i>Dhanvantar tail</i> <i>Dashmool kwath</i> steam, With <i>Sahachar tail</i>		

Table no 2 showing the effect of treatment on gastric upset

Sr.no.	Clinical features	Before treatment	After treatment
1.	Loss of appetite	++	Gained average
2.	Constipation	++	--
3.	Gases, bloating	++	--

The above treatment was given for 7 days the patient was asked to revisit on the 14th day & later medicine was given for 14 days and the patient is called after one month.

Discussion: The patient has many complex complaints like delayed and difficult speech, engagement in swinging movements, sleeplessness, constipation, lack of appetite, and gases. Autism is considered under *Sahaj vyadhi* including vitiation of all the three *sharirik Doshas* and *dwi manas Doshas-Raja* and *Tama*. [4]

Trikatu, *Triphala*, and *Hingavashtaka* like *Agnideepak-pachak* drugs are given as there is a first need to improve the digestive power of the children as these are *kapha-Vatahara* and provokes *pitta*. *Rajanyadi churna* balances *Vata* and *pitta Doshas*. It treats gastric upset, and improves strength, weakness, and immunity.[7]

Vatadushti (vitiation) is the principal etiological factor in the pathology of autism which later vitiates to both the *manas Doshas-Raja* and *Tama*. Ultimately there is an abnormality of *Dhee* (grasping), *Dhruti*(capacity to hold) *Smruti* (memory), communication, and behavior. Therefore, to reduce the *Vata dushti*, not only medication (*Shamanaushadhis*) but external procedures such as *Abhyanga/Bahya snehan* (body massage), *Sweden* (hot fomentation) along with *Matra Basti* (oil insertion into the rectum) by *Dhanvantar tail* are important *panchakarma* procedures to calm the *Vatadushtijanya* behavioral changes, constipation, irritability and hyperactivity of patient which in turn leads to *Vatashaman*. [16-17] As the brain and involvement of *Majjadhatu* in autism, *Nasya* and *Shiro Pichu* with *Brahmi tail* improve brain functioning and intelligence.[14] It calms *Vata* and redirects the flow of *Vata* downwards as *Brahmi* revitalizes the nerves and brain cells, and improves mental performance and long and short-term memory.[8] Table no 3 depicted the action mechanism of different *panchakarma* procedures useful in the management of Autism. [18-20]

Table no. 3 showing the efficacy of panchakarma procedures in the management of Autism

No.	Procedure	Mode of Action
1	<i>Talapothichhil / shirolepa</i>	The calm and cooling effect, mood regulation, Vasodilatation, a tranquilizing effect due to an increase in brain circulation, Cognition, improved memory, sleep & Relieves irritability
2	<i>Nasya</i> -medicated oil instillation	Stimulant action on the brain and its sensory-motor centers. Relieved symptoms of ADHD, Autism, stimulant efficacy to brain
3	<i>Snehan-Sweden</i>	Nourishment to skin, muscles, and nerve endings, <i>Vata</i> pacifier action by increased circulation & vasodilatation leads to improve motor function, bulk and strength. Relieves pain, and stiffness & stops stereotyped movements.
4	<i>Matrabasti</i>	<i>Vatashaman</i> , microbiota-gut-brain axis, stimulates brain function

Suvarnaprashan improves the brain's higher functions like thinking, communication, physical and mental developmental ability and corrects digestion too.[9] The only thing is that there is a need to continue these Ayurvedic modalities till improvement in all complaints. Proper counseling, motivation, assurance, and guidance are parts of Ayurved psychotherapy. *Panchakarma* procedures act directly on multiple systems of our body with the pacification of dominant *Dosha* and augmentation of recessive *Dosha* thereby making an equilibrium and results in the good relief in multiple aspects of such autistic children. Autism like a brain disorder is a neurobehavioral developmental disability that needs lifelong care. As an adjuvant, play therapy, *Marma* therapy-acupressure, Om chanting, music therapy, and counseling which come under *Sattvavajaya chikitsa* (Ayurvedic psychotherapy-all non-pharmacological measures) have a pivotal role in the improvement of quality of life. [11-12] *Marma* therapy- was regularly done as acupressure with slow increase and release of pressure till 1 min on *marma* points of the brain & vertebral column to stimulate all nerves coming out from the vertebral column. Play therapy and Clapping hands and feet to arouse points of all organs for their better functioning. [13, 18, 19] Music therapy and Om chanting help to calm the patient with an increase in focus on any work or task. [20-21] Mother was asked to make the environment of sleep and hug the child with love and secure feeling to reduce loud screaming and sleeplessness at night with uttering *Omkar* and moving right palm of the mother on a vertebral column to induce sleep. [13, 22] *Nasya* and *Shiropichu* also stimulate all brain

functions. [23-24] at the end of 2nd sitting only, the patient was able to stand on his own and started a supportive walk. Simultaneously, due to early and multiple interventions, his understanding, non-verbal and slightly verbal communication was started which provided immense satisfaction to parents thereby they could know the feeling of their child what is in his mind and what he want to convey to them.

Conclusion: From this study, it can be concluded that Autism is a congenital and incurable disease so, any medicine cannot destroy it from its roots, but we can at least improve the quality of life of the child by using long-term holistic Ayurvedic treatment modalities.

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8.

**A CASE STUDY ON AYURVEDIC MANAGEMENT OF
KITIBHAKUSHTA****¹Deshmukh Sourabh Gyanranjan , ²Thakare Trupti Ishwardas**

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Abstract

The most prevalent disorder that affects people of all ages due to improper living choices is skin disease. It is one of the worrying problems with a significant societal impact. One of the earliest documented human diseases is kushta. In Ayurveda, the all skin diseases are referred to as Kushta, which is further divided into Maha Kushta and Kshudra Kushta. One variety of Khudra Kushta is Kitibha Kushta. Ayurveda offers long-lasting, irreversible treatments for skin conditions that reduce the likelihood of illness recurrence. **Aim and Objectives:** The present study was conducted to perceive the effect of combination of Ayurvedic modalities on *Kitibha Kushta*. **Material and Method:** A 30-year-old male patient having lesions on the chest, abdomen and back region that were reddish in colour, rough to the touch, hard and dry in nature, and that had been itching for the previous three years, were effectively treated with *Shodhan Chikitsa* (Vaman), in addition to *Shaman Chikitsa*. The disease was treated with combination of Ayurveda Modalities like *Shodhan* and *Shaman chikitsa*. In *Shaman chikitsa* we given internal medicines like *Gandhakrasayan* and *Panchatiktaghrita* followed by *Shodhan chikitsa* with *Samsarjana karma* was given along with Vetapalai oil and Atrisor cream for local application was continue for 1 month. **Observation:** The PASI score was 5.4 before treatment which was 0 after the treatment. **Result:** In the present case study after giving the *Shodhan* and *Shaman chikitsa* the patient got complete relived from the symptoms. **Conclusion:** By using the Ayurveda modalities we can find much better result in case of *KitibhaKushta*.

Keywords: *Kitibha*, Guttate Psoriasis, *Shodhan chikitsa*, *Shaman chikitsa*.

Introduction:

Psoriasis is a terrible and chronic, multisystem and non contagious disease. The incidence rate is 2.8% seen in India affects the majority of people. The most common clinical type of guttate psoriasis is more frequently observed in adolescents and young adults ^[1]. Eruptive psoriasis is another name for guttate psoriasis. Approximately 2% of people with psoriasis have guttate psoriasis. Topical dermal steroids, anthralin, and UVB phototherapy are the most frequently used treatments for guttate psoriasis ^[2]. Skin conditions like *Kushtaroga* are reportedly one of the chronic diseases that are very challenging to diagnose and manage. The pathogenesis of Kushta and psoriasis is thought to be heavily influenced by behavioural, immunological, genetic, dietary, and environmental variables ^[3]. *Kushta* is among the oldest known disorder to mankind ^[4]. The skin diseases in Ayurveda has been broadly classified under the heading *Kushta* and Acharya Charaka has told it as one of the *Ashta Mahagada* that is difficult to treat ^[5]. *Kushta* is further classified as *Kshudra Kushta* and *MahaKushta* in which all kinds of skin disease mentioned in Ayurveda are involved ^[6]. The *KitibhaKushta* is the type of *Kshudra Kushta* having symptoms like *Kharasparsha*, *Shyava*, *Rukshapidika*, *Kandu* and *kina* ^[7]. The manifestation of *Kitibha Kushta* is due to seven factors including four Dhatu (*mamsa*, *rakta*, *lasika*, *twaka*) and three *Doshas* (*vata*, *pitta*, *kapha*). ^[8].

Case study:

A 30-year-old male patient approached with chief complaints of reddish colour lesions rough to touch hard and dry in nature with itching for 3 years.

Brief history of patient

A 30 years old male patient was apparently well before 3 years. But suddenly started complaining about the skin lesions over the chest, abdomen and scapular region which was rough and hard to touch and dry in nature associated with itching. He was a worker belonging to lower socioeconomic class, Hindu family background. He went to local physician before a year but got only symptomatic and temporarily relief. When he was consulted to our institutional OPD of Kayachikitsa, he underwent some clinical assessment like PASI score and then he advised to take *Shodhan* and *Shamanchikitsa*. No family history was found; on examination it was found that the lesions were hard rough in nature with dark brown colour. The patient had the habit of taking very spicy and oily food, intake of nonvegetarian food with consumption of alcohol sometimes.

Skin examination:**1. Inspection**

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- Size shape: well defined, scaly, erythematous small round lesions on lower limb
- Colour: reddish
- Lesion: small reddish

2. Palpation

- Moisture: dry ness
- Temperature: warm to touch
- Texture: Rough and hard

Material and Method:

Shodhan chikitsa (Vaman) along with that *Shamanchikitsa* was given. In the *Shodhanchikitsa* Vaman therapy was planned followed by *Samsarjan krama* of 5 days, sequencing of *Purva Karma*, *Pradhan karma* and *Paschayat karma* as shown in **Table No.1**. After the *Shodhanchikitsa*, *Shamanchikitsa* was started using *Antarparimarjanchikitsa* including *Panchatiktaghrita*, *Gandhakrasayan* (after interval of 7 days) for 15 days and *Bahirparmarjanchikitsa* using Atrisor cream and Vetapalaioil for 1 month as given in **Table No. 2**.

Observation:

The severity of the area is determined by the three clinical indicators.

The severity characteristics are rated on a scale of 0 to 4, with 0 being the least severe and 4 being the most severe. The body of human being is bifurcated in to following sections-

- HEAD (10 percent of the person skin)
- Arm (Arm) (20 percent)
- Trunk (T) is a slang term for a trunk (30 percent)
- Legs (40 percent)

Each of these areas is rated separately, and the total score of all four is used to calculate the PSAI score. The percentage of the skin area engaged in each segment is calculated and then graded on a scale of 0 to 6. (**Table no. 3-5**)

Result:

In *Kushtaroga*, one of the types of *Kshudra Kushta* is *Kitibha Kushta*, a *Twacha vikara*. *Shyava*, *Kina Kharasparsha*, and *Parushya* are its manifestations. After the completion of the *Shodhan chikitsa* (Vaman therapy) patient received temporary relief in symptoms. Then after *Shodhan*, *Shaman chikitsa* was started which gives better result in recovery of patient by symptomatically as shown in **Figure No 1**.

Discussion:

In this case study *Vaman* was chosen for the *Shodhanchikitsa* because *Vaman* has the efficacy of removing the *vata* and *kapha dosha* which are the main *doshas* involved in the skin disorder such as *Kitibha Kushta*. After this therapy *sansarjankrama* was planned for 5 days to increase the *Sharirbala* and *Agni*. After that *Shaman* therapy was started in which *Panchatiktaghrita*, *Gandhakrasayan* for internal use and *Atrisor* cream and *Vetapalai* oil for local application.

Action of Gandhakrasayan:

The *Gandhakrasayan* has the *Kushtaghna*, *Kandughna*, and *Dahapra*. *Shaman*, *Raktashodhak*, *Vranaropaka*, *Twachya*, *Krumighna* mode of action. It is a most common formulation used in *Kushtaroga*. Some studies showed that it has the properties of antiviral, antibacterial and antifungal. The purified sulphur is used in all types of *Twacharoga*. It is helpful in reducing the itching. It is mainly used externally and internally for skin disorder. The oil is helpful in reducing the itching and increases the complexion along with improvement in digestion^[9].

Action of Panchatiktaghrita:

The *ghrita* is used for *Shodhan* treatment in *purvakarma* as internal *snehana* and in *Shamanchikitsa* for oral intake. The ingredients of the *Panchatiktaghrita* have *tikta* (Bitter), *Madhura* (sweet), *Ruksha* (rough), *Katu* (pungent), *Kashaya* (astringent), *Sheeta* (cold) and *Snigdha* (oily) properties along with *Ushnavirya* that helps to pacify the *Tridosha* involved in the disorder. The pacification of *Vatadosha* is responsible for relieving the symptoms such as *Kharasparsh*, *Kina*, *Parusha*, as well as the *Shyavavarna* in the *KitibhaKushta*. The pacification of the *Pitta Dosha* helps in reducing the *Daha* and *Srava*. And lastly the *Kaphadosha* pacification is responsible for decreasing *Kandu*, *Vruttanvrudhimanthi*^[10].

Action of Abhyanga with Marichyadi tail:

For performing the *abhyanga* procedure *Marichyadi tail* was used. The *dravya* which are present in the oil have the properties such as *Katu*, *Kashaya* and *Tiktarasa* which are responsible for the *Shaman* of *Vata* and *Kaphadosha*. The *Snigdha* guna of the *tail* is responsible for reducing the *Rukhshta*, *Khartva* and *Parushta*. The *tail* has antifungal, anti-inflammatory, antiseptic hence this oil is effectively used in disorder like *Kitibhakushta*^[11].

Action of Vetapalai oil

Vetapalai oil is the *Twachya* oil and is having qualities such as *Kushtaghna*, antibacterial, antifungal, antioxidant, and antimicrobial, anti-inflammatory. It is used in skin disorders,

itching, pruritus, and psoriasis. It is responsible for improving the complexion, relieving pain and is capable of wound healing.

Action of Atrisor cream:

The cream is used as the topical application. It is an herbal anti-psoriatic cream which is responsible for reliving the symptoms like itching, dryness. The cream is indicated in all types of *twacharoga*. The cream helps in bringing back the normal texture of the skin.

Mode of Action of Vaman Therapy:

As per the Ayurveda, the process of *Vaman karma* starts with *deepanpachana* which are responsible for reducing the *aamdosha* and increasing the *Agni*. *KitibhaKushta* in which the *kaphais* predominant and hence *Vaman* is performed.

The *vamadravyas* have the properties like *tikshna*, *sukhshma*, *vyavayi*, *ushna* and *vikasi* which get absorbed and come to heart due to the *virya* it has. The drug acts on the sites where the vitiated *doshas* are found. The drugs are responsible for liquefaction of the complex material. The liquefied molecules reach to *amashaya*. The *udanvayu* gets stimulated and the molecules march in upward direction to remove the vitiated *doshas*. By the process of *Vaman* therapy the vitiated *doshas* gets pacified and symptoms gets subsided ⁽¹²⁾.

Conclusion:

Kitabh Kushta which is one of the types of *Kshudra Kushta* can be correlated with the guttate psoriasis in modern medicine. The present study concluded that from Ayurvedic treatment that contains *Shodhan* and *Shamanchikitsa* psoriasis can be treated successfully where the chances of recurrences are very less. *Panchkarma* treatment can expel the harmful accumulates in the affected part and clears the body channels. This is a very effective way of treating psoriasis.

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Figure No- 1

Shodhan chikitsa:**Table no. 1:** The table showing *Shodhanachikitsa* by following *Purva Karma*, *Pradhan karma*, *Paschyatkarma*.

Karma		Formulation	Dose	Period	Route
<i>Purvakarma</i> For <i>Vaman</i>	<i>Dipana and Pachana</i>	<i>Trikatu churna</i>	3 gm twice a day with lukewarm water	3 days	Orally
	<i>Ghritpana</i>	<i>Panchatikta ghrita</i>	Dose starts from 30 ml – 1 st Day 2 nd day- 60ml 3 rd – 90ml 4 th – 120ml 5 th – 160 ml 6 th - 180ml 7 th - 220ml	For 7 days	Oral with empty stomach at morning
	<i>Sarvanga snehana</i> F/B <i>Nadi Swedana</i>	<i>Marichyadi Taila</i> <i>Dashmool Kwath</i>	Quantity sufficient Quantity sufficient	After completion of 7days of <i>Snehapana</i> On 8 th day <i>Abhyanga</i> is done	External application
<i>Pradhankarma</i>	<i>Vaman</i> Followed by <i>Samsarjan Karma</i> for 5 days	<i>Madanphal Yoga</i>	<i>Antarakha mushti matra</i>	On 9 th day at Morning time after <i>Snehana & Swedana</i>	Oral
<i>Paschyatkarma</i>	<i>Dhoompan</i>	<i>Aguru Stick</i>		5 min	By each Nostril
	<i>Sansarjana Karma</i>			5 Days after <i>Vaman</i>	Oral

Shaman Aushadi and Bahirparimarjana Chikitsa:**Table no. 2:** Table showing medication given after *samsarjana karma*

Medicine	Dose	Anupan	Route	Duration
<i>Panchatikta Ghrita</i>	10 ml (morning at 7 AM with empty stomach)	Luke warm water	Oral	15 Days
<i>Gandhakrasayan</i>	2 BD	With water	Oral	15 Days with 7 Days of interval in between
Atrisorcream	Quantity sufficient Twice a Day	-	External application	1 month
Vetapalaioil	Quantity sufficient Twice a Day	-	External application	1 month

- Table no. 3:**

Table Showing the area involved in involvement with gradation:

No involved area	Grade:0
<10% of involved area	Grade:1
10-29% of involved area	Grade:2
30-49% of involved area	Grade:3
50-69% of involved area	Grade:4
70-89% of involved area	Grade:5
90-100% of involved area	Grade:6

- Table no. 4:**

Table showing assessment criteria:

Chest (L)			
	Before Treatment	First follow up	Second follow up
Skin area involved Grade - A	3	2	1
Erythema (Redness)	3	1	0
In duration (Thickness)	3	1	0

Desquamation (scaling) E, I, D, B	3	1	0
Total PASI Score	5.4	1.8	0

- **Table no. 5:**

Table showing overall result:

	Before Treatment	First follow up	Second follow up
Area involved	30-49%	10-29%	<10%
Erythema (Redness)	Moderate	Mild	Absent
In duration (Thickness)	Moderate	Mild	Absent
Desquamation (scaling)	Moderate	Mild	Absent

असतो मा सद्गमय

9.

SUCCESSFUL MANAGEMENT OF DIABETES MELLITUS TYPE II (MADHUMEHA) WITH MADHUTAILIK BASTI-A CASE STUDY¹Dr.Sadhana Misar (Wajpeyi), MD, PhD Kayachikitsa,¹Professor, Dept. of Kayachikitsa, Mahatma Gandhi Ayurved College & Research Centre, Salod(H), Wardha, Datta Meghe Institute of Higher Education and Rresearch, Sawangi (M), Wardha**ABSTRACT-**

Introduction: Diabetes mellitus is a non-communicable metabolic illness. Raised blood glucose levels that are caused by absolute or relative insulin insufficiency, insulin resistance, or both are its defining feature. The most prevalent type of diabetes is type 2, which is usually brought on by leading an unhealthy lifestyle. Madhumeha is a type of Vatika Prameha. Acharya Charaka mentioned Madhutailika Basti in Yapana Basti. It has both Rasayana as well as Shodhana effects and indicated in Prameha. Hence here a case is treated with Madhutailika Basti.

Case Report- A 56 years female came with chief complains of bodyache, Sweet taste in mouth, Burning sensation at sole, excess hunger, excess sleep, polyurea and lethargy for more than 3 to 4months was treated with Madhutailika Basti 8 days followed by Nishamalaki Churna and lifestyle modification for 21 days. Patient was assessed on 7th and 15th and 30th day.

Result and Observations- Improvement in subjective parameters and reduction in blood glucose level was observed. **Discussion-** Madhutailika Basti is a Yapana Basti which includes Madhu, TilTaila, Saindhava, Shatapushpa, Erandmool which showed reduction in all parameters and also the reduction was observed after Nishamlaki and lifestyle management.

Conclusion- Madhutailika Basti is effective in reducing symptoms and Blood Glucose level due to its Shodhana, Rasayana and Antidiabetic property. Nishamaklaki and lifestyle management helps in improving symptoms and maintaining Blood Glucose level to normal.

Keywords- Blood Glucose level, Diabetes mellitus, Madhutailika Basti, Madhumeha, Metabolic disorder, Nishamalaki, Prameha.

INTRODUCTION –

Diabetes mellitus is a non-communicable metabolic illness. Raised blood glucose levels that are caused by absolute or relative insulin insufficiency, insulin resistance, or both are its defining feature (1). The most prevalent type of diabetes is type 2, which is usually brought on by leading an unhealthy lifestyle. The American Diabetes Association states that exercise, dietary and lifestyle changes should be used as the initial treatments for type 2 diabetes (2). If, however, lifestyle changes are not enough to control it, oral hypoglycemic medications and insulin will be required. Damage to the heart, blood vessels, kidneys, eyes, peripheral nerves, digestive system, ability to heal wounds, and sexual response are among the major problems of diabetes 2, also causes issues during pregnancy (3). According to the International Diabetes Federation (IDF), the number of individuals with diabetes worldwide is predicted to rise from 451 million (18-99 year olds) in 2017 to 693 million by 2045(4).

In Ayurveda it can be correlated with Madhumeha. In all Brihatrayi, there is a description of diabetes under the head of Prameha. The term Prameha means increased frequency of urine. Madhumeha (Madhu+Meha), a type of Vatika Prameha is the disease condition in which the urine becomes sweet, viscid and smells as honey. There are 2 different types, one is Dhatukshyajanya caused due to Vata aggravation and the other avaranajanya caused due to Kapha Meda Avarana (Blockage of channel) along with Vata prakopa. Management of Diabetes mellitus according to Ayurveda includes Nidanparivarjana, Shamana and Shodhana chikitsa. In sthul pramehi (Type 2 Diabetes, Obese patients) having good strength and severe increase Dosha, Shodhana chikitsa (purification) is advised. Exercise and life style modification is also indicated in the management (5). Acharya Charaka mentioned Madhutailika Basti under Yapana Basti. It has Rasayana as well as Shodhana effects and indicated in Prameha. Hence here a case is treated with Madhutailika Basti after taking consent of patient.

CASE REPORT –

A 56 years female came with chief complains of bodyache, sweet taste in mouth, burning sensation at sole, excess hunger, excess sleep, polyurea and lethargy for more than 3 to 4 months.

History of Chief Complaints- Patient was alright 4 years back. Then she slowly started above said complaints for which she was investigated by her family physician. Her fasting and postprandial blood glucose was raised so she was advised to take Metformin, an antidiabetic drug. But patient was not taking regular medicine hence her complaints get worsened and she wanted to shift on Ayurveda drugs so she visited to our Hospital.

Past History- Patient was given no significant past history.

Family History- Mother was suffering from Diabetes mellitus type II.

Personal History- Patient was pure vegetarian, having moderate stress with no addiction. Her sleep was adequate but interrupted and given history of taking daytime sleep for 2 hours daily after meal. She was not practicing any type of exercise.

Ashtavidha Pariksha-

Table no. 1 Ashtavidha Pariksha-

Nadi	78/min
Mala	Samyak
Mutra	8-9 times during day and 3-4 times at night
Jivha	Niraam
Shabda	Spashta
Sparsha	Anushnasheet
Druk	No pallor, No icterus
Akruti	Sthul(Overweight)

General examinations –General condition of patient was good. All vital parameters were within normal limit. Her pulse was 78/min, BP-130/80mmHg, respiratory rate-18/min and body temperature-98⁰F. She was overweight with weight 72 kg, height 168 cm and BMI of 25.5 Kg/m².

Systemic examination- of Respiratory, Gastro-intestinal, Cardiovascular, Central Nervous System and Locomotor were within normal limits.

Blood investigations - showed Fasting Blood sugar level as 176 mg/dl, Post prandial Blood Sugar level as 274 mg/dl and Glycosylated hemoglobin (HbA1c) as 8.4%.

Diagnosis-From above findings, diagnosed as Madhumeha (Diabetes mellitus type-II).

Table no. 2- Treatment Given

1	Madhutailika Basti	
	Duration	8 days
	Dose	530 ml
	Kala	Prataha (Abhakata)
	Type of Basti	Niruha (Yapan Basti)
	Parihara Kala	16 days
2	Nishamalaki Churna – started after Basti from 9 th day	
	5gm twice a day with lukewarm water before meal	21 days
3	Dietary modification	21 days
	Avoid fatty, salty, and sugary food products. Increase the intake of high fibrous diet such as whole grain, green vegetables, and fruits	
4	Exercise	21 days
	Daily brisk walking 30 min. Avoidance of daytime sleep. Meditation-15 min.	

Table no. 3 Ingredients of Madhutailika Basti-

SN	Ingredients	Quantity
1	Madhu (Honey)	4 Pala - 160 gms
2	Erandamool Kwath (<i>Ricinus communis</i>)	8 Pala - 320 ml
3	Til Taila (<i>Sesamum Indicum</i>)	4 Pala - 160 ml
4	Shatapushpa Kalka (<i>Anethum sowa</i>)	3 Karsha – 30 gms
5	Saindhava Lavana	1 Karsha - 10 gms

Preparation of Madhutilika Basti -

All the ingredients of Madhutilika Basti as shown in table no. 3 were collected. Initially *Madhu* and *Saindhava Lavana* were taken in the *Khalva Yantra* and triturated to form a homogenous mixture. Then *Tila Taila* was added and mixed properly till it get emulsified to become homogeneous. After that *Shatapushpa Kalka* was added and mixed so that *Kalka* particles remain uniformly distributed. At last *Erandamula Kwatha* was added and mixed until it properly mixes with oil globules. Finally prepared mixture was assessed for homogeneity with certain features under the heading *Suyojitha Niruha Lakshana*. Before administration quantity of 530 ml *Basti* formulation was measured (6).

Assessment –Patient was assessed on Day 8, 15, 30 for both subjective and objective parameters (as shown in table no.4).

RESULT AND OBSERVATION-

Assessment of Subjective parameters- On the first follow up (after 8 days Basti) patient reported reduction in previous mentioned symptoms. Moderate improvement was observed in symptoms like bodyache, sweet taste in mouth, burning sensation at sole, excess hunger, excess sleep, polyurea and lethargy. On the second follow up (15th day) patient had little more improvement in above symptoms. On third follow up (30th day) patient felt lightness and energetic in routine activity, mental stress and burning in feet was also reduced and frequency of urine was 0-1 times during night and 4-6 times during day.

Table no 4.-Assessment of Objective parameters-

Follow up	Medicine	FBS mg/dl	PPBSmg/dl	Weight in kg
0 day	No medicine	176	284	72
1 st follow up (8 days)	Madhutilika Basti	124	194	70
2 nd follow up (15 days)	Nishamalaki Churna + Dietary modification and Exercise	114	178	70
3 rd follow up (30 days)	Nishamalaki Churna + Dietary modification and Exercise	102	164	69

DISCUSSION- Acharya Charaka mentioned Madhutilika Basti in Yavana Basti. The main components of this Basti are Madhu (Honey) and Til Taila (Sesame oil), hence the name Madhutilika. Yavana Basti enhances lifespan and can be used for a longer period of time. It can be given to both healthy and sick people, does not require purvakarma, and does not result

in the creation of atiyoga or ayoga. Acharya Charaka mentioned Yapana Basti's Rasayana and Shodhana qualities (7).

Madhutailika Basti -

The major ingredients in this basti are Madhu (Honey) and Til taila (Sesame Oil), both in equal amounts. Its primary attributes are Rasayana (rejuvenating). Also, it includes qualities that make it useful for Krimi, Kushtha Arsha, Pliha Roga, and Prameha. It acts as Brihana, Dipana, Medohar, Vatakaphashamaka, Amapachana, and Strotoshodhana. It boosts the digestive power (Agni), cleanses all of the body's channels, and also aids in restoring normal function of Rasavaha, Medovaha, and Mootravaha Srotasa. Thus it helps in breaking pathogenesis by balancing Vitiated dosha, opening obstructed channels and improving metabolism by correcting deranged Agni. Thus it has Shodhana and Rasayana effects (8).

Concept of Shodhana-

By removing vitiated doshas from the body and preserving the balance of the Tridosha, Madhutailika Basti aids in the purification of the body. The removal of vitiated Pitta, Kapha, and Kleda from the body aids in clearing clogged channels and restores Vayu's regular flow. Shodhana also helps in Agnidipti (digestive fire enhancement), Vata anuloman (downward movement of Vayu), Sukhen malapravriti (defaecation with ease), Vyadhinigrah (reducing the symptoms), and Viviktatata pavitrata-glani rahita (feel energetic after passing stool, no lethargy) Madhutailika Basti cleanses the Srotorodha thereby enhancing nourishment to all dhatus.

Rasayana effect of Madhutailika Basti-

Due to Rasayana (rejuvenating) property of Madhutailika Basti, healthy bodily tissues are produced. All body tissues are nourished by the Brihana (nourishing) and Dhaturvardhana (strengthening body tissues) property, which maintains tissue regeneration. It strengthens defence mechanisms without raising blood sugar levels. It improves physical strength (adaptogenic activity), the health of neurological tissues, and microcirculation via regulating macrophage activity (9,10). All above action of Basti drugs help in breaking pathogenesis as it possess antidiabetic activity. It might be useful in modifying the fat and carbohydrate absorption from the gut.

Mode of action of drugs in Madhutailika Basti:

Madhu (honey) (11) has Yogavahi property which increases potency of Basti. Sesame oil has the Tikshna (Deep penetration), Vyavayi (quickly Spreading in all the body), and Sukshma (capability to enter tiny pore) property. TilTaila causes Lekhana (scraping) and Karshan (emaciation) due to Tikshna, Ushna, and Ruksha guna. Due to its Sukshma guna, TilTaila penetrates all Strotasa. Moreover, it nourishes all bodily tissues and pacifies vitiated Vatadosha. The smooth, heavy properties of TilTaila (12, 13) calm the dry, rough qualities of Vata and improve cell membrane permeability. Saindhava's molecular, fast, and smooth characteristics allow it to penetrate microchannels, dissolve dosha, and break down unhealthy mala. Shatapushpa (14) and Eranda Moola (15) cause addition of Vata pacification, appetite improving, purification, restoration of health property to this. Because of all these properties, Madhutailika Basti aids in digestion of Ama (undigested food), and Vata Kapha pacification leading removal of blockage from channels thus maintaining proper functioning of Vayu and breaking pathogenesis.

Modern view of mode of action-

Modern science asserts that Madhutailika Basti immediately enters the systemic circulation through the rectum, has a quicker absorption rate, and produces benefits quickly. Honey can dissolve lipids and water because it is ambiphilic in nature (hydrophilic and lipophilic). In addition to lowering surface tension, salt also changes honey's gel state to liquid. Added oil will then quickly dissolve in this mixture. Kalka may dissolve readily and provide Basti Dravya potency. Along with its other effects, Kwatha will expand the surface area for absorption. The aforementioned reactions will be facilitated by temperature and constant stirring. In the end, the drug will take on a very unstable colloidal form that will enable chemical interaction between the vast intestine lumen and circulation through semi permeable membranes.

Niruha Basti is hyper osmotic, facilitating elimination of morbid factors, i.e. endo toxins into the solution, and produces detoxification during elimination. Enteric nervous system (ENS) usually communicate with the CNS-central nervous system through the parasympathetic (eg. via the Vagus nerve) and sympathetic (e.g. via the Prevertebral ganglia) nervous system. The GIT's pressure and chemical changes are both monitored by sensory neurons in the ENS. Smooth muscle in the GI tract contracts, and GI tract endocrine cells are active, owing to enteric motor neurons. The majority of the neurotransmitters used by the ENS, including acetylcholine, dopamine, serotonin, and others, are the same as those of the central nervous system. The enteric nervous system has the ability to change its response depending on parameters like as quantity and nutrient composition. Considering the complete nervous

system is interrelated therefore this regular stimulation to ENS may have some good effect over the CNS too and in this way the neuro-endocrine control may take place. The ENS works with the CNS, specifically the hypothalamus and brain stem, to maintain glucose homeostasis (16). This helps in maintaining blood glucose level normal.

Basti balances the Vata Dosha and, owing to the drugs' lekhana properties, Madhutailika Basti also cleans the channels, clears of the Medasa Avarana, and normalizes the movement of Vatadosha. Thus it helps in reducing the symptoms of Madhumeha.

Effect of Nishamalaki-

Nishamalaki is an polyherbal formulation made from Amlaki (*Embllica officinalis*) and Haridra (*Curcuma longa*) with the method mentioned in texts (17). Both drugs in it individually have hypoglycaemic, neuro-protective and anti-oxidant action (18). Nishamalaki is recommended in prameha by Acharya Vagbhata. Haridra has Raktashodhaka (blood purifying) while the Amalaki is a potent Rasayana effect (19). There are many studies based on Nishamalakichurna and its anti-diabetic action, and there is convincing evidence for its long-term success in the treatment of Diabetes mellitus and the avoidance of complications. (20-24). Prior researches on Nishamalaki also imply that when combined into a compound formulation, the two medicines Haridra and Amalaki may have an additive or synergistic impact (25-26).

Effect of lifestyle intervention -

To manage weight, glycemic control, blood pressure, and lower the risk of deadly consequences in T2DM patients, lifestyle intervention is an efficient, non-invasive method (27,28)

The primary goal of treatment for diabetes management is glycemic control because it is attributed to better health outcomes and lower rates of serious complications and co-morbidities. Diabetes management demands for patient commitment to adhere to regular drug therapy, blood glucose monitoring, and medical checkups in addition to pharmacological treatment. Commitment to lifestyle treatments and patient self-care practises is crucial for the management of T2DM and improves glycemic control, lipid profile, BMI, blood pressure, and the risk of complications from diabetes (29).

Conclusion- Madhutailika Basti is effective in reducing symptoms and Blood Glucose level due to its Shodhana, Rasayana and Antidiabetic property. Nishamaklaki and lifestyle management helps in improving symptoms and maintaining Blood Glucose level to normal. As this is a single case study it is recommended to carry out study on large sample size to prove

their efficacy in the management of Diabetes mellitus.

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असतो मा सद्गमय

10.

**AYURVEDA MANAGEMENT OF *TIRYAK RAKTAPITTA* WITH SPECIAL
REFERENCE TO IDIOPATHIC THROMBOCYTOPENIC PURPURA
– A CASE REPORT**

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Abstract

Rakta-pitta is one among the *Raktavaha sroto dushtijanya vikara* which if not managed properly can be fatal. It is known to be caused as a result of vitiation of “*rakta*” *dhaatu* and “*pitta*” *dosha* together. Depending upon the nature, causes, degree of vitiation and its spread; there is spontaneous bleeding occurring from different orifices of the body. *Tiryak rakta-pitta* can be thought on the lines of ITP for better parallel Pathophysiological understanding on the basis of signs and symptoms and general clinical presentation which highlights subcutaneous manifestation with the basic complaint of low to extremely low platelet levels during blood screening. Although, new contemporary treatment options have been able to improve the prognosis to some extent, these therapies have their share of associated adverse effects.

In this case, an attempt was made to treat a 5-year-old pediatric patient who was pre-diagnosed with chronic ITP, having symptoms of small reddish black patches on skin, especially on the lower limbs, bleeding gums with associated complaints such as a sudden increase in weight. Ayurveda treatment was prescribed after analyzing the detailed history given by the patient’s mother from birth to till date. Taking into account the Pathophysiology and etiological factors, treatment was planned which showed the promising result. Rare clinical conditions like ITP can be managed successfully with the help of Ayurveda way of diagnosis and treatment.

Keywords- Ayurveda, *Kaumarbhritya*, *Raktapitta*, ITP, Children, Ayurveda intervention, Case Report

Introduction

Rakta-pitta is one among the *raktavaha sroto dushtijanya vikara* which has been included
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in one of the *Mahagada* (fatal disease) [1,2,3]. The disease manifests itself rapidly, invades the body in all possible directions and spreads like fire. There is the involvement of *raktavaha srotas moola* that is *pleeha* and *yakrita* and *raktavahini dhamanis* as explained in *samhitas* [4]. Thus, it's the cumulative involvement of all these entities leads to *raktaja-vyadhi* which requires immediate attention and prompt treatment. "*Raktam jeeva iti sthiti*"- highlighting that it may prove to be fatal if not managed at the earliest [5]. In *rakta-pitta*, depending upon the nature, causes, degree of vitiation and its spread; there is spontaneous bleeding occurring from different orifices of the body. When all the *doshas* are vitiated and are circulating in the bloodstream, the manifestation takes place through all the *roma-kupas* (skin pores) of the entire body subcutaneously, this is *tiryak rakta-pitta* [6]. *Tiryak rakta-pitta* can be thought on the lines of ITP- Idiopathic/ Immune thrombocytopenic Purpura for better parallel Pathophysiological understanding on the basis of signs and symptoms and general clinical presentation which highlights subcutaneous manifestation[7]. It is one of the exceptional auto-immune disorders with the basic complaint of low to extremely low platelet levels (thrombocytopenia) during blood screening with no known cause so there is easy bleeding and coagulopathy which may make it fatal. Although new contemporary treatment options have been able to improve the prognosis to some extent, these therapies have their share of associated adverse effects. ITP has an incidence of up to 6.4 per 100000 children and 3.3 per 100000 adults per year [8, 9]. In ITP, usually petechial haemorrhages, easy bruising more over the lower limbs, and mucosal bleeding such as menorrhagia in women, nasal bleeding, bleeding from gums, and hematuria are found. Although no permanent medical treatment is available to date apart from using steroids, anti RH (D) globulin, high dose IV gamma globulin, platelet transfusions, immunosuppressants etc; Ayurvedic Management in *Pratyakhyeya* form when administered at the earliest is known to show better results without any adverse effects.

Case Report

A 5-year-old female patient along with her parents came to Ayurveda Pediatric OPD. She was diagnosed case of ITP. A Hindu by religion, born to a lower middle class, non-consanguineous parents. The pediatric patient is having symptoms of small reddish black subcutaneous patches, especially on the lower limbs, bleeding gums and an increase in weight. The child is the 1st offspring, delivered through FTND-vaginally with a 3.33 kg birth weight, born with less spacing (within 2nd month) post her mother's miscarriage (at

2.5 months). At 1.5 months of pregnancy, the mother had per uterine bleeding for about a week for which she was advised total bed rest and was given injections for a period of 2 weeks. Since 3rd month of pregnancy, she was taking medicines for hyperglycemia. No other significant pre-natal, natal & post-natal birth history was noted. In the last 1 year, the parents of the patient started noticing those patches. In between; she got wounded over the lips while playing where prolonged bleeding and delayed healing were seen. She was then taken to Tertiary Healthcare Centre where she was diagnosed with chronic ITP and was prescribed steroids, post certain blood investigations. Dosage was – 6 mg/ night after food in March 2022 which was reduced to 4 mg/ night in April 2022, to 2mg / night in May and finally tapered down to 1 mg/ alternate night after food in June. Initially, there was a transient increase in platelets for a few days which soon started decreasing. She then developed adverse effects of steroids as associated symptoms like an increase in weight, refusal to play, increased appetite, and marked facial and body puffiness. No other evident history of past illness was given. No specific family history or consanguinity has been found. Chances of genetic disorders were partially ruled out through repeated questioning based on the patient's history. The patient was immunized as per the schedule. The child was breastfed exclusively till 6 months of age, thereafter milk, cerelac; soft rice and egg-white were given till 1 year of age.

Examination

General: The patient was stable, afebrile and conscious during all the follow-ups. She has *heena Sara- Satva*. Her weight had increased from 17 kg to 22kg (5 kg) within a span of 3 months as of May 2022 and was not very alert and interactive. P/A was soft-non tender. Pulse rate, respiratory rate and body temperature were within normal range. Pallor- was present while icterus, cyanosis, and clubbing were absent. Bowels were passed every alternate day, were of hard consistency and frequency of urination was around 6-7 times/day. Sometimes reddish-coloured urine was noticed by parents. There was a marked increased appetite with normal sleep pattern.

Systemic: CNS, CVS, RS examination showed normal findings.

Local: Small reddish black subcutaneous patches especially on the lower limbs. Predominantly dry- rough-dull skin, pallor was present and face and full body puffiness.

INVESTIGATIONS

Table no. 1 shows Platelet count pre-treatment

Date	Reading in (thousand/ cumm)
1/4/2022	30,000
22/4/2022	20,000

Bone marrow aspiration report (11/2/22)

Myeloid series is mildly hyperplastic. Eosinophils are increased and form 30% of myeloid cells. Normal maturation was seen. Erythroid series- was normal. Megakaryocytes- are increased. Some are immature with round nucleus and blue cytoplasm. Iron- was absent in marrow. Final impression- features of ITP with Latent Iron Deficiency Anemia (Hb-normal) with moderate increase in eosinophils.

Treatment protocol

The patient and her parents were counselled first, and the prognosis was explained. *Pratyakhyeya chikitsa* in the *shamana* form was adopted.

Table No. 2 is depicting Medicinal treatment and periodic prescription changes

Date	Day of treatment	Formulation	Dose	Anupana	Duration
29 April 2022	Day 0	1) Syrup Aptilift 2) (powder Combination) Raktapachak Churna-125mg Rasapachak Churna-125 mg Yashtimadhu churna-150 mg Sariva churna - 100 mg Manjistha churna- 100 mg Panchatiktaghruta guggulu -50mg 3)Triphala ghruta	5ml-TDS 1dose3times 5 ml/ 1 tsp	----- With Syrup Aptilift	After food After food Before sleeping

Medicines were given for 21 days and Called for follow up					
20 May 2022	Day 22	1. Syrup Bal Rasayana 2. (Powder Combination) Raktapachak-125 mg Rasapachak-125mg Yashtimadhu -150mg Sariva Churna- 100 mg, Arogyavardhini- 100 mg Manjistha- 100 mg Panchatikta ghruta guggulu- 50 mg, 3. Triphala ghruta	5 ml TDS 1 dose 3 times 5 ml/ 1 tsf	With Syrup Bal Rasayana	After food After food Before sleeping
Medicines were given for 21 days and called for follow up					
10 June 2022	Day 42	1. Syrup Bal Rasayana	7 ml TDS		After food
Medicines were given for 30 days					

Results: Table No. 3 showing pre-post treatment effect on sign & symptoms

Signs and symptoms	Before	After
Petechial haemorrhage (reddish black patches) on lower limbs	+++	+
Dryness (<i>rukshata</i>)	+++	++
Bleeding Gums	+++	++
Red color Urination	+++	+

Table No. 4 shows the After-treatment effect on Platelet count.

Date	Readings in (thousand/ cumm)
19/05/2022	74000
09/06/2022	130000

Figure No.1 & 2 Showing the Difference of petechial Haemorrhage Before and After treatment



DISCUSSION

There are no direct references of ITP, but similar signs and symptoms are found in *rakta-pitta* disease mentioned in various classics. Pinpointing towards its symptoms and pathogenesis, it may be specifically linked with *tiryak rakta-pitta* [10, 11]. Due to probable *beeja dushti* and *hetu-sevana*, *pitta prakopa* takes place in *Amashaya* leading to *rakta swa-pramanatah vrudhhi* or directly affects the *rakta* and does its *dushti*. Further, *mamsadi dhatus syandana* with *guru guna vrudhhi* and gets *pravruddha loha gandh* due to *dushita rakta* (compared to altered or loss of clotting mechanism due to destruction of platelets) and *pradushta pitta*. Due to *ushna-teekshna guna*, *syandana* increases so there's *dravansa* mixing with *pitta dushita rakta*. It leads to continuous dilatation –constriction (*samvruta-vivruta*) of blood vessels due to increase in blood volume. Since the vessels cannot hold on to excessively increased volume, they break open and sub-cutaneous bleeding occurs.

The modern science stresses on use of steroids and platelet transfusions for ITP which are temporary relief. The definite treatment available is bone-marrow transplant which is not feasible for all and has its own limitations. The evident history given by the patient's parent of immediate conception post miscarriage, highlights *stree-artava beeja* and *kshetra dushti*. Initially problem encountered was due to the parents being reluctant to give the detailed history which later was sorted once doctor-patient relation was established, and parents started

believing in the treatment. Per-uterine bleeding at 1.5 months of pregnancy may have had an impact on the fetus in the womb. Anti-hyperglycemic drugs which were started since 3rd month of pregnancy may have caused some undesired changes in the fetal system. The cumulative effect of history given may have adversely affected the mother which in turn would have leads to major changes in the baby.

Syrup Aptilift (*Madifal rasayana*) contains drugs which do *deepana*, *pachana* and *Agni sandukshana* which will act on *Agni* as well as on the *pachaka pitta*, *samana- vyana vayu vikruti*. It is *hrudya* and *anulomaka* as well. *Triphala ghruta* will act excellently on the *Agni* and will do away with *malavrodha* because it is one of the best *anulomaka* [12]. *Rasa-raktapachaka* will do *prakruta dhatu-pachana kriya* and *prasadana* of *rasa* and *rakta dhatu* for *uttama dhatu sthiti as Rasayan* [13]. Considering the point that *rakta* gets formed in *meda-swaroopi majja*, *Panchatikta ghruta guggulu* worked wonders as *rakta prasadaka* and *asthi-majja pachaka* for *dhatu niyamana* [14]. *Yashtimadhu* is *guru*, *swaduh* and yet acts on *kapha-pitta-vata-asra* [15]. *Manjistha* has a synonym as *vikashi* so it can be interpreted as *vikas* or growth of *rakta* through *rakta-prasadan* [16]. *Sariva* mainly reduces *pitta* and does *bala vrudhhi* [17]. The *Bal Rasayan Syrup* is an excellent tonic for *Rasavaha* and *Raktadoshaja vikara* which helped in Sustained relief of symptoms. The treatment on a whole focus on correcting the *Agni* and *anulomana kriya*, reducing mainly the *pitta-rakta dushti* by using *rakta prasadaka-pitta shamaka dravya* and increasing *dhatu bala* and *sharira bala* of the patient [18]. *Arogyavardhini* is a *rasa-kalpa* mainly correcting the liver metabolism and since *kutaki* is present in a comparatively higher amount than the other ingredients, it will help in *samyak mala pravartana* as well [19, 20].

CONCLUSION

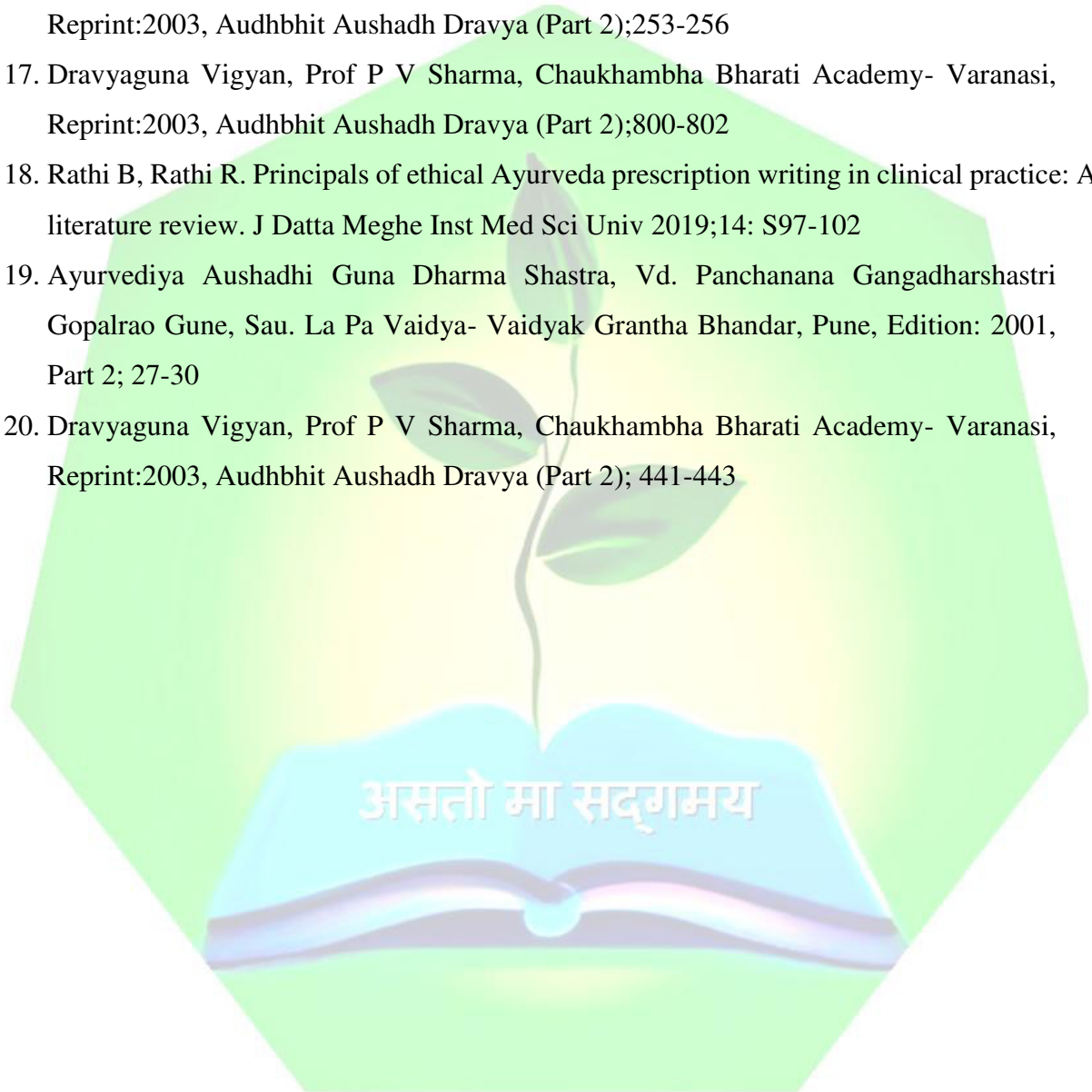
This case study is an effort to understand the concept of *Tiryak raktapitta* applied in ITP. Marked improvement was seen in all the signs and symptoms of the disease and there was marked increase in Total platelet count. Going by the results of this case study, we can conclude - Ayurveda modality of treatment is highly effective for management of *Tiryak raktapitta* especially in early stages on the not so common yet one of the most important crises in pediatric patients.

Conflict of interest-None

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11.

AYURVEDA MANAGEMENT OF GADGET ADDICTION IN PEDIATRIC PATIENT: A SINGLE CASE STUDY¹Dr Prasad Gajanan Yewale, ²Dr. Renu Rathi, ³Dr. Swapnali Mate¹Assistant Professor, ²Professor, Dept. of Kaumarbhritya, ¹Assistant Professor Dept. of Kriyasharir Sharir, Mahatma Gandhi Ayurved college hospital & research center, Salod (H), Datta Meghe Institute of Higher Education & Research (DU).**ABSTRACT**

Aim- To study the effect of *Ayurveda* treatment on Gadget addiction in children. **Objective** – the study of Gadget addiction in detail. **Discussion**-Gadget addiction is related to *Asatmeindriyarthā Samyoga & Pradnyaparadh*. It affects the normal growth and development of children as well as the structure of the brain. It is the necessity of time to deaddict children from Gadget addiction as early as possible. **Result-** In the present case study Ayurveda principles are used to treat the patient and a good outcome is noted. **Conclusion**– The application of Ayurveda treatment modalities in the treatment of Gadget addiction gives a good result.

Keywords - Ayurveda, Gadget addiction, Kaumarbhritya, *Satvavajaya*, *Yoga*.

INTRODUCTION

Addiction can be described as a process in which behavior, which has the potential to both bring about pleasure and provide relief from internal discomfort, is used in a pattern that is marked by a repeated inability to control the behavior (powerlessness) and persistence in the behavior despite grave negative effects (un-manageability).⁽¹⁾ The term "gadget addiction" includes excessive mobile use, online gaming, online gambling, excessive internet browsing, and excessive social media use. Addiction to Gadgets is negatively correlated with psychosocial issues in adolescents⁽²⁾ Addictions to gadgets causes a decrease in physical activity, which causes early fat deposition. According to research, stressful environments encourage people to get addicted.⁽³⁾ Gadget addiction is a behavioral type of addiction and there are similarities between Gadget and drug addiction⁽⁴⁾. The *Ayurveda* concept of *Asatmeindriyarthā Samyoga*⁽⁵⁾ (Indulgence in unhealthy subjects of sensory organs) and *Pradnyaparadh*⁽⁶⁾ goes much equivalent to today's Gadget addiction.

AIM – To study the effect of *Ayurveda* treatment principles in the management of Gadget addiction in children

OBJECTIVE –

1. Study of Gadget addiction in detail
2. Study of the pathology of Gadget addiction in detail
3. Study of the efficacy of *Ayurveda* treatment principles in Gadget addiction in detail

PRESENT COMPLAINTS (In Chronological Order)

1. Spending excessive time on a smartphone, video games
2. Less communication with family and friends
3. No interest in playing and surroundings

The patient had these complaints for 1 year.

Associated complaints

- Eye pain
- Eye irritation
- Gaining weight abnormally for 1 year

History of present illness:

The patient had a history of disease for 1 year. She was spending a lot of time on mobile and video games. As well as having poor scholastic performance with low social contact with peers and family. Hence came for the *Balroga* OPD

History of past illness: admitted for U.T.I. Last year

Family history: [h/o- dm/htn/ihd/tb/leprosy /asthma/genetic disorders] - no

Hereditary disorders – no

Dietary history

Type of Food- *Rukshanasevan* (daily biscuit & other bakery product consumption),

Ushna Tikshna Ahar (fast food consumption)

Appetite: Good

Personal history-

Bowel Movements- Constipation

Micturition- Normal

Sleep- sleeps only for 5 hours.

Hygiene- Good

Habits- Bed Wetting/

PICA/Nail Biting- no

GENERAL EXAMINATION

Built: obese

Gait: Normal

Pulse: 80 / min

Temperature: 98.4f

B.P: 105/ 76mmhg

RR: 28/ min

No e/o - Icterus/Organomegaly/Lymphadenopathy/Oedema

Anthropometry

Weight – 29 kg, height – 142 cm,

Ashtavidh parikshana –

- A. *Nadi* (pulse) = 80/min.
- B. *Mala* (stool) = *Malavashmbha* (constipation),
- C. *Mutra* (urine) = Normal.
- D. *Jivha* (tongue) = *Saam* (coated).
- E. *Agni* = Normal
- F. *Shabda* (speech) = *Prakrut* (Normal).
- G. *Sparsha* (Skin) = *Prakrit* (Normal).
- H. *Druk* (Eyes) = *Netradaha* (eye irritation)
- I. *Bala* (Strength) = *Madhyama* (Medium).

DOSHA DUSHYA INVOLVED –

Manas dosha: clinical features of gadget addiction are related to *Raj Guna* and *Tamo Guna* is predominance features⁽⁷⁾.

Deha dosha:

Vata: controlling the mind is the function of *Vata Dosha*⁽⁸⁾, in gadget addiction, the restraining power of the mind is delayed.

Pitta: intellect is delayed in gadget addiction, which related to *Sadhaka pitta*⁽⁹⁾

Dushya:

Buddhi - intellect, restrain, and memory of a person are affected which are the function of *buddhi*. From the above clinical feature we could conclude that *buddhi* is the main *dushya* in

gadget addiction.

Adhishthan – *man*

ASSESSMENT TOOLS:

- 1) Young's Internet Addiction test scale
- 2) DSM-V criteria for social behavior

MANAGEMENT –

Sr.No.	Intervention	Details of method	Duration & Frequency
1	<i>Counseling</i>	Counseling about hazardous effects of mobile and benefits of mobile deaddiction	fortnight 1 session with parents and child separately
2	<i>Yoga therapy</i>	<i>Surya Namaskar, Dhyana</i>	Daily
3	Encouragement for in & outdoor games	The patient was counseled to play In and Outdoor games daily	Daily for 1 hour
4	Encouragement towards attending social programs	Parents were guided to the engagement of children in learning new things, in group activities with peers, etiquette	'Si-opus sit' Whenever required & feasible
5	Encouragement of parent-child relationship	Parents advised spending time with children To give a reward for non using mobile	Minimum 2 hours of quality time daily by parents
6	Targeted reduction in Gadget use time	Reduced time was used for adventure, bravery cognitive skill-oriented things, sports, and yoga.	By <i>Padanshik krama</i> i.e reduce Gadget use time by ¼ part each week

The patient and her parents were educated by PPT presentations.

Initial training of *Surya namaskar* and the method of *Dhyana* was given.

The patient was asked to do the proposed *Suryanamaskara* and *Dhyana* on the assessment day.

Total treatment was advised for 90 days and follow-up was taken on ^{the 91st} day

OBSERVATION -

Complaint	Before treatment	After treatment on the 9^{1st} Day
Screen time	7 hours daily	Reduced to 1 hour
Communication with friends and family	No or minimal communication	Spend much time with family and friends
playing	Not interested	Interested in outdoor activities
Young's Internet Addiction test scale score	78	18
DSM-V criteria for social behavior score	8	2

DISCUSSION –

The frequent use of gadgets causes, sensory overload, enlivening the mind for subjective experience, and the affinity of these experiences causes adverse effects. Addiction (of any kind) impairs a person's mental capacity, which makes it difficult for them to make morally sound decisions. The mind needs regulating ability to make any decisions, According to Ayurveda, Dhee is the component that controls the action of the mind⁽¹⁰⁾ Direct management of any addiction is not mentioned anywhere in the literature of Ayurveda, but by comprehending the role of dosha dushya in Gadget addiction, we can come to the conclusion that management of gadget addiction can be done based on *Manasa Roga* treatment principles which are proper counseling, assurance, memory enhancing, providing knowledge and meditation.⁽¹¹⁾ Ashwasana (reassuring and explaining), Suhritvakya (guidance and suggestion), and Dharmartha Vakya (educating the individual and family) are the types of satvavajaya chikitsa that were used in treating this case. Yoga has the power to cleanse our mind, soul, and body as well as to control our emotions; this phenomenon is helpful in conditions such as addiction, yearning, compulsive behavior, tolerance, and relapse. A consistent yoga practice activates the alpha, beta, and theta brainwaves, which have been related to improvements in memory, mood, and anxiety. Mental tension and depression are typical causes of addictive behavior⁽¹²⁾.

The easy way to switch from unwholesome things to adopting wholesome things by 1/16th part⁽¹³⁾ is by using the Padamshik Krama. In Pada karma, bad habits or objects should be

abandoned and good habits should be adopted. To effectively treat Gadget addiction, daily time spent on gadgets was reduced to 1/16th of that amount, and replaced with beneficial habits or creative endeavors. In addition to being helpful to patients, Ayurvedic interventions like Satvavajaya (psychotherapy), Yoga, and Aachar Rasayana require nothing in the way of infrastructure and the majority of these treatments are completely free. It will be simple for the patient to adopt such measures because the importance and method of yoga are widely known among Indians and are commonly practiced.

CONCLUSION – In this study, we used *Ayurveda* treatment principles which show good improvement in a patient without any side effects.

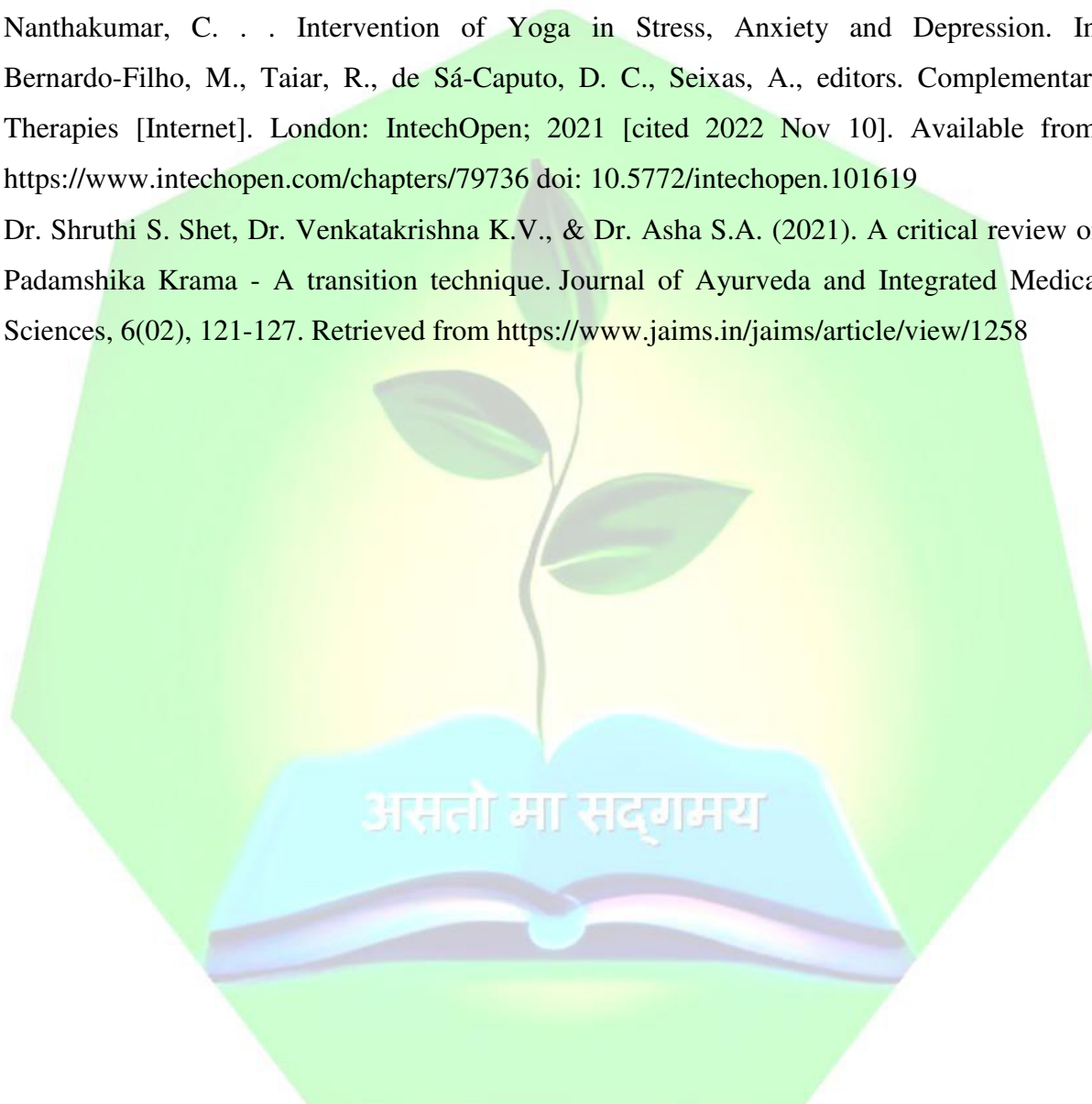
SOURCE OF FUNDS – No

CONFLICTS OF INTEREST – Nil

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12.

AN AYURVEDIC LOOM FOR INDRALUPTA (ALOPECIA AREATA)¹*Pargaonkar Akshay Sudhir, ²Jibkate Bhagyashree Ratan¹Assistant Professor, Department of Dravyaguna,²Assistant Professor, Department of Rasashastra and Bhaishajya kalpana, Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod (H), Wardha - 442001. Datta Meghe Institute of Medical Sciences (DU), Nagpur, Maharashtra, India.**Abstract:**

Background: Hair is one of the significant characters of an individual. Hair loss may not hurt physically but it may lead to a psychological impact. Alopecia areata is an autoimmune disease in which the patient experiences patchy hair loss commonly on the scalp and facial area. A similar condition is mentioned in Ayurveda in terms of *Indralupta* which is classified under *Kapalgat roga*. This study aimed to assess the efficacy of *shaman chikitsa*, *Jalaukavacharan*, and *Prachhana karma* in Alopecia areata.

Materials and Methods: The present case is a single case study of 22 years old female patient who came with complaints of asymptomatic hair loss at a single site over the scalp for 5 months. With *Shaman chikitsa*, *Jalaukavacharana*, and *Prachhana karma* this case of Alopecia areata (*Indralupta*) was successfully treated in 3 months. **Result:** The patch was immensely filled with glossy black hairs at the end of the follow-up period. **Conclusion:** It can be concluded that Ayurveda provides a promising result in the patient of *Indralupta* through *Jaloukavacharana*, *Prachhana karma*, and *Shamana chikitsa*. It can be a choice of treatment, by observing its cost-effectiveness and successful management as compared to conservative treatment.

Key words: Alopecia areata, *Indralupta*, *Prachhankarma*, *Jalaukavcharan*, *Shaman Chikitsa*.

Introduction

Alopecia areata is an autoimmune disease in which the patient experiences patchy hair loss commonly on the scalp and facial area. Males are frequently suffered from Alopecia aerata than females and children. It can occur at any age. The utmost occurrence is between 30-59 yrs of age. Its prevalence was 0.7% in India (1). It affects 8.7-20% of cases to family members (2). It creates more emotional problems in females and children due to hesitation and cosmetic concern. In Ayurveda, Alopecia areata can be correlated with *Indralupta*. *Indralupta* is described as *Kapalgat roga* in Ayurveda (3). Ayurveda has given both *shaman* (Disease-specific internal medications) and *shodhan* (Internal and external cleansing procedures) treatment for this disease. The present case of Alopecia areata was

successfully treated with Ayurvedic *shaman chikitsa* along with *lepa*, *Jalaaukavcharan*, and *Prachhana karma*.

Materials & Methods:

Patient Information

The patient was a 22-year-old unmarried girl in Wardha, Maharashtra. Her height was 172 cm, and her weight was 58 kg.

Present Medical History

22 years old female patient visited with a history of present illness. The patient was asymptomatic 10-11 months back. Then, she progressively started to have an asymptomatic hair loss at a single site over the scalp. She also had a history of hair fall for 6 months. There are no complaints of dandruff and itching. She applied some herbal oil and also took some homeopathic treatment but did not get relief.

History of past illness

the patient had no history of systemic illness, drug allergies, and no similar illness in the family.

Inspection:

Two bald patches with imprecise margins, longitudinal (2.5cmX5cm approx) & circular (2cm radius approx) were found on right parietal & vertex (Figure 1,2) respectively over the scalp.

Palpation:

There was no local rise in temperature, notenderness/induration.

Personal History

1. Ahar : Pitta Vardhak Ahara	8. Ruchi: Yes
2. Vyasana: None	9. Jarana Shakti: Madhyama
3. Vyayama: Intermediate	10. Abhyavarana Shakti: Madhyama
4. Nidra: Asamyaka, 7h at night, sometimes 1 – 2 hrs at daytime.	11. Pramana: height 172 cm, weight 58 kg
5. Koshtha: Santushtha, 1 time/day, Madhyama	12. Saatmaya: Pravara
6. Mootra Pravritti: Samyaka	13. Satva: Madhyama
7. Artava Pravritti: Samyaka	14. Prakriti: Vata pittaj

Treatment

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Treatment was done for 3 months including follow-up. Total 3 sittings of *Jalaukavacharana* (leech application three sittings with a gap of 7 days, followed by three sittings with a gap of 15 days), two sittings of Bloodletting was done with a gap of 15 days, *Hasti danta mashi* and *Jaypal lepa* (paste of *Croton tiglium*) applied locally once in 3 and 15 days respectively for 3 months. All the medicines were administered as given in table no. 1.

Result

When the treatment started, the patient had one patch over the scalp (fig. 1 and Fig 2). After starting bloodletting and leech therapy and *lepa*, small hairs started to grow (Fig. 3 and Fig. 4). Significant growth in the length of hairs was noticed after 3 sittings of leech therapy (Fig. 5). After completion of leech and bloodletting therapy, the patch was completely covered with hairs. Internal medicines were stopped during the follow-up period. The patch was filled with glossy black hair at the end of the follow-up period (Fig. 6 and Fig.7).

Discussion

The diagnosis of Alopecia areata (*Indralupta*) was made on clinical presentation. The patient was used to eat fast food and packed food and also had a habit of day sleep. According to Acharya Sushruta, due to the deranged *Vata* and *Pitta* there is gradual falling of hair while deranged *Rakta* and *Kapha* barring their new growth and recurrence (4). Here *Amrutashatak* was given for its *shamana* effect on aggravated *Pitta Dosha*. It was given with *ardra* (wet) *Guduchi* which helps *pachan* of *pitta dosha*. *Indralupta kashay* and *Krumikuthar rasa* were chosen for their *Raktashodhaka*, *Raktavardhaka* and *yakrut uttejaka* effect, respectively. *Indralupta kashay* contains ingredients like *Amruta*, *Musta*, *Chandan*, *ushir*, *Brungraj*, *Sariva* etc. which regulates disturbed *rakta dhatu* and *pitta dosha* and also are beneficial for hair growth and premature graying. Furthermore, to get scrapping and stimulating effect to hair follicles *Jaypal lepa* prepared in lemon juice was applied once in 15 days locally and *Hastidanta mashi lepa* with coconut oil was applied once in 3 days locally. Leech therapy is an ideal method for *Raktamokshana* for vitiated *Pitta*. There are more than 20 bioactive molecules present in Leeches secretions. They act as an anti-inflammatory, analgesic, platelet inhibitory, anticoagulant as well as having extracellular matrix degradative and antimicrobial effects (5). In alopecia areata, leech and bloodletting therapy may have worked by increasing the micro blood circulation through acetylcholine- and histamine-like molecule (6). When leech and bloodletting therapy is done on bald areas, the increase of blood circulation helps enhance the concentration and delivery of nutrients to that area on one side and removal of accumulated toxin, inflammatory substances on the other side thereby assisting in the promotion of hair

growth. Recently alopecia areata is becoming a universal problem, especially in youngsters. According to its signs and symptoms, it can be correlated with *Indralupta*. Internal medicine (*shaman chikitsa*), local application, Leech therapy and [bloodletting](#) showed potential results on this case of alopecia areata of a female patient. Hence, if done according to *Dosha*, *Avastha*, and *Prakruti* of the patient, this can be successful management for alopecia.

Acknowledgment:

I would express my sincere gratitude to Dr. Bhagyashree Jibkate for her generous support.

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Images



Fig. 1: Day 1



Fig. 2: Day 1



Fig. 3: First sitting
of *Jalaukavacharana*
(Leech application)



Fig. 4: *Lepa* therapy



Fig. 5: Hair growth started



Fig. 6: Significant growth in
the length of hairs



Fig. 7: Final Outcome
-Significant growth in the
length of hairs

Table 1: Treatment advised

Sr. no.	Drug Name	Dose	Duration
1.	Amrutashtak kwath with adra Guduchi	20 ml	Twice a day
2.	Indralupta kashay	20 ml	Twice a day
3.	Krumikuthar rasa	500mg	Twice a day
4.	Jaypal + Lemon Lepa	QS for local application	once in 15 days
5.	Hastidanta Mashi mixed with coconut oil	QS for local application	Once in 3 days
6.	Jalaukavchara (Leech therapy)	--	Once in 7 days X 3 sitting
7.	Pracchan Karma (Bloodletting)	--	Once in 15 days X 2 sitting

असतो मा सद्गमय

13.

**MANAGEMENT OF *KATISHOOLA* (LOW BACK PAIN) THROUGH
AYURVEDA – A CASE REPORT**¹Dr. Seema Himmatrao Thakare,¹Assistant Professor, Department of Rognidan & Vikruti Vigyana, Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod (H), Wardha - 442001. DattaMeghe Institute of Medical Sciences (DU), Nagpur, Maharashtra, India.**Abstract:**

In current scenario, the changing lifestyle hastening the process of degeneration and leading to the emergence of degenerative disorders, the most prevalent of which include arthritis, spondylosis, PID, low back pain, etc. Low back pain (*katishoola*) is a common complaint among the individuals visiting hospitals for medical care. Nearly 84% of individuals will have low back pain (LBP) at some point in their lives, and up to 50% of those people will experience it more than once. According to Ayurveda, in *katishoola* there is vitiation of *vata* that result in pain (*shoola*). It is characterized by *Katipradeshi vedana* (pain in lower back region), *Kati shunyata* (numbness in lower back), *Kriya hani* (loss of functions), *Hasta-padasuptata* (numbness in hands & legs). In the present article, a case of *katishoola* was treated with some ayurvedic treatment principles. A 65 years old female patient, having chief complaints of lower back pain, pain in both legs, difficulty during walking & unable to stand for longer duration since few months was treated with procedures like *snehana*, *swedana*, *katipichu*, *matrabasti* along with oral medications like *Trayodashanga guggula*, *Ashwagandha churna*, *Dashamoola kwatha*, *Saraswatarishta*, *Eranda taila* for one month. Effect of treatment was assessed before and after the treatment on presenting complaints. After one month treatment, significant relief in the pain & restricted movements is observed which was assessed by visual analogue scale & SLR test respectively.

Keywords: Ayurveda, Low back pain, *Katishoola*, *Matrabasti*, *Shamana chikitsa*

INTRODUCTION:

Aging is a gradual and irreversible pathophysiological process and related with reductions in tissue and cell function. It increases risk of various aging-related diseases like musculoskeletal diseases, cardiovascular diseases, immune system diseases and neurodegenerative diseases etc.

(1) Ageing is also associated with various degenerative changes in body. In current scenario, the changing lifestyle hastening the process of degeneration and leading to the emergence of degenerative disorders, the most prevalent of which include arthritis, spondylosis, PID, low back pain, etc. (2) Low back pain (LBP) is a common disease. Up to 84% of individuals will have low back pain (LBP) at some point in their lives, and up to 50% of those people will

experience it more than once. The degree of symptoms severity in LBP varies widely. Some LBP episodes are self-limiting may get resolve without any specific therapy, but some LBP-related conditions may be so painful that they require treatment in an emergency hospital. (3) LBP may contribute significantly to functional restrictions, make it difficult to carry out everyday tasks, and be a risk factor for incapacity and invalidity. LBP is one of the most common and debilitating musculoskeletal condition frequently reported by older people. In approximately 85% of patients LBP is idiopathic (no identified cause are known) & considered as non-specific type. (4) (5)

According to Ayurveda, in older people there is predominance of *Vata dosha* (one of the three basic humors). (6) Total 80 types of *vatavyadhi* known as *Nanatmaja-vatavyadhi* are described by Acharya Charak, *katishoola* (Low back pain) is one among them. It is characterized by *Katipradeshi vedana* (pain in lower back region), *Kati shunyata* (numbness in lower back), *Kriya hani* (loss of functions), *Hasta-padasuptata* (numbness in hands & legs). Procedures like *Snehana*, *Patra-pindaswedana*, *Matrabasti*, and *Katibasti* are considered as first line of treatment for *vatavyadhi*. In the present case study, the patient is treated with local *snehana* & *swedana*, *matrabasti*, *katipichu* & some oral medication.

Case Presentation:

A 65 years old female patient, having chief complaints of lower back pain, pain in both legs since last six months came to OPD at Naliniprakash clinic, Sainagar Wardha. She was complaining difficulty during walking & unable to stand for longer duration since last few months. She also complains about unsatisfactory bowel movements & having disturbed sleep during night. She had trouble in sleeping due to low backache. Meanwhile she took some conservative treatment for the same but only get temporary relief & the pain again gets aggravated after discontinuing the medicine. She had no any previous history of back injury.

Personal history: Personal history revealed that, the patient was housewife, Vegetarian & used to take green chilli chutney in her meals daily. She had no any history of addiction.

Past history: No history of Hypertension, Diabetes or any major illness in past but diagnosed with mild osteoporosis three years back.

Examination: On examination, the vitals of the patients were within the normal limits. No any abnormal finding was noted in systemic examination. The findings of *Ashtavidha pariksha* (Eight fold examination) are given in Table no. 1

Assessment Criteria The assessment of pain was done with the help of Visual Analogue Scale (VAS) (7) & straight leg raising test (SLR test) was used for assessment of restricted lumbar movements.

Table No. 1 Ashtavidha Pariksha

Sr. No	Examination	Observation
1	<i>Nadi</i> (Pulse)	72/min
2	<i>Mutra</i> (Urine)	<i>Samyaka</i> (Normal)
3	<i>Mala</i> (stool)	<i>Asamyaka</i> (Unsatisfactory sometimes hard stool)
4	<i>Jivha</i> (Tongue)	<i>Sama</i> (Coated)
5	<i>Shabda</i> (Speech)	<i>Spashta</i> (Clear)
6	<i>Sparsha</i> (Touch)	<i>Sheeta</i> (cold)
7	<i>Druka</i> (Vision)	<i>Samyaka</i>
8	<i>Akriti</i> (Built)	<i>Madhyam</i> (Medium)

Table No. 2 Treatment given to the patient

Karma	<i>Snehana</i>	Local <i>snehana</i> was done with <i>sahacharadi taila</i>			
	<i>Swedana</i>	Local <i>swedana</i> was done with <i>nadi sweda</i>			
	<i>Katipichu</i>	<i>Dhanvantar taila</i> was used			
	<i>Matra basti</i>	<i>Sahacharaditaila</i> – 60 ml was administered for 7 days			
Internal treatment	Drug name	Dose	Administration time	Duration	<i>Anupana</i>
	<i>Trayodashanga Guggula</i>	500 mg	Twice a day after meal	30 days	Luke warm water
	<i>Ashwagandha Churna</i>	1 gm	twice a day before food	30 days	Luke warm water/milk
	<i>Dashamoola kwatha</i> + <i>Sarawatarishta</i>	20 ml each	twice a day after meal	30 days	Luke warm water
	<i>Eranda Taila</i>	10 ml	at bed time	15 days	Luke warm water

Table No. 3 Pain assessment through Visual Analogue Scale (VAS)

Sr. No	Score	Before treatment	After treatment
1	0-10	9	4

Table No. 4 assessment of restricted lumbar movements by SLR test

	Before treatment	After treatment
Right leg	45 degree	55 degree
Left leg	40 degree	45 degree

Discussion:

According to Ayurveda, *Katishoola* (low back pain) is produced due to provoked *vata dosha* at lumbar region. *Vata* provocation mainly occurs due to either *dhatu kshaya* (depletion of *dhatu*) or *margavrodha* (obstruction in *vata* movements). In the present case, the patient complaints about back pain, pain in both legs, difficulty in walking & sitting. Here in this case *vata* gets provoked due to *dhatu kshaya* & hence *snehana*, *swedana*, *katipichu*, *matrabasti* are used along with some oral medication to alleviate the provoked *vata* & thereby to reduce the pain.

In *shamana chikitsa*, *Trayodashanga guggula*, *Ashwagandha churna*, *Dashamoola kwatha*, *Saraswatarishta*, *Eranda taila* was prescribed to the patient. *Trayodashanga guggula* is mainly described for treatment of *katigraha*. It also used in conditions like, *Sandhiashritvata*, *Asthiashritvata*, *Majjaashritvata* & *snayuashritvata*. As *Katishoola* is an *Asthi-sandhiashrita vikara* hence *trayodashanga guggula* is used for the patient. *Ashwagandha* due to its *madhur vipak* & *ushnavirya* alleviates vitiated *vata dosha*. It also has *rasayana*, *balya*, *vedanashamaka* properties & helps to improve the *rasadi dhatu*. It also acts as analgesic, sedative & helps in improving the sleep quality. (9) (10) here in present case the patient is old age & also have disturbed sleep hence *Ashwagandha* is used to improve sleep quality & to improve the strength of patient. *Dashamoola* contains root of ten different plants. It is well known ayurvedic medicine used by Ayurveda practitioner to treat various painful, inflammatory musculoskeletal disorders. It is described as an analgesic, anti-arthritis and anti-rheumatic combination. The 10 constituents in *Dashamoola* are thought to have a variety of functions, including adjuvant, carrier agent, stabilizer, etc. *Dashmoola kwath* is *tridosahara* (alleviating all deranged *doshas*), *vedanasthapana* (pain killer), and *shothahar* (subside inflammation) & thus helpful in present case. (11)(12) *Saraswatarishta* is used in conditions like anxiety, insomnia, stress etc. Here in present case it is used to improve sleep quality & reduce the anxiety due to pain. (13) *Eranda taila* is *madhur* (sweet), *katu* (pungent), *kashaya* (astringent) & having *ushna virya* (hot in potency). *Virechana* has an important role in

chronic LBP. *Eranda taila* helps in pacification of *vata* & *kapha dosha* & acts as a *vatanulomaka* & *mridu virechaka*. (14) Considering the feasibility of patient, local *snehana* with *shacharadi taila* & *nadi sweda* was given to the patient for 7 days. *Snehana* helps in reducing pain & numbness while *swedana* helps in reducing *stambha* (stiffness), *gourava* (heaviness) of body. *Kati pichu* helps to retain warm oil in the low back area & thus exerts direct local *Snehana* (oleation) and *Swedana* (sudation) properties & thereby alleviates the vitiated *Vata Dosha* & results in relief from pain and muscle spasm, stiffness. *Dhanwantar taila* was used externally for *katipichu*. It is considered one of the best medicines for all *vata vyadhi*. Its effects are more observed on pain and numbness as sesame oil is used as a base in it. The *taila* possess *bruhan* properties thus cause nourishment of tissues & reduce degeneration. It helps to increase circulation in lumbo-sacral region. Most of ingredients of this *taila* show *vatahara* properties. Its application helps to reduce stiffness & restricted movement caused due to aggravated *vata dosha*. (15) (16) *Basti* is considered as best than any other remedy to treat the vitiated *vata dosha* or *vatapradhan vyadhi*. *Matra basti*, a *vikalpa of anuvasana basti* when given reaches up-to *pakvashaya* which is the main site of *vata dosha*. It promotes strength & administered in all seasons without specific diet plan. It promotes easy elimination of *Mala* & *Mutra*. As per Acharya Charak, *matra basti* acts as *bruhan*, overcomes *dhatukshaya* and reduces *vata prakopa*. Here in present case, *sahacharadi taila* is used for *matra basti*. Its most of the ingredients have *katu rasa* and *ushna virya* and thus helps to alleviates *Vata* and *Kapha*, and reduce the pain and swelling.

Conclusion:

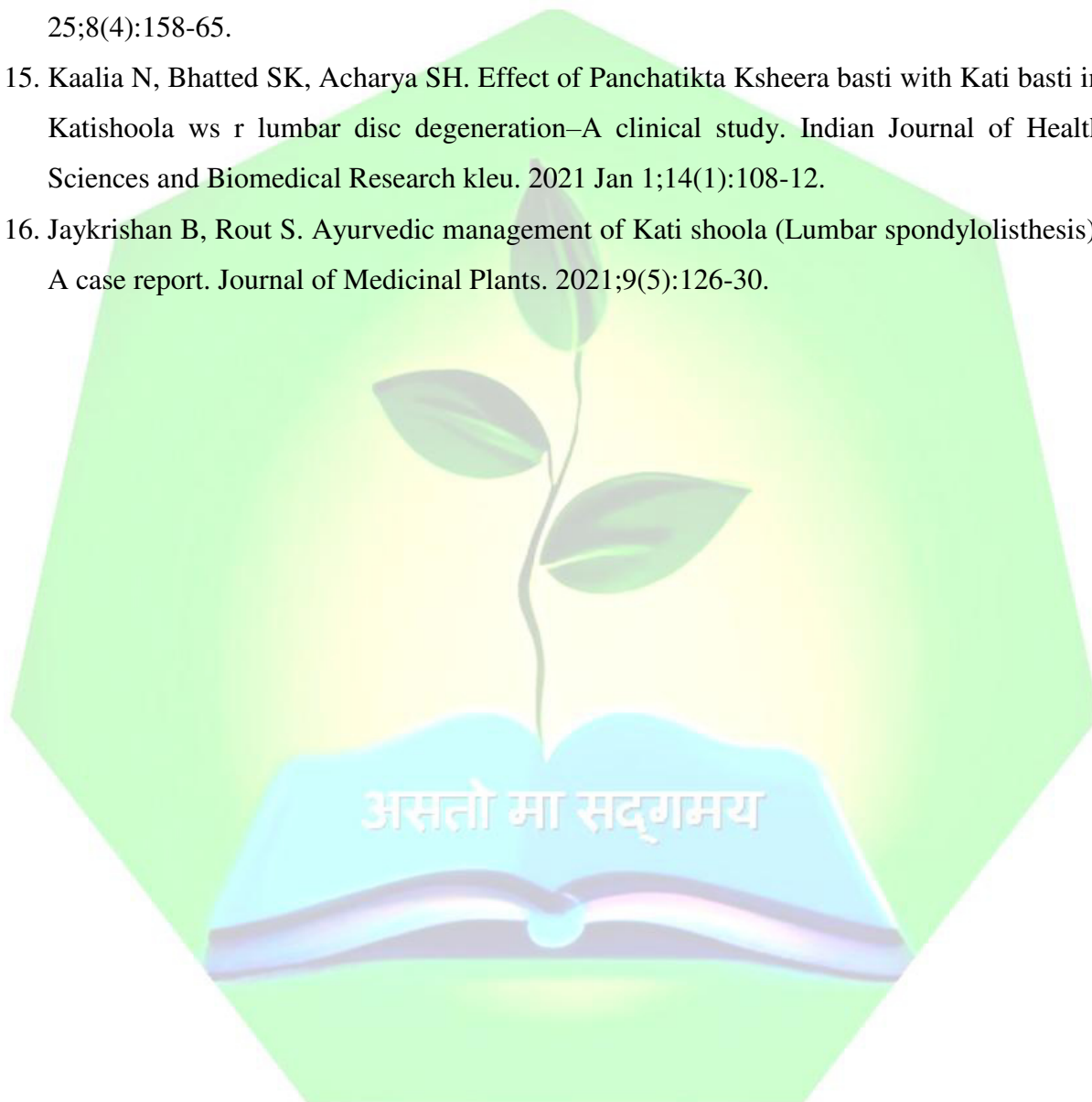
Katishoola (low back pain) is a common complaint experience by individual at some point in their lives. It is *vata* predominant condition. Due to its high prevalence & high rate of disability it serves as leading problem especially in elderly. Both *shaman* & *shodhan chikitsa* are used for the treatment of *katishool*. In the present case, procedures like *snehana*, *swedana*, *katipichu*, *matrabasti* are used to treat the alleviated *vata dosha* along with oral medications like *Trayodashanga guggula*, *Ashwagandha churna*, *Dashamoola kwatha*, *Saraswatarishta*, *Eranda taila*. Significant relief in the pain & restricted movements is observed with assessment by visual analogue scale & SLR test respectively.

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14.

**POLYCYSTIC OVARIAN SYNDROME FROM AYURVEDIC
VIEWPOINT- A CASE STUDY.**

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Abstract:

Polycystic ovary syndrome (PCOS) is a hormonal disorder common among women of reproductive age. Women with PCOS may have infrequent or prolonged menstrual periods or excess male hormone (androgen) levels. The ovaries may develop numerous small collections of fluid (follicles) and fail to regularly release eggs. Women with PCOS have a hormonal imbalance and metabolism problems that may affect their overall health and appearance. PCOS is also a common and treatable cause of infertility. High levels of Androgens and Insulin are one of the major contributing factors to PCOS. Many women with PCOS have insulin resistance, especially those who have overweight or obesity, have unhealthy eating habits, do not get enough physical activity, and have a family history of [diabetes](#) (usually type 2 diabetes). Ayurved emphasizes on the preventive aspect of any disease. Also it focusses on the overall well- being of the individual both physical as well as mental. There are various dietary principles as well as treatment modalities in Ayurved , which are very effective in treating and preventing Obesity, insulin resistance and increased levels of Male hormone, which play a major role in occurrence of Polycystic ovarian syndrome.

Keywords- Hormonal, Infertility, Androgens, Modality.

Introduction:

Ayurveda is a holistic and Indian System of Medicine. It not only emphasizes on the curative aspect, but also focusses on the preventive aspect of the disease. Polycystic ovarian syndrome is a condition, which affects about 6- 10 % of the overall women population. PCOD is a very common endocrinal disorder, which is mainly arising due to the prevalent hitech urbanisation and unhealthy lifestyle. This condition generally affects women in the age group of 15 to 30 yrs. Polycystic ovarian disease is a syndrome, which is the outcome of hormonal balance and consist of symptoms like irregularities in menstruation, facial hair growth, acne, skin oiliness, obesity and over production of androgens. Stein Leventhal Syndrome is the other name for PCOS.

Ayurveda considers vitiation and imbalance of Tridoshas as the causative factor for any disease. Ayurveda considers Vitiation of kapha dosha as the main hetu for PCOS. The vitiation of kapha dosha causes agnimandaya and subsequently results in production of ‘Ama’. This agnimandaya and production of ‘Ama’, causes rasa dushti, subsequently resulting in “Pradushta Artava”, as artava is the upadhatu of Rasa dhatu. At the same time, Stress or disturbance in Mansik doshas is also one of the contributory factors for Pradushta Artava (PCOD) .

The 20 Yonivyapadas, which are elaborated in “Ashtang Hrudayam “ are due to improper and bad eating habits. Thus Dushit ahar, vihar and dinacharya are the major contributing factors leading to this condition.

Now- a- days, because of the busy and sedentary daily routine schedules , lifestyle disorders are increasing at its peak. Lifestyle disorders affect the overall well- being of the individuals. In women, this unhealthy lifestyle affects both physical as well as fertility aspects also.

Many established conventional medications are there for the treatment of this disease. With the advent and excess use of modern drugs, resistance is being developed as well as patient is having many adverse effects, because of the synthetic molecules present in the modern drugs. Thus the people are showing a positive trend towards Ayurveda and natural treatment. This positive trend towards traditional medicine is not only because of its least side effects.

The Ayurvedic treatment modalities not only emphasizes on the curative aspect but also on the overall well- being and lifestyle changes in the Individual, along with promoting female reproductive health and support hormonal balance.

Aims and Objectives:

- To assess the efficacy of Ayurvedic medications in symptoms related to menopausal syndrome
- To assess the effectiveness of alternative treatment modalities in symptoms related to PCOS.

Literary Review:

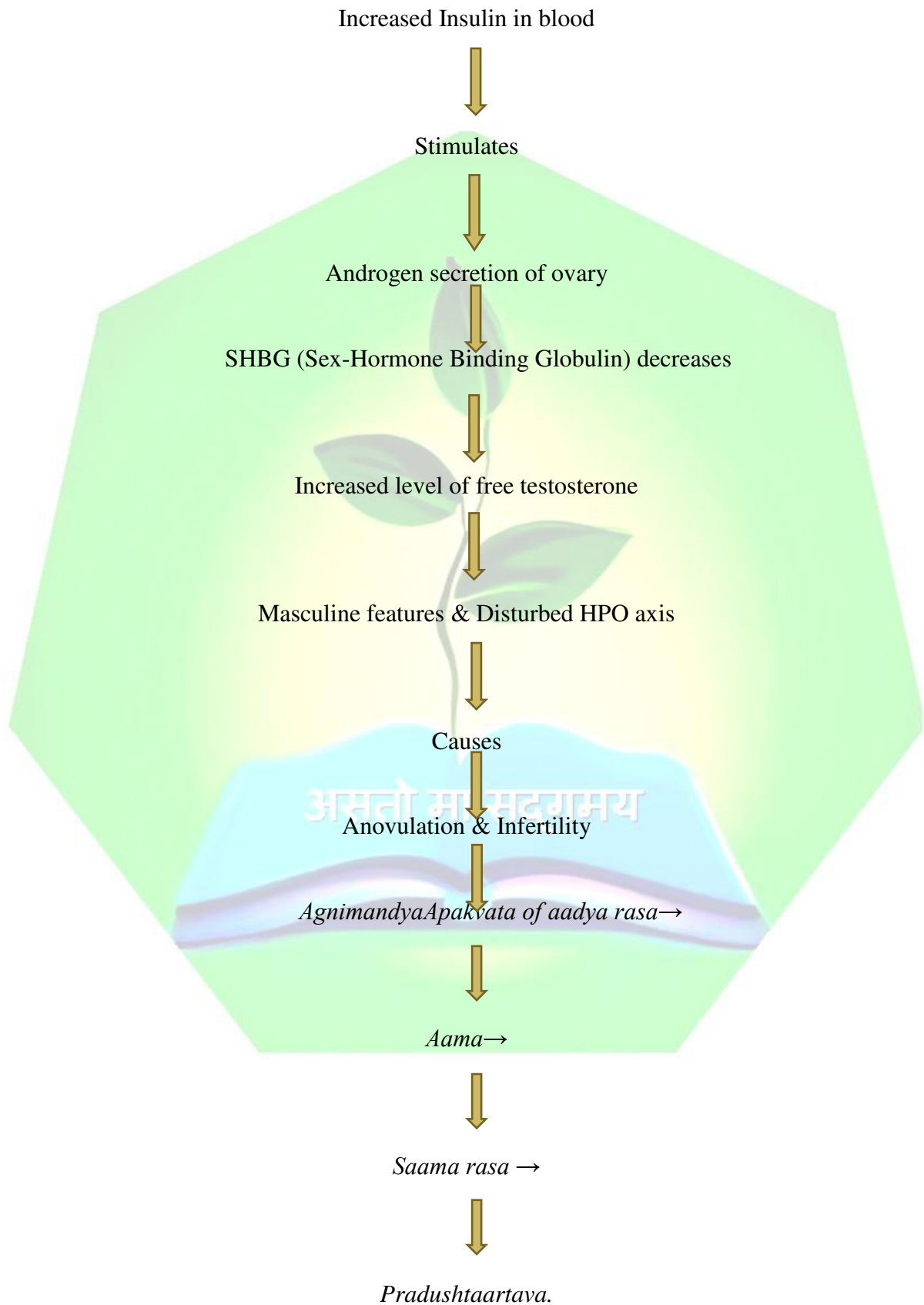
Pradushta artava consist of 2 words: Pradushta and artava.

Pra means utkarshena, Dushta means Kud, which means vaikalya. Pradushta means utkarshena vaikalya i.e. abnormality in excess. Pradushta artava means excessive abnormality of artava.

Pradushta artava is one among the causes of 20 Yonivyapadas according to Acharya Charakh, Shushrut and Madhavnidan. Acharya Charakh has explained artava in the context of “Bija” and

“Rajah”. Acharya Shushrut has explained eight artava dushtis, abnormality in ritusrava and rajodushti.

Pathophysiology:



Exact pathophysiology of PCOD is not clearly understood. It may be discussed as

1. Hypothalamic-pituitary compartment abnormality.org acq) aszuber2
2. Androgen excess.
3. Anovulation.
4. Obesity and insulin resistance.
5. Long term consequences.

- **Material and method:**

- Case description**

A 27 years old female patient, visited with complaints of Irregular menses, Oligomenorrhoea, Weight gain, oily skin, acne, Hyperpigmentation on neck and face, Hirsutism since 4 months. Patient had visited a private clinic 15 days back, but had no relief. Then after that patient visited to OPD of Streeroga-Prasuti tantra of MGACH & RC for further management.

- **Chief Complaints:**

Irregular menses, Oligomenorrhoea, Weight gain, oily skin, acne, Hyperpigmentation on neck and face, Hirsutism since 4 months.

Past medical history: No H/O DM/ HTN/ Bronchial asthma/ Hypothyroidism.

Past surgical history: No h/o any past surgical illness.

Past H/O allergy: No H/o any past allergy

Family history: Nil

Menstrual history:

Menarch -at 14 yrs

LMP-01/05/2021

Irregular cycle was 60 days with scanty menstrual bleeding (1 pad/day)
1-2 days bleeding/each menstrual cycle.

Marriage History: The patient was unmarried

General examination findings: G.C.– stable

Temperature- afebrile

Pulse– 74/ min

BP- 110/70 mm hg

Height– 5ft

Weight- 54kg

Per Abdomen Examination: Soft, no tenderness, no organomegaly

Systemic Examination:

RS – AE=BS Clear

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CVS - S1S2 Normal

CNS – conscious, oriented

Ashtavidha pariksha:

- *Nadi* - 78 bpm
- *Mala* - twice in a day
- *Mootra* - 3-4 times/day & 1-2 times in night
- *Jiwha* - *saam*
- *Shabda* - *spashta*
- *Sparsha* - *anushna*
- *Drika* - *alpa shwetabh*
- *Akriti* – *madhyama*

Dasavidha pariksha

Prakriti–*VataKapha*

Vikriti – *Kapha*

Satva – *Madhyama*

Satmya – *Madhyama*

Sara–*Madhyama*

Aharashakti – *Madhyama*

VyayamaShakti–*madyama*

Samhanana – *Madhyama*

Pramana – *Madhyama*

Vaya –*Madyama*.

Investigations Done:

1. USG (abdomen and pelvis)
2. Serum insulin
3. CBC
4. Thyroid profile (T3, T4, TSH)
5. LH and FSH Ratio.
6. ESR
7. Blood sugar levels.

Treatment Given:

1. Kanchanar Guggul 500 mg BD for 1 month.
2. Ashokarishta 20ml BD (after meals with equal water)
3. Arogyavardini Vati 500mg BD(aftermeals)
4. Triphala Churna 5gm HS (With warm water)
5. Amree plus powder 10gm BD (1/2 hour before meals)

Panchakarma-

1. Abhayanga with bala tail
2. Matra basti ksheerbala tail -50 ml

Food advised- Tila, lashun, matsya etc.

Yoga Procedures-

Surya namaskar, Sarvangasan, Paschimottanasan, Ardhamatsyendrasan, Matsyasan were advised to do regularly.

Dietary Recommendations:

1. Low glycemic index foods were advised.
2. Oily foods, junk foods, dietary products and red meat should be avoided.
3. Regular consumption of green leafy vegetables, fresh seasonal fruits are beneficial.

Duration of Management –

The treatment was prescribed for duration of 3 months from September 2021 to November 2021.

Follow- up:

Follow- up was done for 3 months at interval of 2 weeks.

Discussion:

Ayurveda suggests that Pradushta artava (PCOS) is a disorder of Apan Vayu. Also there is involvement of other doshas. There is vitiation of Vata, which involves manifestation of symptoms like painful menses, severe menstrual irregularity. Pitta vitiation involves clinical features such as hair loss, acne, painful menses, clots and heart problems. Similarly vitiation of kapha dosha includes increased weight gain, infertility, hirsutism and Diabetic tendencies .

PCOS (Pradushta artava) is a gynecological condition , which involves vitiation of pitta , kapha , medas, ambhuvahasrotas and shukra dhatu.

Ashokarishta , Til, Rajapravartini vati and Pushpadhanva ras regulates the Artava dhatu and has ovulatory effect. Kanchanar guggul helps in reducing fat and clearing the obstruction by dissolving the cysts. Amree Plus powder helped in regulating the blood sugar level . Triphala churna assists in cleansing the bowel. Arogyavardini vati normalizes metabolism by improving hepatic activity.

Conclusion :

The given treatment modality regularized the menstrual cycle, reduced hirsutism and reduced the weight. The Ayurvedic treatment diet was very beneficial in the control of vitiation of kapha dosha. Meditation and gentle excercises are beneficial in bringing the vitiation pitta to normalancy.

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15.

THE THERAPEUTIC EFFECTIVENESS OF KHADIRADI GUTIKA IN THE MANAGEMENT OF PITTAJA MUKHAPAKA (RECURRENT ULCERATIVE STOMATITIS)-A CASE REPORT**,¹Roshna Bhutada ²Saniya Khan****¹Professor and head, Department of Shalakya, ²Intern,
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Datta Meghe Institute of higher Education and Research (DU) Wardha, India.****Abstract:-**

Background: 'Mukhpaka' or 'Sarvasar Rog' is a recurrent mouth ulcer or Stomatitis and is also termed as Aphthous ulcer. In Ayurveda the disease is characterised as the paka-avastha of oral mucosa & produces ulcers in the oral cavity. Pittadosha, Bodhakkapha, rakta & mamsa are the main dushyas in Mukhapaka. In pittaja mukhapaka the entire oral cavity is studded with red or yellow coloured, slender eruptions with burning sensation, feeling of heat locally, bitter taste in the mouth. The eruption exhibit pain similar to caustic alkali. The general line of treatment as explained in Ayurvedic text are *mukhadhavana*, *kavalgraha*, *kashayapana*, and some internal medications.

Acharya Sushruta has specifically mentioned about shodhanakarma/Cleaning of entire body (*vamana*, *virechana*) along with siravedha should be done followed by all pitta pacifying/madhura and sheeta veerya drugs.

Over consumption of extremely pungent and spicy food, consuming and chewing of chemical agents like Tobacco-Gutakha, Insomnia, Vitamin deficiency, many life threatening disease like Malignancy, Submucosal fibrosis, Skin disease and disturbances in GI tract like Constipation, Dysentery are the main causative factors responsible for this most common ailment.

In modern medicine, several mouth paints and mouth gargles are used for the treatment for Aphthous ulcer adjuvant to steroids, B'Complex group of drugs, injection placentex (sub mucosal) which have their own limitations and there is no successful, satisfactory and cost effective treatment available. Corticosteroids are widely used to control aphthous lesions; however, even their topical application may be associated with some side effects. Hence in such cases Ayurvedic treatment is useful.

Key Words-Recurrent Ulcerative Stomatitis, Burning sensation, Pricking pain, Slender eruptions, Constipation.

Introduction:-

Pittaja Mukhapaka or the *Aphthous ulcer* is a painful and often recurrent inflammatory process of the oral mucosa that can appear secondary to various well-defined disease processes. Idiopathic recurrent aphthous stomatitis is referred to as recurrent aphthous stomatitis.

Mukhapaka often called as “Sarvasara roga” is disease of oral cavity characterised in Ayurveda as the paka-avastha of oral mucosa & produces ulcer in oral cavity. Pitta dosha, Bodhak kapha, rakta & mamsa are the main dushya in Mukhapaka.¹ Based on Sankhya samprapti there are 3 types of mukhapaka according to Sushruta, Bhavprakash and Yogratnakara these are - *Vataj, pittaja (raktaja) and kaphaj mukhapaka*.² According to Ashtang Hridaya/Ashtang samgrha 8 types of mukharogas are explained these are - *Vataj, pittaja, kaphaja, raktaja, sannipataj, Urdhvagada (Asadhya), arbuda, and pootyasyata*.³ The diseases ; spread upon/involving all the 7 parts of mukha like Oshtha, dantamula etc; are called "Sarvasara/Mukhapaka" . (Generalised disease of oral cavity).² The clinical symptoms of mukhapaka are comparable with stomatitis. To break this samprapti *pitta doshahar, rakta prasadak, vranashodhak, vranaropak, shothahar chikitsa* is essential.³

In Mukhapaka Acharya Charaka has explained sarvadehik shodhana karma which include shirovirechan, *kayavirechana* then in local measures he has explained *mukhadhavan, charwana, pratisarana, kashayapana, kavalgraha* & some internal measures.⁴

Acharya Yogratnakara has explained khadiradigutika for internal use which constitutes khadira, jati, karpura, tamalpatra, nagkeshara, to cure tongue, lip, tooth, pharynx & palatine disorders.⁵

In pittaja mukhapaka the entire oral cavity is studded with red or yellow coloured, slender eruptions with burning sensation, feeling of heat locally, bitter taste in mouth and osha i.e. dragging sensation. The eruption exhibit pain similar to application of caustic alkali on wound and the disease is called '*pittaja sarvasara/mukhapaka*'.⁶

Acharya sushruta specifically mentioned about shodhana karma /Cleaning of entire body (vamana, virechana) along with siravedha should be done followed by all pitta pacifying/madhura and sheet remedial measures in pittaja mukhapaka.⁷

Ashtanga samgraha has mentioned the use of Gandusha/Kavala by Milk, sugarcane juice or water added with sugar is used for Gandusha.

Kakolyadi madhura ingredients are used for processing milk. Such milk either consumed or used for Kavala and nasya.

Nasya karma is done by ghruta processed with padmaka, samanga, manjishtha, rodhra, dhataki is used.

Charvana by madyantika (mahendi) leaves should be chewed and spitted out. These are the general measures used for the management of pittaj mukhapaka.⁸

In modern medicine , the etiological factors for the causation of recurrent ulcerative stomatitis are Vitamin deficiency ,viral infection, gastric reflux.etc are described.

The modern treatment in such condition's are Analgesic lozenges given to relieve pain.Local use of steroid lozenges or paste may also be useful.Acidity should be controlled . Vitamin supplements should be given and the patient is advised to maintain oral hygiene.⁹

Patient Information(Case history):-

Name:-Ms. Xxx. , Age:-26 yrs, Address-Wardha , Patient has visited Shalakya OPD; On dated:-10/5/2021

Present complaints:-

Patient is having complaint of constipation since 15 days; Reddish - yellow coloured small blisters/ulcers found in Oral cavity with pricking pain and difficulty in chewing food since 7 days.

Past complaint:-No any past history found in patient.

Family history:- No any family history of ulcers.

Clinical findings:-

Physical examination- A comprehensive physical examination is necessary to diagnose the case of stomatitis .the examination findings may include:-

1.Appearance:- Patient was thin built .On examination of oral cavity red and yellow coloured small vesicles/ulcers are seen on the surface of tongue .Mucosa of the tongue is swollen and of red coloured.

2.Vitals:- 120/80mmhg (Blood pressure are within normal limit) ;

Pulse -72 beats /min;

3.Gastrointestinal:-Patient is having acute history of constipation (since 15days).

Patient is also complaining of mild acid eructations since 5-6 days

4.Cardiovascular examination:- S1 & S2 audible.

Local examination:-

Number of ulcers- 8-10 no. Of ulcers are seen on the surface of tongue

Shape of ulcers- Round or oval shaped ulcers.

Size of ulcers- 0.5-1 mm

Margin of ulcer-Smooth

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Color of ulcer:-Red and Yellow colored ulcers seen.

Oral mucosa: - Over all mucosa of mouth is swollen.

Any pain:-Pricking pain is experienced by patient in over all oral cavities.

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Environmental factors:-

Any physical trauma-No any history of trauma.

Diet- Non-veg diet ; Spicy and oily foods, Contradictory foods .

Emotional stress- emotional stress +.

Ayurvedic examination:-

Nidan panchak:-

Hetu: Ushna, tiksha , katu ahara atisevana; viruddha ahara sevana.

Purvaroop: Agnimandya , aruchi, Malavasthambha

Rupa: Malavasthambha, mukhadaha , mukhashotha ,lalima, mukhavrana.

Upashaya:Sheeta veerya drugs.

Anupshaya: Ushna , teekshna ahara ,viruddha bhojana.

Samprapti: Ati ushna teekshna ,viruddha ahara sevana -

Agnimandya-Ajeerna-malavasthambha - Rakta, pitta and mamsa dhatu dushti -Pitta prakopa

-Ushnata in the body increases-Daha and Shotha in mukha- Mukhavrana.

Ashtavidha pariksha:-

Nadi-72 beats/min

Mala-1/day ;not clear

Mutra-4-5 times /day & 1/night.

Jivha-Saam ,reddish ulcers ,swollen tongue.

Shabda-Spashta

Sparsha-Anushnasheeta

Drik-No pallor

Aakriti-Hina

Clinical findings:-

On examination of oral cavity it is found that yellow or red coloured small ulcers are seen on the surface of tongue , patient is complaining of burning sensation all over the oral cavity+++ and difficulty in eating food+++ . Patient also complaint of not having clear bowels since a week+++.

Timeline: - Patient was suffering from Constipation since 15 days ; pricking pain and burning sensation through out the oral cavity and difficulty in chewing food Since 7 days .

Diagnostic Assessment:- Patient was investigated for complete blood count.

1.Blood test(CBC):-Result are within normal limits

Therapeutic Intervention:- Small tablets each of 250 are prepared from dense mixture each of powdered Jatipatra,karpura,puga/supari,chaturjataka.i.e. Tvak, tejapatra, nagkeshar,Ela;and kasturi.GMP And FDA approved Dattatrya Ayurved Rasashala Wardha(MS). Each capsules was of 250 mg was advised to take two gutikas in morning and two gutikas at night after food. And Triphala churna for Constipation 5 gms twice a day with Lukewarm water Daily for a period of 7 days.

Sr.no	Name of drug	Dose of drug	Kal	Frequency and Anupana
1.	Khadiradi gutika	250mg(2Tab)	After food	Twice a day with lukewarm water
2.	Triphala churna	5 gms	After food	Twice a day with lukewarm water

Follow-up and Outcomes: - On zero day of treatment patient was Suffering from pricking pain in the oral cavity+++ and burning sensation+++, Difficulty to engulf food+++ , Constipation+++; In 1st visit(After 2 days of taking treatment) the pricking pain , burning sensation in mouth , difficulty in chewing the food , constipation is mildly reduced .on 2nd follow up visit (After 3 days)) Pricking pain, burning sensation , difficulty in chewing food , Constipation is reduced greatly.And On 3rd visit (7 day of treatment) All the symptoms are completely reduced.

Sr.No.	Symptoms before treatment	On zero day	1st follow up after 2 days	2nd follow up after 3 days	3rd follow up after 7 days of treatment
1.	Today(pricking pain)	+++	++	+	-
2.	Daha(Burning sensation)	+++	++	+	-
3.	Difficulty to engulf food	+++	++	+	-
4.	Constipation	+++	++	+	-
5.	Mukhavrana	+++	++	+	-

Materials and Methods:-**Shaman chikitsa-**

Khadiradi gutika/lozenges-4kg of khadira bark is mixed with 16 litres of water. The mixture is boiled till 1/8th of total decoction is left. It is further cooked to make it dense after mixing 10 gms .each of powdered Jatipatra, karpura, puga/supari, chaturjatak .i.e. (tvak, tejapatra, nagkeshar, ela) ;and kasturi. Small tablets each either of 250 gms are prepared from this dense mixture. Sucking of this tablet/lozenges takes care of all diseases of tongue, lips, teeth ,mouth and palate (Yoga ratnakara).

Shodhana chikitsa-

Triphala churna:-5 gms of Triphala churna with lukewarm water is advised to patient morning and at bed time (H.S) after food for a period of 7 days to treat constipation.

Observation:- Burning sensation all over mouth and difficulty in chewing the food and constipation is greatly reduced.

Conclusion:- Triphala churna is a powerful polyherbal formulation Patient got relief from Constipation in 2nd follow up visit (After 3 days of treatment) by taking 5 gms of the churna with Lukewarm water and in third visit (After 7 days of taking treatment), patient got complete relief from Constipation. In third visit pricking pain & burning sensation in mouth and difficulty in chewing the food is also relieved completely by internal use of khadiradi gutika within a week.

Discussion:-

Mukhapaka is the disease of Oral cavity; it is the paka of oral mucosa and produces ulcers in the oral cavity. In mukhapaka pitta dosha prakopa is seen and there is a Rakta and Mamsa dhatu dushti , localizing in oral cavity .¹⁰ Hence the line of treatment should be pittashamak , shothahara , vedanasthapana , vranashodhana , vranaropana , rakta prasada and mamsa dhatu pushtikar.¹¹

Various treatment modalities from the modern medical faculties are available for the treatment of Recurrent Ulcerative Stomatitis such as local applications of gels and ointments such as orabase. The gels application at the affected area heals the ulcers, Tetracycline mouthwashes are also available for mouth ulcers . Supplementation of Vitamins and iron is also recommended . Oral and systemic antibiotics are also administered if necessary.¹² But these treatments have very limited or unsatisfactory results. During the study result of Khadiradi

gutika is assessed on the basis of shool, mukhadaha , shotha, lalima..etc. I have selected Khadiradi gutika which proved to be very effective to treat mouth ulcers.It contains Tvak (*Cinnamomum zeylanicum*) , the ayurvedic properties of Tvak as per Bhavprakash nighantu is: it is Ruksha (dry) , laghu (light) and tikshna (sharp) in gunas ,it's Rasa is Katu (pungent), tikta (bitter) and madhura(sweet). It's Vipaka.i.e. post digestive effect is Katu (pungent); it is Kapha Vata shamaka.Tvak is commonly known as Cinnamomum bark ,is one of the main spice in India.Phytoconstituents naturally found in *Cinnamomum zeylanicum* like aldehydes, acetates, flavonoids, alkaloids,phenols, saponins,tannins, hydrocarbons and steroids-it is aromatic in nature, it improves quality of shukradhatu,strength of and complexion of body hence it is immunity booster ; it relieves dryness of mouth and thirst , pacifies Vata and it is absorbent, appetizer, digestant and is antimicrobial in action because of all these properties in mukhapaka it is used to relive constipation .¹³

Tejpatra(*Cinnamomum tamala*) is another valuable herb mentioned by bhavprakash , it is having madhura,katu and tikta rasa ,it is teekshna,laghu and snigdha in gunas ,ushna veerya and madhura in vipaka, it is deepana and anulomana ;hence used in Agnimandya,ajeerna and shoola.leaves and bark is aromatic and has astringent taste.it is stimulant and has carminative properties hence used in dental carries and oral problems.¹⁴

Ela (*Elettaria cardamomum Maton*) is another useful herb it is madhura and Katu rasatmaka it is laghu and sheets veerya it balances kapha and Vata dosha.It is useful in digestion and hence relives constipation and hence useful in repeated oral ulcers. it helps to relieve burning sensation and gastritis.it is a mouth freshner and removes bad taste from mouth(xerostomia). Nagakeshar(*Mesua ferra.Linn*) is having Kashaya and tikta rasa,It is laghu and rooksha in gunas , Alpaushna in veerya and katu in vipaka .It is pittaghna due to it's Kashaya and tikta rasa.Due to it's Kashaya rasa and ushna veerya it is a binding agent (sangrahi).Hence it should be used in Agnimandya,leaves and ajeerna.It is raktasthambhana (styptic).It eliminates mukhadaha,mukhadurgandha and atitrishna resulting from aggravation of Pitta. It's stamens contain mesuoferin A and B and mesuone which are bactericidal.

Kasturi(*Moschus mociferus*) has Katu,tikta rasa and ushna veerya ,it is guru gunatmak ,it is kapha-vata shamak .¹⁵It's fragrance is just like ketaki pushpa/kevda if it is pure musk.hence it is used in Dargandhya(Feotid smell).¹⁶

Jatipatra(*Myristica fragrans.*) Is having katu,tikta rasa;Laghu, teekshna and snigdha in gunas , Ushna veerya and katu vipaka. It's paste is applied locally on Shotha, Shoola and vedana.it should be used as a mouth freshner.

Karpooora(*Cinnamomum camphora*) it is having tikta,katu and madhura rasa,it is laghu and

teekshna in gunas ,it is sheet veerya and katu in vipaka.it is tridoshaghna as it balances all the three doshas of body.being tikta it is kaphaghna,being madhura it is vataghna and pittaghna being sheeta veerya . Being teekshna it is vedanasthapana.Karpooradi oil is used in nervine pain eg.tootache.It should be used in mukharogas as it is mouth freshner being sugandhi and mukhashodhana due to it's tikta rasa .

Puga (*Areca catechu*) it is Kashaya and madhura in rasayanadhyaya, it is rooksha and guru gunatmak ,it is sheet veerya and madhura in vipaka.it is kapha pitta shamaka.Being stambhana and vranaropana gargling with it's decoction should be done in mukhapaka and pittakaphaja galarogas.Its powder is applied to vrana as vranaropana.it is used in aruchi and Agnimandya.being mukhavaishadyakara it is used in mukhadurgandha.¹⁷

Triphala churna contains Amalaki ,Vibhitaki and Haritaki these 3 fruits are mentioned by Charaka in rasayanadhyaya of Charaka samhita . Amalaki and haritaki is said to destroy all the diseases (Sarwaroga shamaka) .And are considered as a best rejuvenator drugs .¹⁸ Acharya charak in matrashitiyadhyaya has mentioned to consumed Amalaki daily for protection of health and avoidance of diseases.¹⁹

Amalaki (*Embelica officinalis*) is having all the five rasa except lavana rasa.Amla is main rasa in it. It is laghu and ruksha in gunas ,sheet in veerya and Madhura in vipaka(Post digestive effect).It is tridoshaghna in action as it is having all the rasa hence it balances all the three doshas in the body. Being amla it is Vataghna,being Madhura and sheets it is Pittaghna and being rooksha and kashaya it is kaphaghna.Its swaras should be used in daha and it's decoction is used as a vranashodhana and ropana. Internally it's action on Anna and Pureeshavaha srotas are : It's juice with sugar is used for Amlapitta, Agnimandya,aruchi .It is used in Malanulomana when there is associated malavasthambha hence used in Vibandha. The fruit contains tannic acid,gallic acid ,sugar,cellulose,calcium,minerals and plenty of Vit.C which is heat resistant hence it is very useful in mukhapaka.

Vibhitaki (*Terminalia belerica*) is having Kashaya rasa ,rooksha in gunas ,ushna veerya and is katu in vipaka.beign Kashaya it is kapha and pittaghna.This fruit is having Kashaya as a main rasa and is used in Shotha and vedana.It is deepana and pachana being ushna.It acts as a laxative and is useful in Vibandha.being Kashaya it is used in bleeding disorders .It's powder is indicated to arrest bleeding from traumatic wound. Chemically it contains tannin,B-sistesterol,gallic and chebulic acid,mannitol, glucose, fructose and galactose.hence in mukhapaka it is used to suppress pain and odema ,it arrest bleeding from ulcers in mouth.

Haritaki (*Terminalia chebula*) is also having all the five rasas except lavana rasa.kashaya is main .It is laghu and rooksha in gunas,ushna in veerya and madhura in vipaka.it is tridoshahara

in prabhava.being Kashaya it is vranashodhana and ropana hence it's decoction should be used for vrana dhavana,it is used in all the painful conditions,being madhura it is pittaghna and being laghu and rooksha gunatmaka it is kaphaghna.Gargling with it's quatha is indicated in mukhapaka.Hence triphala churna is very effective in the management of mukharogas.²⁰

Patient Perspective:- :- Patient was very happy as she got complete relief from pricking pain and burning sensation in the mouth , without using modern medicine and side effects of modern medicine was avoided.

Conflict of interest:- Nil

Source of Funding:- Self

Consent of Patient:- Taken

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असतो मा सद्गमय

16.

**EFFICACY OF PANCHATIKTAKSHEER BASTI IN THE
MANAGEMENT OF ANUKTA VYADHI VANKSHANAGATA VATA (
AVASCULAR NECROSIS) – A CASE STUDY**¹Dr. Ankush D Dikondwar, ²Dr. Geeta Sathvane¹Assistant Professor ²Associate Professor, Department of Rognidan Avum Vikritivigyan, Department of Rognidan Avum Vikritivigyan Datta Meghe Ayurved Medical College, Hospital & Research Centre, Wanadongari, Nagpur.**Abstract**

Avascular necrosis is the pathological process encounters due to hampering in blood supply to the bone (Death of the bone tissue). Avascular necrosis is also called as Osteonecrosis or Bone Infarction. Most commonly hip joint (Head of Femur) is involved but avascular necrosis of hip joint is poorly understand. But this process is the common pathway of traumatic or non-traumatic factor that comprise the already precarious circulation of the femoral head. Long term use of steroid medication and heavy intake of alcohol can lead to avascular necrosis. Clinical picture of avascular necrosis is quite similar to *Vankshanagata Vata* but in *Ayurveda* classical text it is called as *Anukta Vyadhi* as this disease is not clearly mentioned in the *Ayurveda* classical text. Rectal administration of medications or medicated oils or decoction is called as *Basti*. *Basti* is very elite to encounter the aggravated *Vata dosha* which is the main aetiological factor for the manifestation of disease. *Asthi* are important site of *Vata Dosha*. Hence medication given rectally affects all the tissue up to bone tissue that's why *Basti* is selected for the present case; along with *Basti Panchakarma* treatment patient was on oral *Ayurveda* medication and physiotherapy. Patient was hospitalized for duration of 2 months 18 days and showed substantial improvement.

Keywords – *Anukta Vyadhi, Vankshanagata Vata, Panchatiktaksheer Basti, Avascular Necrosis*

Introduction

Ayurveda is the most ancient healing science present on this planet. *Ayurveda* deals with the health of wellbeing. *Ayurveda* has holistic approach towards the life of individual. In *Sanskrit* language *Ayurveda* means ‘The science of life’. Main motto of *Ayurveda* is to keep healthy individual healthier and to improve the quality of life of an individual and treatment of diseased one with help of medicinal herb and *Panchakarma* procedure which one is suitable as per the sign and symptom of the disease.^[1] *Ayurveda* classical text was written in *Sanskrit* language in which many diseases are explained in detailed with their treatment.

According to *Ayurveda* the three principle energies of life is called as *Tridosha* or three pillars of life i.e. *Vata Dosha*, *Pitta Dosha*, and *Kapha Dosha*. *Vata Dosha* is subtle energy associated with movement. *Pitta Dosha* expresses the body metabolic system where as *Kapha Dosha* is the energy that forms the body structure. Balanced condition of three *Doshas* reflects good health. But any vitiation in any in one of above *Doshas* due to *Hetusewan* leads to disease condition.

Ayurveda classical text includes *Charaksamhita*, *Sushrutsamhita*, and *Vagbhatsamhita* out of which *Charaksamhita* is *Chikitsa* oriented granth in which *Acharya Charaka* describes *Vatavyadhi* in detail along with treatment. *Acharya Charaka* describe two types of *Vyadhi* i.e. *Nanatmaja* and *Samanyaja Vyadhi*. Out of which 80 *Vyadhis* are of *Vata Dosha*, 40 *Vyadhis* are of *Pitta Dosha*, 20 *Vyadhis* are of *Kapha Dosh*.^[2]

In the present study Avsclular necrosis of femoral head; more common and most important symptom is *Vankshana Sandhishool* (Predormal symptom of *Vata* vitiation).^[3] Avsclular necrosis means death of Bone tissue due to impairment in the blood supply due to trauma (joint and bone marrow), fatty deposits in the vessels, due to underlying medical condition such as sickle cell anemia, Gaucher’s disease can cause diminished blood flow to the bone tissue. In 25% of cases cause is unknown. Anyone can be affected but the condition is more common between the age group from 30 to 50 years.

Steroid use ,excessive heavy intake of alcohol, Biphosphonate use (Long term use to improve bone density), Certain medical treatment modalities such as radiation therapy for the cancer patient, organ transplant especially kidney transplant are at higher risk to develop Avascular necrosis.

Many people have no sign and symptoms in early stage of Avascular necrosis as it develops gradually. As the condition worsen patient’s affected joint might hurt only when you put weight on it. Eventually patient might feel pain even on lying down. Pain can be mild or severe and increase gradually. Pain associated with avascular necrosis of the hip joint might center on

the groin, thigh or buttock. Besides the hip, the areas likely to be affected are shoulder, knee, hand, foot. Some people develop avascular necrosis on both sides (bilaterally) such as hips or knee.^[4,5]

However there is no disease explained or found in *Ayurveda* classical texts resembling avascular necrosis such a *Vyadhi* are termed as *Anukta Vyadhi*. But according to *Ayurveda* principle stated by *Acharya Charaka* physician can diagnose on basis of *Hetu* (Cause), *Sthan* (Place) and also treat the disease condition.^[6] In *Vankshanagata Vata* vitiation of *Vata Dosha* occurs as per *Ashrayashrayi Bhava Asthi* are *Ashraya* and *Vata* is *Ashrayi*.^[7] According to *Acharya Charaka* for the treatment of *Asthi Ashrayi Vyadhi*’s physician can administer *Basti* as *Panchkarma* procedure in addition to this *Ksheer* and *Ghrit* can be use which is made up of *Tikta Rasatmak* herbs.^[8]

So according to principle stated by *Acharya Charaka* patient received *Panchatikta Ksheer Basti* and got relief from pain and the main aim of study is to explain the efficacy of *Panchatikta Ksheer Basti* in *Vankshanagata Vata*.

Case Study

A 45 years male patient was fit, fine and healthy before 2.5 years then he went to private hospital for the treatment of complaints which he was encountering includes pain in both hip joints, pain in both knee joints for the same complaint he went under the routine investigation, MRI and diagnosed as Avascular Necrosis of both femur. After treatment for avascular necrosis got some relief from pain but symptoms relapse after 1-2 months period with more intensity and addition of difficulty in walking, difficulty in movement of hip joints, pain during movements for which he took treatment from private hospital but didn’t get relief so he came and admitted in the *Ayurveda Hospital*.

Past History

No H/O	Hypertension, Diabetes Mellitus, Bronchial Asthama, Pulmonary Tuberculosis, Thyroid Disorder
No H/O	Thyroid, Malaria, Dengue, Jaundice.
No H/O	Fall, Trauma, RTA
No H/O	Any Surgery
No H/O	Blood Transfusion
No H/O	Any drug allergy

On Examination

G.C. - Moderate
Temp – Afebrile
Pulse- 80/Min
BP- 130/80 mm of Hg

Weight -58Kg

Clinical ExaminationInspection of Hip Joint

No signs of inflammation
No Oedema observed
No dislocation

Table No -1**Range of motion of Hip joint examination (Before Treatment)**

Joint	Flexion	Extension	Abduction	Adduction	Internal Rotation	External Rotation
Right Hip Joint	10 ⁰ Painful	0 ⁰ Painful	15 ⁰ Painful with Support	15 ⁰ Painful with Support	Absent	Absent
Left Hip Joint	90 ⁰ Painless	15 ⁰	40 ⁰	20 ⁰	Normal	Normal

Gait –

Limping Gait
Walk with Support of Stick

MRI Impression –

- F/S/O B/L Avascular Necrosis both Femoral head, Gr III on Right side and Gr ii on Left side.
- Right Hip joint effusion noted with minimal volume.

I. Medicinal Treatment –

1. Kaishor Guggulu	10gm (40Tabs)	}	42 Packets
Mahavatavidwansa Rasa	05gm (20Tabs)		1 Pack. BID
Gulwel Satwa	10gm		with Dugdha
Chopchinyadi Churna	40gm		(Cow Milk)
2. Maharasnadi Kwath	20ml BID	}	with Koshnajal
3. Abha Guggulu	10gm (40 Tabs)		42 Packets
Tab. Calcipral	10gm (40 Tabs)		1 Pack. BID
Kukkutandtwak Bhasma	10gm		with Koshnajala

Date	Medicine	Dose	Fre q
22/7/2019	A.Kaishor Guggulu 10gm(40Tabs) Mahavatavidwansa Rasa 05gm (20Tabs) Gulwel Satwa 10gm Chopchinyadi Churna 40gm B.Maharasanadi Kwath C.Sarvang Snehan D.Sarvang Nadisweda	42 Pack 1 Pack. With Dugdha (Cows Milk) 20ml	BID BID OD OD
28/7/19	Panchatiktaksheer Basti (1 st Set.)	125 ml / Daily	OD
13/8/19	Panchatiktaksheer Basti (2 nd Set)	125 ml / Daily	OD
15/8/19	Sunthisidhha Erandsneha	5ml	HS
02/09/19	Panchatiktaksheer Basti (3 rd Set) (With Addition of Physiotherapy ,Exercise, Cycling)	125 ml / Daily	OD
06/09/19	Abha Guggulu 10gm (40 Tabs) 42 Tab. Calcipral 10gm (40 Tabs) Pack Kukkutandtwak Bhasma 10gm ISBN 978-93-6039-103-4 Annurak Rasayan 50gm	1 Pack with Koshnajala	BID

Amalaki Rasayan

50gm

II. Panchakarma Treatment –

1. Sarvang Snehan
2. Sarvang Nadiswedan
3. Panchatiktsheer Basti (16 basti in 1Set)

Table No – 2 Intervention**Table No 3 – Observation after Intervention**

	On Admission 22/7/19	After 1 st Set of Basti 12/8/19	After 2 nd Set of Basti 28/8/19	After 3 rd Set of Basti 17/9/19
Pain in Right Hip Joint	+++	++	+	Slight pain
Pain in Left Hip Joint	++	+	+	Relief
Pain in Both Knee Joint	++	Relief	Relief	Relief
Difficulty during movements of Hip Joint	+++	+++	Sit without pain	Relief
Difficulty during sitting	++	++	Sit without pain	Sit without pain
Walking with support	+ With Stick	+ With Stick	Walk without support	Walk without support

Table No 4 – showing changes in gait

	Gait of patient
Early stage without treatment	Painful walking with help of stick
After 1 st set of Basti	Pain reduce walk with support of stick
After 2 nd set of Basti	Walk without stick
After 3 rd set of Basti	Can walk Staircase

Table No 5 – Showing AT and BT changes of range of motion of Hip joint

Before Treatment						
Joint	Flexion	Extension	Abduction	Adduction	Internal Rotation	External Rotation

Right Hip Joint	10° Painful	0° Painful	15° With support Painful	15° With support Painful	Absent	Absent
Left Hip Joint	90°	15°	40°	20°	Normal	Normal
After Treatment						
Right Hip Joint	45° Painless	10° Painless	40° Painless	10° Painless	Painful	Painful
Left Hip joint	90°	15°	40°	20°	Normal	Normal

Materials and Methods

In this present case we are using one of the finest procedure amongst *Panchakarma* i.e. *Basti* (Rectal Administration of Medicated decoction or medicated *Ghrit*). In this case we are giving *Panchatiktaksheer Basti*. For the preparation of this *Basti* Physician needs *Panchatikta*.^[9]

I. Panchatikta Dravya

- *Guduchi* (Tinospora cordifolia)
- *Vasa* (Adhatoda vasaca)
- *Nimb* (Azadirachta indica)
- *Patol* (Trichosanthes dioica Roxb)
- *Kantkari* (Solanum surratense Burm.)

II. Ghrit

III. Ksheer (Cow's Milk)

IV. Madhu (Honey)

V. Saindhav (Salt)

VI. Basti pot (Enema pot)

VII. Rubber Catheter No 10.

Preparation of *Panchatiktaksheer Basti* –

Take 5ml *Madhu* and 1 pinch of *Saindhav*, mix it properly up to 5-10 mins. (Till those two

substances become one).

Add 20ml *Ghrit* in the above mixture again stirrer properly.

Add 50 ml *Ksheer* after proper mixing addition of 50 ml *Kwath* in it.

(Preparation of *Kwath* from the *Panchatikta Dravyas*)

Administration of *Panchatiktasheer Basti* –

Basti is administer rectally when patient was on left lateral position with right leg folded in knee near abdomen. Total 125 ml of *Panchatiktasheer Basti* was administered to patient.

Discussion

In this present case as per the sign and symptoms of this patient, we can correlate *Anukta Vyadhi Vankshangata Vata* with Avascular necrosis of femur. *Vankshangata Vata Vyadhi* falls under the heading of *VataVyadhi* because vitiation of *Vata Dosha* occurs due to *Hetu sewan (Mitthya Ahar)* and occupies the *Rikta Srotas* of body which is the main factor for manifestation of disease (*Vankshangata Vata*). *Srotas Rukshata* and *Parushata* observed due to increased *Ruksha Guna* of *Vata Dosha* which is the key point of Pathogenesis of *VataVyadhi*.^[10] So to redress the *Ruksha Guna* of *VataVyadhi* we used *Snehan*. *Snehan* should have to be used in form of *Basti*. *Basti* is one of the *Panchakarma* procedure have capability to eradicate the *Vata Dosha* completely at the same time provides nutrition to tissue also. *Vata Dosha* is mainly located in *Pakwashaya* (Colon) but bone tissue (*Asthi*) is also site of *Vata*.^[11] Hence medication administer rectally effects *Asthi Dhatu*.

As stated earlier *Vankshangata Vata* is not clearly mentioned the *Ayurveda* classical texts but *Vankshan Sandhi Shool* is the main and common symptom of the patient. We can also say that this is *Asthyashrayi Vyadhi* so to treat the root cause we can use *Panchakarma* procedure (*Basti*), *Ksheer*, *Sarpi* made up of *Tikta Rasayukta Dravyas*.^[12] In *Panchatiktasheer Basti*, there are 5 herbs which have principle *Rasa* as a *Tikta Rasa*, *Katu Viapaka*, *Ushana Virya* are *Guduchi*, *Vasa*, *Patol*, *Nimb*, *Kantkari*.

Panchatiktasheer Basti is basically *Vatashamaka* due to its principle *Rasa*, *Vipaka*, *Virya* also *ksheer* is *Snigdha*, *Madhur*, *Vatapittaghna*.^[13] *Ghrit* is also *Pittanilahara* and *Balawardhan*.^[14] *Saindhav* is *Tikshna*, *Ushna*, *Sukshma* and *Vatavikarnashak*.^[15] From all angles the contents of *Panchatiktasheer Basti* are *Vata Doshahar* which is the main factor in the manifestation of *VataVyadhi*. Also due to the *Sukshma Guna* of *Saindhav* and *Snehgunyuktata* of *Ghrit* this *Snehan Basti (Panchatiktasheer Basti)* reaches *VankshanSandhi* and *Asthi Dhatu* and effectively reduce intensity of *Shool* (Pain) which is due to aggravated *Vata Dosha* of that

region. *Vata Dosha* is mainly located in *Pakwashaya* (Colon) but bone tissue (*Asthi*) is also site of *Vata*. Hence medication administer rectally effects *Asthi Dhatu*.

Conclusion –

In this present case on the basis of observation and assesment we can conclude that *Panchatiktaksheer Basti* play effective role in the management of *Anukta Vyadhi Vankshangata Vata* (Avascular Necrosis).

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17.

**EFFECT OF *TILA TAILA ABHYANG* AND *GHRITAPANA* IN
VICHARCHIKA
: A CASE STUDY**¹Vd. Maheshwari D Joshi, ²Vd. Sumant M Pande,¹Assistant Professor, Department of Swasthavritta and Yoga, Dr. Rajendra Gode Ayurved College, Hospital & Research Center, Amravati.²Associate Professor, Department of Rognidan, Mahatma Gandhi Ayurved College, Hospital & Research Center Wardha.**Abstract:**

Life style means a pattern of individual practices and personal behavioral choices that are related to elevated or reduced health risk with regard to health. It refers to dietary habits.

The important diseases that mainly arise from wrong dietary habits are skin diseases. Skin diseases are correlated with different types of *kushth* in *Ayurveda*. *Vicharchika* is one of the types of *kshudrakushtha*. The clinical features of *vicharchika* represents relapse and seasonal variation and definitely, changes as per diet variation. Some procedures with or without main line of treatment for *vicharchika*, are found to have good symptomatic effect for *vicharchika*; *abhyang* and *ghritpana* are some of them.

Present case study is an attempt to observe the efficacy of *til tail abhyang* and *ghritpana* in *vicharchika*.

Key words : *Vicharchika*, *Rasayan*, *Ghritapana*, *Til tail Abhyang*

Introduction:

According to *Ayurveda*, the basic cause of all skin diseases is *virudha aahar* and *vihar* that is altered life style and faulty food habits. Today's life style is completely changed because of faulty job profile and deranged *dincharya*.¹

According to *Ayurveda* *vicharchika* is *rakta pradoshaj vikar* having involvement of three *doshas* with

Dominance of *kapha dosha* and *vat dosha* though it is *kshudra kushtha* it runs a chronic course. Skin rashes characterized by redness of skin, edema itching and dryness.²

In maximum number of cases, no satisfactory treatment is available in contemporary medical practices except antihistaminic and topical steroids. The Prevalence of eczema is 22%.the skin is the largest organ in the body which protect the body from physical and

chemical attack, skin rich in immune cells, forming a complex network called the skin immune system, *Abhyang* helps to maintain immunity of skin and *rasayana* (*ghritpana*) improves glow upon skin.⁷

In *Ayurveda* for *kustha*, *shodhan*, *shaman*, are the main treatments. In both treatments *snehan* is included in the form of *abhyantara* and *bahya snehan*. According to *Ayurveda*, those who are desirous of health and happiness should do *abhyang* to the body. *Abhyang* is one among the *dincharya* and is an ancient Indian *ayurvedic* approach adopted for healing relaxation and treating various diseases. *Tila taila* improves the quality of skin.³

Acarya caraka has described *rasayana* as the means of obtaining the best qualities of *rasadi dhatus*, it is believed, in *ayurveda* that the qualities of the *rasa dhatu* influence the health of other *dhatus* of the body hence any medicine that improves the quality of *rasa* should strengthen or promote the health of all tissues of the body. *Rasayan* drugs act inside the human body by modulating the neuro-endocrine systems and have been found to be a rich source of antioxidant, *rasayana* is not a drug therapy, but is a specialized dietary regimen. *Goghrita* is one of the best *rasayana* for skin.

Aim : To study the effect of *tila taila abhyang* with *ghritpana* as a *rasayan* in *vicharchika*.

Objectives :

1. To study the effect of *abhyang*.
2. To study the action of *Ghritapana* in *vicharchika*.

Material and method:

Case report:

A 26 year young female, Doctor by profession, approached in opd presenting with the complaints of

1)	Itching (<i>Kandu</i>)	: 5yr
2)	Blackish discoloration (<i>Vivarnata</i>)	: 2yr
3)	Dryness(<i>Raukshya</i>)	: 5yr

All these symptoms appeared on the dorsal side of Right palm.

There were no previous history of any known allergy in patient and also no family history of any known skin diseases.

On examination:

History taken for *hetu sewan* (etiological factor) was almost same as described in *Ayurvedic* text as follows :

Hetu :

Aaharaj hetu: Milk, pickles ,fruit salad , ice creams ,oily foods like *papad* , curd , spicy vegetables,

viharaj hetu :soaps and detergents, increases in dry weather, frequently washing of hands with soap.

Manas hetu : stress, extreme emotions like anger.

Doshas: *kapha*, *vat*

Dushya :*Rasa*, *Rakta*

General condition of patient was moderate as vital were stable

General examination:

1) <i>Nadi</i>		:80/Min
2) <i>Mala</i>		: <i>Malabada</i>
3) <i>Mutra</i>		: <i>Prakrut</i>
4) <i>Jiva</i>		: <i>Alpsam</i>
5) <i>Shabda</i>		: <i>Spashta</i>
6) <i>Sparsha</i>		: <i>Ushna</i> , <i>Ruksha</i>
7) <i>Druk</i>		: <i>Samanya</i>
8) <i>Aakruti</i>		: <i>Madhyam</i>

General examination:

1) Pulse: 72/min

2) BP : 110 /70mm/Hg

3) Pallor :absent

R/S: air entry equal on both side

CVS: normal function, S1 ,S2 normal

CNS : conscious oriented

P/A : soft sometimes distended

Bladder habit was regular

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Patients detail history: no past history of any chronic illness.

Personal history:

Dincharya : wake up at around 8 o'clock am, no regular exercise, *ruksha* spicy green chilly in food, *virrudha anna sewan vihar* as per mention above *hetus* .late night sleep ,stress

Occupation: medical student

Past history:

Patient was all right before 5yr ,patient taken allopathic treatment for the same but after discontinuing the treatment the symptoms were aggravated, patient was came to *swasthyarakshan* opd before 3 months .

After clinical examination patient was recruit for the treatment of *vicharchika* through life style management and *rasayana sewan* that is *goghurut*.

Local examination:

Fissured erythematous lesions on dorsal aspect of right hand and blackish discolouration with the thin serous discharge.

Ruksha +++,

khara ++, *sparsha*

Doshas: kapha ,vata

Dushya : Rasa, Rakta

Treatment protocol:

- *Ghritapan* 10 ml in *rasayana kal*.
- Local application of *tila taila* for 3times in a day.
- Diet regimen and life style modifications.
- Diet do's and don'ts (*pathya pathya*)
- *Ghrutpan* in *rasayana kal*.
- Avoid extra salt intake and fruit salads
- Hot and spicy foods bakery products.
- Food and fruits with milk ,curds
- Eat fresh and normal food
- Avoid more water while taking food.

- Life style modifications:
- Live stress free life.
- Do regular exercise and *dhyana* and *yoga*.
- Avoid *diwaswap* ,late night sleep ,lying down position after dinner
- Do not hurry while taking food.
- Avoid application soaps and detergent on skin ,herbal *neem* soap must used
- After bath skin must not allow to remain wet.
- Avoid sweating as much as possible,

Observation:

Observation table showing symptoms before and after treatment

Symptoms	Before T/t	Day30	Day60	Day90
Itching(<i>kandu</i>)	++++	+++	++	Complete relief
Blackish (<i>shyawata</i>)Discolouration	+++	++	+	Complete relief
Oozing(<i>bahustrawa</i>)	+++	++	+	Complete relief

Result:

On comparison with pre intervention condition of the patient ,there was a marked difference in patient post treatment the featured which showed the marked difference in all symptoms and complete relief .

Discussion:

In this study , observation was done before and after treatment based on symptoms gradation and result obtained are the itching before treatment was 4+after treatment reduced to 0, blackish discolouration BT is 3+ and AT is 0, oozing BT is 3+ and AT is 0,. Above result shows mark reduction in the symptoms, effect of *tila taila abhyang* and *ghrutpan* as *arasayan* with diet and life style modifications.

Itching in *vicharchika* is causes due to vitiation of *kapha* and vitiation of *vata* by *ruksha guna snehpan* and *abhyang* both possesses *vathara* properties pacifying *vrudha vata* in *vicharchika* also *taila* possesses *vat kaphaghna* property hence *tila taila abhyang* nullifies vitiated *kapha* and thereby relieves symptoms of itching.

Discolouration in *vicharchika* cause due to vitiation of *vata dosh*,a *snehpan* and *abhyang* both possesses *vathara* properties paseifying *vrudha vata* in *vicharchika* hence *tila taila abhyang* nullifies vitiated *kapha* and thereby relieves symptoms discolouration as *til taila* has

varnya property which helps to decrease discolouration .

The world *rasayana* addresses the optimizing of circulating the nourishing food through tissues and cells. In this case, used *Goghрут* as a *rasayann* helps to get adequate quantity and quality of *aahar rasa* with its proper circulation .which helps to relieve the symptoms.

Mode of action of *Til Tail Abhyang* in *Vicharchika* :

In *Vicharchika* mainly *Vat Kapha Doshas* are vitiated in *Kushtha Chikitsa* for *vat Pradhan Kustha Ghrutpan* is indicated ,as *Ghrutpan* is *Rasayan Chikitsa* ,and *Abhyang* improves blood circulation facilitates removal of toxins from the tissues , *Bhrajak Pitta* is located in the skin it impacts the characteristics of color and luster ,in given patient *til tail* is applied on the skin *Abhyang* is digested by *Bhrajak Pitta* ,due to *Tail Abhyang* the *Vata Kapha Doshas* are brings to normal thereby decreasing symptoms of *vicharchika* ,due to *Abhyang* the hardness and roughness of skin is diminished. *Abhyang* helps to improve quality of skin and brings to normal appearance reliving the symptoms of *Vicharchika*.⁷

Conclusion: Thus present case study concludes that *tila taila abhyang* and internally *goghрутpan* as a *rasayan* in *vicharchika* with life style modification and diet regimen gives relief to the patient .there were no adverse effect was found.



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18.

**AYURVEDA MANAGEMENT OF GADGET ADDICTION IN
PEDIATRIC PATIENT: A SINGLE CASE STUDY*****¹Dr Prasad Gajanan Yewale¹, ²Dr. Renu Rathi, ³Dr. Swapnali Mate**¹Assistant Professor HOD & ²Prof. Dept of Kaumarbhritya, ³Assistant Professor
Dept of Kriya Sharir Mahatma Gandhi Ayurved college hospital & research center, Salod(H),
Datta Meghe Institute of Higher Education and Research Centre, (D.M.I.H.E.R.), Maharashtra,
India.**ABSTRACT**

Aim- To study the effect of *Ayurveda* treatment on Gadget addiction in children. **Objective :** the study of Gadget addiction in detail. **Discussion:** Gadget addiction is related to *Asatmeindriyarth Samyoga & Pradnyaparadh*. It affects the normal growth and development of children as well as the structure of the brain. It is the necessity of time to deaddict children from Gadget addiction as early as possible. **Result:** In the present case study *Ayurveda* principles are used to treat the patient and a good outcome is noted. **Conclusion:** The application of *Ayurveda* treatment modalities in the treatment of Gadget addiction gives a good result.

Keywords- *Ayurveda*, Gadget addiction, Kaumarbhritya, *Satvavajaya*, *Yoga*,

INTRODUCTION

Addiction can be described as a process in which behavior, which has the potential to both bring about pleasure and provide relief from internal discomfort, is used in a pattern that is marked by a repeated inability to control the behavior (powerlessness) and persistence in the behavior despite grave negative effects (un-manageability).⁽¹⁾ The term "gadget addiction" includes excessive mobile use, online gaming, online gambling, excessive internet browsing, and excessive social media use. Addiction to Gadgets is negatively correlated with psychosocial issues in adolescents⁽²⁾ Addiction to gadgets causes a decrease in physical activity, which causes early fat deposition. According to research, stressful environments, encourage people to get addicted.⁽³⁾ Gadget addiction is a behavioral type of addiction and there are similarities between Gadget and drug addiction⁽⁴⁾. The *Ayurveda* concept of *Asatmeindriyarth Samyoga*⁽⁵⁾ (Indulgence in unhealthy subjects of sensory organs) and *Pradnyaparadh*⁽⁶⁾ goes much equivalent to today's Gadget addiction.

AIM – To study the effect of *Ayurveda* treatment principles in the management of Gadget addiction in children

OBJECTIVE –

4. Study of Gadget addiction in detail
5. Study of the pathology of Gadget addiction in detail
6. Study of the efficacy of *Ayurveda* treatment principles in Gadget addiction in detail

PRESENT COMPLAINTS (In Chronological Order)

4. Spending excessive time on a smartphone, video games
5. Less communication with family and friends
6. No interest in playing and surroundings

The patient had these complaints for 1 year.

Associated complaints

Eye pain

Eye irritation

Gaining weight abnormally for 1 year

History of present illness:

The patient had a history of disease for 1 year. She was spending a lot of time on mobile and video games. As well as having poor scholastic performance with low social contact with peers and family. Hence came for the *Balroga* OPD

History of past illness: Admitted for U.T.I. last year

Family history: [H/O- DM/HTN/IHD/TB/Leprosy /Asthma/Genetic Disorders]- No

Hereditary disorders – No

Dietary history

Type of Food- *Rukshanasevan* (daily biscuit & other bakery product consumption), *Ushna Tikshna Ahar* (fast food consumption)

Appetite: Good

Personal history-

Bowel Movements- Constipation

Micturition- Normal

Sleep- sleeps only for 5 hours.

Hygiene- Good

Habits- Bed Wetting/

PICA/Nail Biting- no

GENERAL EXAMINATION

Built: obese

Gait: Normal

Pulse: 80 / min

Temperature: 98.4f

B.P: 105/ 76mmhg

RR: 28/ min

No e/o - Icterus/Organomegaly/Lymphadenopathy/Oedema

Anthropometry

Weight – 29 kg, height – 142 cm,

Ashtavidh parikshana –

- 1) *Nadi* (pulse) = 80/min.
- 2) *Mala* (stool) = *Malavashmbha*(constipation),.
- 3) *Mutra* (urine) = Normal.
- 4) *Jivha* (tongue) = *Saam*(coated).
- 5) *Agni* = Normal
- 6) *Shabda* (speech) = *Prakrut* (Normal).
- 7) *Sparsha* (Skin) = *Prakrit*(Normal).
- 8) *Druk* (Eyes) = *Netradaha* (eye irritation)
- 9) *Bala*(Strength) = *Madhyama*(Medium).

DOSHA DUSHYA INVOLVED –

Manas dosha: clinical features of gadget addiction are related to *Raj Guna* and *Tamo Guna* is predominance features⁽⁷⁾.

Deha dosha : Vata: controlling the mind is the function of *Vata Dosha*⁽⁸⁾, in gadget addiction, the restraining power of the mind is delayed.

Pitta: intellect is delayed in gadget addiction, which related to *Sadhaka pitta*⁽⁹⁾

Dushya : Buddhi - intellect, restrain, and memory of a person are affected which are the function of *Buddhi* . From the above clinical feature we could conclude that *Buddhi* is the main *dushya* in gadget addiction.

Adhishtan – Man

ASSESSMENT TOOLS:

- 1) Young's Internet Addiction test scale
- 2) DSM-V criteria for social behavior

MANAGEMENT –

No.	Intervention	Details of method	Duration & Frequency
1	Counseling	Counseling about hazardous effects of	fortnight 1 session with

		mobile and benefits of mobile deaddiction	parents and child separately
2	Yoga therapy	<i>Surya Namaskar, Dhyana</i>	Daily
3	Encouragement for in & outdoor games	The patient was counseled to play In and Outdoor games daily	Daily for 1 hour
4	Encouragement towards attending social programs	Parents were guided to the engagement of children in learning new things, in group activities with peers, etiquette	'Si-opus sit' Whenever required & feasible
5	Encouragement of parent-child relationship	Parents advised spending time with children To give a reward for non using mobile	Minimum 2 hours of quality time daily by parents
6	Targeted reduction in Gadget use time	Reduced time was used for adventure, bravery cognitive skill-oriented things, sports, and yoga.	By <i>Padanshik krama</i> i.e reduce Gadget use time by $\frac{1}{4}$ part each week

The patient and her parents were educated by PPT presentations.

Initial training of *Surya namaskar* and the method of *Dhyana* was given.

The patient was asked to do the proposed *Suryanamaskara* and *Dhyana* on the assessment day.

Total treatment was advised for 90 days and follow-up was taken on ^{the 91st} day

OBSERVATION –

Complaint	Before treatment	After treatment on ^{the} 91 st Day
Screen time	7 hours daily	Reduced to 1 hour
Communication with friends and family	No or minimal communion	Spend much time with family and friends

playing	Not interested	Interested in outdoor activities
Young's Internet Addiction test scale score	78	18
DSM-V criteria for social behavior score	8	2

DISCUSSION –

The frequent use of gadgets causes, sensory overload, enlivening the mind for subjective experience, and the affinity of these experiences causes adverse effects. Addiction (of any kind) impairs a person's mental capacity, which makes it difficult for them to make morally sound decisions. The mind needs regulating ability to make any decisions, According to Ayurveda, Dhee is the component that controls the action of the mind⁽¹⁰⁾ Direct management of any addiction is not mentioned anywhere in the literature of Ayurveda, but by comprehending the role of dosha dushya in Gadget addiction, we can come to the conclusion that management of gadget addiction can be done based on *Manasa Roga* treatment principles which are proper counseling, assurance, memory enhancing, providing knowledge and meditation. ⁽¹¹⁾ Ashwasana (reassuring and explaining), Suhritvakya (guidance and suggestion), and Dharmartha Vakya (educating the individual and family) are the types of satvavajaya chikitsa that were used in treating this case. Yoga has the power to cleanse our mind, soul, and body as well as to control our emotions; this phenomenon is helpful in conditions such as addiction, yearning, compulsive behavior, tolerance, and relapse. A consistent yoga practice activates the alpha, beta, and theta brainwaves, which have been related to improvements in memory, mood, and anxiety. Mental tension and depression are typical causes of addictive behavior⁽¹²⁾.

The easy way to switch from unwholesome things to adopting wholesome things by 1/16th part⁽¹³⁾ is by using the Padamshik Krama. In a Pada karma, bad habits or objects should be abandoned and good habits should be adopted. To effectively treat Gadget addiction, daily time spent on gadgets was reduced to 1/16th of that amount, and replaced with beneficial habits or creative endeavors. In addition to being helpful to patients, Ayurvedic interventions like Satvavajaya (psychotherapy), Yoga, and Aachar Rasayana require nothing in the way of infrastructure and the majority of these treatments are completely free. It will be simple for the patient to adopt such measures because the importance and method of yoga are widely known

among Indians and are commonly practiced.

CONCLUSION – In this study, we used *Ayurveda* treatment principles which show good improvement in a patient without any side effects.

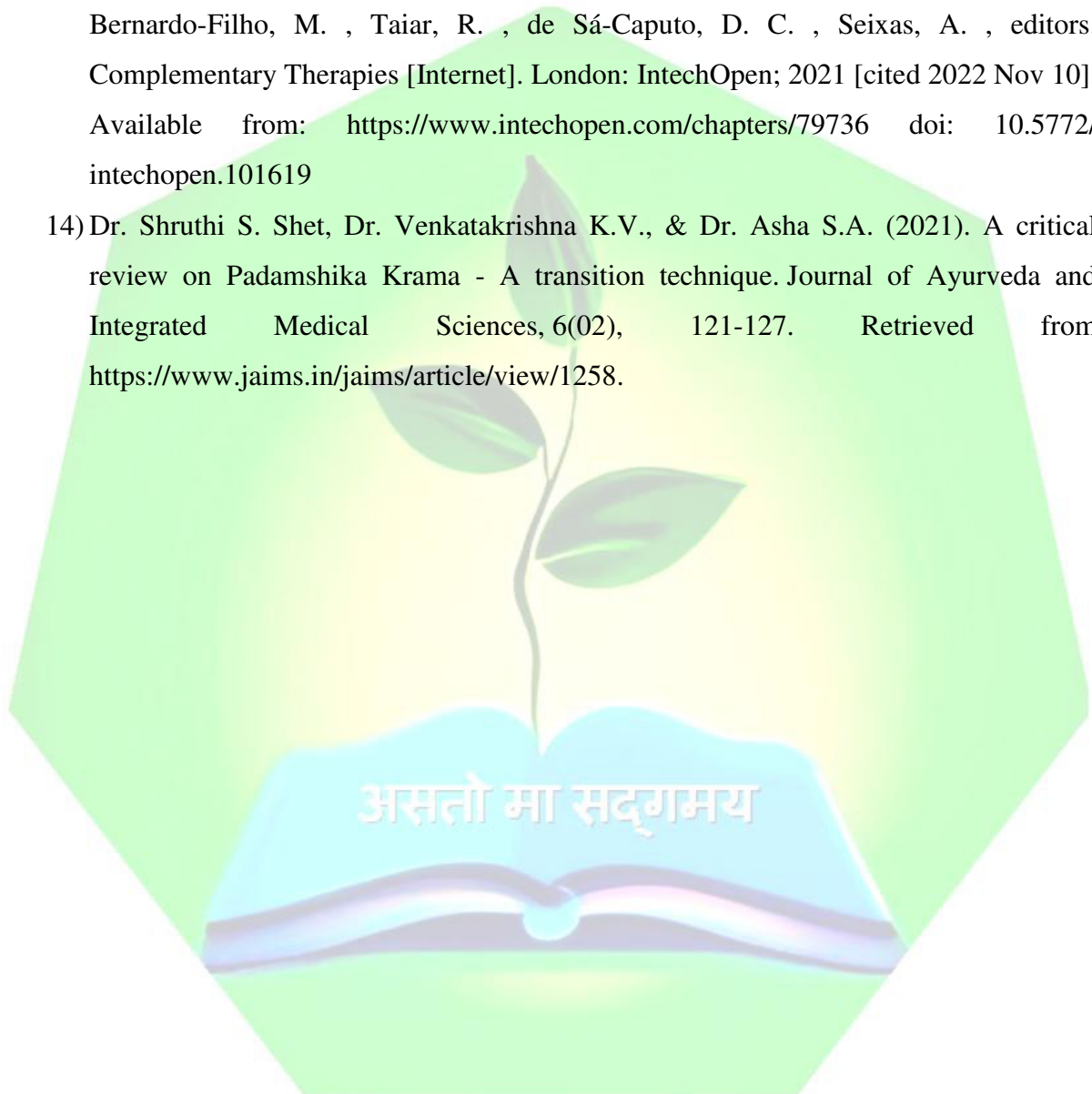
SOURCE OF FUNDS – No

CONFLICTS OF INTEREST – Nil

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19.

**STUDY ON THE EFFICACY OF KARVEERADI TAIL IN THE
MANAGEMENT OF PAMA W.S.R TO SCABIES*****¹ Dr. Kanchan Gaidhani, ² Dr. Sonali Chalkh,**¹PG Scholar, Dept. of Agadtantra, ² Professor Dept. of Agadtantra, Mahatma Gandhi Ayurved College Hospital & RC, Wardha, Datta Meghe Institute of Higher Education and Research Centre, (D.M.I.H.E.R.), Maharashtra, India.**Abstract:**

Background: *Pama* is a *Tridoshaj*, *Pitta*, *Kapha* predominant disease. There are eighteen kinds of *kushdra-kustha* in Ayurveda. Out of these *pama* is one of the types of *kustha*. Due to similarities of signs and symptoms, *pama* can be correlated with Scabies. In Ayurveda, *Nidanparivarjana*, *Shodhana* and *Shamana Chikitsa* are described for *pama kustha*. In *Chakradatta*, *karveeradi Tail* is indicated in the management of *Pama* (Scabies). Hence, this study was conducted to compare the effectiveness of *Karveeradi Tail* in the management of *Pama* with special reference to Scabies. **Methodology** - Total 40 patients were enrolled and randomly divided into two equal groups. Group A was treated with *Karveeradi Tail* and Group B with Permethrin for 21 days. Patients were assessed for *Kandu*, *Toda*, *Daha*, *Pidika* and *Strav* during treatment 3rd and 7th day and after treatment on 14th and 21th day. **Results** - Significant improvement was observed in Group A. **Conclusion** - *Karveeradi taila* is effective in the management of *pama*.

Key words: *Pama*, *Kushdra-kustha*, *Karveeradi Tail*, Scabies, Permethrin

Introduction:

As per Ancient seers skin has seven layer^{1,2} and in ancient literature all skin disorders are categorized under the term “*Kustha*”. which are mainly produced by seven factors *Tridoshas* and four *dushyas* viz. *twacha*, *mass*, *rakta*, *lasika*³. *Kustha* is categorized into “*Mahakushta*” (7) and “*Kshudrakushta*” (11). *Pama* is one of the *kushta* among eighteen types of *Kshudrakushta* according to “*Charaksamhita*”⁴. which is caused by preponderance of *pittadosa* and *kaphadosa*⁵. Symptoms of *pama* is *kandu* (itching), *Toda* (pain), *Daha* (burning), *Pidika* (eruption) and *Strava* (discharge)⁶.⁷. Which resembles with Scabies, one of the skin disorders as per contemporary science.

Scabies is an infestation caused by the mite, “*Acarusscabiei*”. It occurs in individuals at all ages. It is transmitted from one individual to other and sometimes from pet animals such as dogs, cats, horses or any other pet animal (Animal scabies) by close physical contact. Infestation occurs when the pregnant female mite burrows into skin and lays eggs. The incubation period is 2-4 weeks, after which patient's starts experiencing severe itching and diffusely scattered papules and

papules-vesicles. Patients with scabies complain of itching, which is most severe at night⁸.

The exact number of infected cases of Scabies in world-wide are estimated to be up to 300 million⁹. A study conducted in rural area among young people notify that rate of scabies was 70%¹⁰.

Several medications are indicated for scabies but the side effects are much more such as irritant dermatitis in hot and humid climate, CNS toxicity, and convulsion. Some medications are contraindicated in infants and pregnant patients and some are most expensive¹¹.

Even after successful treatment, the itching can be continues and nodular tension persist. It may persist for weeks even through the mite are gone. However itching beyond six weeks indicate treatment failure. So, there is a need to evaluate the efficacy of new *Ayurveda* drug which will have best-antiscabietic action, within a short period, with negligible side-effect, economical and decreasing the incidence of recurrence of disease.

In context of *Agadtantra*, *karveera* is categorized under *upvishavarga*¹². (Low potency poison). It has '*kushthghna*' properties¹³. In *Samhita*, so many medications are mentioned for the treatment of *Pama*. '*Karveeradi tail*' is one of formulation mentioned in '*Chakradatta*'¹⁴. So to evaluate efficacy of '*karveeradi tail*', this study was conducted.

Material and Methods:

Material: The raw material was collected from herbal garden and authenticated by department of Dravyaguna M.G.A.C.H and R.C Salod (H), Wardha.

Ingredients of Karveeradi oil (Table no 1)

Table No. 1;

Sr.No	Ingredients	Latin Name	Part used	Quantity
1	<i>Karveera (shweta)</i>	<i>Nerium indicum</i> mill	Leaf	500gm
2	<i>Sarshap</i>	<i>Brassica Campestris</i> l-invar	Seed oil	2lit

Methodology :

Preparation of Karveerdi Tail : The trial drug was prepared according to procedure given in *Sharangdhar Samhita*¹⁵. Fresh leaves of *Karveer* were collected from Bhamishra Vatika of Mahatma Gandhi Ayurved Mahavidyalaya. The leaves Grinded properly and fine paste was made. 16 times water was added to this drug and heated on *mandagni* till it is reduced to 1/4 quantity to prepare a *quath*. 4 times *sneha* (Mustard oil) was taken. *Kalk* and *Quath* was added in the *sneha* (Mustard oil) Again, heated on *mandagni*, till all water content gets evaporated. When all *snehasiddhilakshanas* was attained, filter the oil properly, collect and store in air tight container and dispatched in plastic bottle measuring 50 ml each.

Analysis of Karveeradi Oil : The formulation was first tested for organo-leptic character such as odour and colour. (Table no 2). Physicochemical analysis includes loss on drying at 105⁰C, total ash, Acid insoluble ash, Alcohol soluble extractives, water soluble extractive, pH, (Table no 4). Colour. Analysis of sample was done as per API standards.

Clinical Study:

Source of Data: After getting IEC approval from Mahatama Gandhi Ayurved College, Hospital and Research centre. , Total 40 patients reported to OPD of *Kayachikitsa* department, MGACH & RC were enrolled in the study, divided into two groups. Group a & Group B (20 patients in each group) **Groups a: Trial** group- 20 patients, **Group B** Controlled group – 20 patients

Study design: Single Arm.

Study Type: Interventional Clinical Study.

Inclusion criteria:

1. Diagnosed cases of *PamaKustha*/Scabies with *Kandu*, *Toda*, *Daha*, *Pidika*, *Strav*
2. Patient between the age group of 15 to 60 years.

Exclusion Criteria:

1. Patients suffering from any other systemic disorders such as Skin Tuberculosis, Leprosy etc.
2. Scabies with complication crust or hyperkeratosis and Secondary infection.
3. Pregnant and lactating women.

Intervention

Group A- Treated externally with *Karveeradi Tail*.

Group B- Treated externally with permethrin lotion.

Posology:

Group A –*Karveeradi Tail* on sufficient amount two times in a day on affected region.

Group B – Permethrin lotion on sufficient amount two times in a day on affected region.

Study Duration: 21 days.

Follow Up Period: On 3rd day and 7th day (Before treatment)

14th day and 21st day (After treatment)

Assessment criteria-

Subjective Criteria: *Kandu* (Itching) *Toda* (Pain) *Daha* (Burning)

Objective Criteria: *Pidika* (Eruption) *Strav* (Discharge)

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Gradation of Assessment criteria:**Table 2. : Subjective criteria:**

Sr.no	Symptoms	Present	Absent
1	<i>Kandu</i> (Itching)	+	-
2	<i>Toda</i> (Pain)	+	-
3	<i>Daha</i> (Burning)	+	-

Table 3: Objective criteria:

Sr.no	Symptoms	Present	Absent
1	<i>Pidika</i> (Eruption)	+	-
2	<i>Strava</i> (Discharge)	+	-

Statistical analysis –

The obtained data was analysed statistically. Chi-square Test and Fishers Exact Test used to test the hypothesis of the study. P value of < 0.05 was considered as statistically significant and p value < 0.01 and < 0.001 were considered as highly significant. Level of significance was noted and interpreted accordingly.

Observation and Results:**Pharmaceutical Study:****Table 4: Organoleptic character of Karveeradi Taila**

Sr No.	Organoleptic character	Remark
1	Colour	Pale greenish
2	Odour	characteristic

Table 5: Physicochemical property of Karveeradi Taila

Sr no.	Test parameter	Result
1	Refractive index	1.4640
2	Iodine value	14.93%
3	Saponification value	194.87%
4	Acid value	5.86%
5	Peroxide value	0.72%
6	Free fatty matter	0.95%

Clinical Study:**Table 6 : Comparison of *Kandu*(Itching) in two groups at Day 0, day 3, day 7, day 14 and at day 21**

Group A	Day 0	Day 3	Day 7	Day 14	Day 21
Present	20(100%)	14(70%)	7(35%)	4(20%)	4(20%)
Absent	0(0%)	6(30%)	13(65%)	16(80%)	16(80%)
Comparison with Day 0 in group A(Fisher's Exact Test)					
p-value	-	0.020,S	0.0001,S	0.0001,S	0.0001,S
Group B					
Present	20(100%)	11(55%)	5(25%)	2(10%)	2(10%)
Absent	0(0%)	9(45%)	15(75%)	18(90%)	18(90%)
Comparison with Day 0 in group B(Fisher's Exact Test)					
p-value	-	0.001,S	0.0001,S	0.0001,S	0.0001,S
Comparison between group A and group B(Fisher's Exact Test)					
p-value	-	0.51,NS	0.73,NS	0.66,NS	0.66,NS

In group A, *Kandu* (itching) before treatment it was 20(100%) and after treatment it was 4(20%) by using fishers exact test statistically significant result was found ($p=0.0001S$).

In group, *Kandu* (itching) before treatment 20(100%) and after treatment was 2(10%).By usingFishers exact test statistically significant result was found ($P=0.0001S$).

Table 7: Comparison of *Toda* (Pain) in two groups at Day 0, day 3, day 7, and day 14 and at day 21

	Day 0	Day 3	Day 7	Day 14	Day 21
Group A					
Present	18(90%)	10(50%)	6(30%)	4(20%)	4(20%)
Absent	2(10%)	10(50%)	14(70%)	16(80%)	16(80%)
Comparison with Day 0 in group A(Fisher's Exact Test)					
p-value	-	0.013,S	0.0002,S	0.0001,S	0.0001,S
Group B					
Present	20(100%)	10(50%)	3(15%)	2(10%)	2(10%)
Absent	0(0%)	10(50%)	17(85%)	18(90%)	18(90%)
Comparison with Day 0 in group B(Fisher's Exact Test)					
p-value	-	0.0004,S	0.0001,S	0.0001,S	0.0001,S
Comparison between group A and group B(Fisher's Exact Test)					
p-value	0.48,NS	1.00,NS	0.45,NS	0.66,NS	0.66,NS

In group A, *Toda* (pain) before treatment was 18(90%) and after treatment it was 4(20%) by using fishers exact test spastically significant result was found. ($p = 0.0001S$).

And in, group B *Toda* before treatment 20(100%) and after treatment it was 2(10%). By using fishers exact test spastically result was found ($p= 0.0001S$).Showing significant effect of karveeradi Tail in comparision in *pama*.

Table 8: Comparison of *Daha* (Burning) in two groups at Day 0, day 3 day 7, day 14 and at day21

	Day 0	Day 3	Day 7	Day 14	Day 21
Group A					
Present	10(50%)	8(40%)	5(25%)	3(15%)	3(15%)
Absent	10(50%)	12(60%)	15(75%)	17(85%)	17(85%)
Comparison with Day 0 in group A(Fisher's Exact Test)					
p-value	-	0.75,NS	0.19,NS	0.04,S	0.04,S
Group B					
Present	12(60%)	9(45%)	3(15%)	2(10%)	2(10%)
Absent	8(40%)	11(55%)	17(85%)	18(90%)	18(90%)
Comparison with Day 0 in group B(Fisher's Exact Test)					
p-value	-	0.52,NS	0.007,S	0.0022,S	0.0022,S
Comparison between group A and group B(Fisher's Exact Test)					
p-value	0.75,NS	1.00,NS	0.69,NS	1.00,NS	1.00,NS

In group A, *Daha* (Burning) before treatment was 10(50%) and after treatment it was 3(15%) by using fishers exact test spastically significant result was found ($P=0.04 S$).

And in group B, *Daha* before treatment 12(60%) and after treatment it was 2(10%).by using fishers exact teststatistically significant result was found ($P=0.0022S$).

Table 9: Comparison of *Pidika* (Eruption) in two groups at Day 0, day 3, day 7, and day 14 and at day 21

	Day 0	Day 3	Day 7	Day 14	Day 21
Group A					
Present	5(25%)	3(15%)	1(5%)	0(0%)	0(0%)
Absent	15(75%)	17(85%)	19(95%)	20(100%)	20(100%)
Comparison with Day 0 in group A(Fisher's Exact Test)					
p-value	-	0.69,NS	0.18,NS	0.04,S	0.04,S

Group B					
Present	8(40%)	5(25%)	5(25%)	2(10%)	2(10%)
Absent	12(60%)	15(75%)	15(75%)	18(90%)	18(90%)
Comparison with Day 0 in group B(Fisher's Exact Test)					
p-value	-	0.50,NS	0.50,NS	0.06,NS	0.06,NS
Comparison between group A and group B(Fisher's Exact Test)					
p-value	0.50,NS	0.69,NS	0.18,NS	0.48,NS	0.48,NS

In group A, *Pidika* (eruption) before treatment was 5(25%) and after treatment it was 0(0%) by using fishers exact test statistically significant result was found ($P=0.04S$).

And in group B, *pidika* before treatment 8(40%) and after treatment it was 2(10%) by using fishers exact test statistically not significant result was found ($P=0.06NS$).

Table 10: Comparison of *Strav* (Discharge) in two groups at Day 0, day 3, day 7, and day 14 and at day 21

	Day 0	Day 3	Day 7	Day 14	Day 21
Group A					
Present	3(15%)	2(10%)	0(0%)	0(0%)	0(0%)
Absent	17(85%)	18(90%)	20(100%)	20(100%)	20(100%)
Comparison with Day 0 in group A(Fisher's Exact Test)					
p-value	-	1.00,NS	0.23,NS	0.23,NS	0.23,NS
Group B					
Present	3(15%)	2(10%)	0(0%)	0(0%)	0(0%)
Absent	17(85%)	18(90%)	20(100%)	20(100%)	20(100%)
Comparison with Day 0 in group B(Fisher's Exact Test)					
p-value	-	1.00,NS	0.23,NS	0.23,NS	0.23,NS
Comparison between group A and group B(Fisher's Exact Test)					
p-value	-	-	-	-	-

In group A, *Strav* (discharge) before treatment was 3(15%) and after treatment it was 0(0%) by using fishers exact test spastically not significant result was found ($P=0.23NS$).

And in group B, *strav* before treatment 3(15%) and after treatment it was 0(0%).by using fishers exact test not spastically significant result was found ($P=0.23NS$), both drugs showing equal effect.

Table 11: Relief in subjective parameters in group A

Symptoms	Before treatment	After treatment	Relief Score	% relief
Kandu	20	4	16	80%
Toda	18	4	14	77.77%
Daha	10	3	7	70%
Pidika	5	0	5	100%
Strav	3	0	3	100%

In group A, *kandu* (itching) before treatment score was 20 & after treatment was 4 there was 80% relief. *Toda* (pain) before treatment score was 18 & after treatment 4, there was 77.77% relief, *Daha* (burning) before treatment score was 10 & after treatment 3, there was 70% relief, *Pidika* (eruption) before treatment score was 5 & after treatment 0, there was 100% relief, *Strav* (discharge) before treatment score was 3 & after treatment 0, there was 100% relief.

Table 12: Relief in subjective parameters in group B

Symptoms	Before treatment	After treatment	Relief Score	% relief
Kandu	20	2	18	90%
Toda	20	2	18	90%
Daha	12	2	10	83.33%
Pidika	8	2	6	75%
Strav	3	0	3	100%

In group B, *kandu* (itching) before treatment score was 20 & after treatment was 2 there was 90% relief. *Toda* (pain) before treatment score was 20 & after treatment 2, there was 90% relief, *Daha* (burning) before treatment score was 12 & after treatment 2, there was 83.33% relief, *Pidika* (eruption) before treatment score was 8 & after treatment 2, there was 75% relief, *Strav* (discharge) before treatment score was 3 & after treatment 0, there was 100% relief.

Table 13: Comparison of group wise and overall percentage improvement in patients

Assessment	Group A	Group B	Total
Complete Remission	0(0%)	0(0%)	0(0%)
Markedly Improvement (>75%)	1(5%)	3(15%)	4(10%)
Moderate Improvement (51-75%)	11(55%)	7(35%)	18(45%)

Mild Improvement (25-50%)	8(40%)	10(50%)	18(45%)
Unchanged (<25%)	0(0%)	0(0%)	0(0%)
Total	20(100%)	20(100%)	40(100%)

Overall improvement seen in Group A is (51-75%) which shows moderate improvement as compared to Group B is (>75%) shows markedly improvement.

Discussion:

All the drugs of *karveeradiTail* are having *Tikta*, and *katurasa* which are having *Aampachak*, *Raktaprasadak*, *kusthaghna*, *dahaprashamak* and *kaphahara* properties so it is considered be very much effective in the treatment of *pama-kustha*. *Laghu*, *Tikshna* and *rukshaguna* subsides *kapha* thereby increases *agni* which helps in removing *Agnimadya* and clears tiny *strotas* by removing *Aam*. All the drugs have Antibacterial, Antiviral, and Anti-inflammatory, Ant allergic and antimicrobial activities. *Karveera* has wound healing and Anti-inflammatory properties¹⁶. *Sarshap* has properties of quickly healing wound due to its antibacterial activity¹⁷. And has excellent drying quality which relieves moisture. Its oil applied externally can instantly relieve pain and inflammation.

Conclusion –

Karveeradi tails shows significant result. No adverse effect of *Karveeradi Tail* was observed in the study. Hence it is concluded that *karveeradi taila* is as effective as permethrin in the management of *Pama*.

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**EVALUATION OF ANTICANCER ACTIVITY OF KUKKUTNAKHI
GUGGULA ON LUNG CANCER- IN VITRO STUDY**¹Dr Mujahid B. Khan,¹Associate Professor, Dept of Rasashastra & Bhaishajya Kalpana, Mahatma Gandhi Ayurved College Hospital and Research Centre, Datta Meghe Institute of Higher Education and Research Centre, (D.M.I.H.E.R.), Maharashtra, India.**Introduction:**

The discovery of new therapeutic medications is facilitated by the various types of natural secondary metabolites produced by the plant kingdom and tested for their anticancer properties (1). The increase of cancer cases worldwide is a significant hindrance to human development and wellbeing in the modern day (2). The number of new cases of cancer annually will rise to 22 million by 2030. Lung cancer is the 2nd most common cancer worldwide and there were more than 2.2 million new cases of found in 2020 (3). Research and scientific documentation are required for newly discovered or conventionally used herbal drugs. Ayurvedic medicine is a glimmer of hope due to the shortcomings of contemporary medicine & therapies. The Materia Medica of Ayurveda was documented by *Acharyas* using folklore and tribal sources. (4, 5) In the Sahyadri foothills, a herb known as *Kukkutnakhi* is grown during the monsoon and wet seasons. (6,7) Its botanical name is *Aspidium cicutarium* Sw., and it belongs to the Dryopteridaceae family. (8,9) It is referenced in the manuscript "*Gharguti Aushadhe*" at first, and it is also known as *Bichava*, *Waghchavdi*, *Kombadnakhi*, *Nirvishi* (10,11). This plant's rhizomes are successfully utilized as a folk cure to treat conditions like *Shula*, *Arbuda*, and *Shotha* etc (12). In the field of Ayurvedic medicine, *Guggula Kalpana*, or medications made from the exudates of *Commiphora mukul*, has its own significance (13). According to a retrospective literary analysis of numerous books and scientific journals, *Kukkutnaki Guggula* was chosen as a study drug because it is prescribed for abscess, tonsillitis, tumors, cysts, elephantiasis, etc (14). For a number of *Mansavaha Strotas* diseases, it was first mentioned in the text "*Chikitsa pradeep*" (15). However, the preparation process and constituent proportions are described in the textbook "*Guggula Kalpana*" (16). According to this document, the research medication was developed using purified *Guggul* and authenticated *Kukkutnakhi* in the same ratio for oral administration (17). The current in-vitro anticancer study used the SRB assay to examine the anticancer activity of *Kukkutnaki Guggula* on Human Lung Cancer cell lines-A549 and HOP62.

Material and Methods:

Material:

The selected cancer cell lines A549 and HOP62 of Lung were procured from American Type Culture Collection (ATCC), USA and NCCS Pune. For *In vitro* study instruments like SRB Calorimeter, 96 well plate, 25 cm² tissue culture flasks, Liquid nitrogen container, 15 ml centrifuge tubes, CO₂ incubator, Millipore disposable filters, Laminar flow hood, Biological Microscope, Electronic balance, Haemocytometer, Multichannel automated pipette, Drug dispensing machine, Elisa reader were used. In the current study, chemicals including SRB dye, ethanol, TCA liquid nitrogen, DMSO, RPMI medium, and DMEM were utilized.

Method:

The advanced center for treatment, research, and education in cancer (ACTREC), Kharghar, Navi Mumbai, was the site of the current *in vitro* research. The study drug's activity was monitored using the Sulforhodamine B (SRB) Assay procedure, and Adriamycin (Doxorubicin) was employed as a positive control.

In-Vitro Study: The chosen cancer cell lines underwent quality control screening before being cryopreserved in a liquid nitrogen container with DMSO (5%–10%) and liquid nitrogen vapors. Cell lines were cultured in 25 cm² tissue culture flasks using RPMI 1640 media, which contains 10% fetal bovine serum and 2 mM L-glutamine, and its single cell suspension was produced. For the purpose of cell division, tissue culture flask was then incubated in a CO₂ incubator at 37.50°C for 24–48 hours. Using a hemocytometer, cells were counted, and the cell count was adjusted (to about 1 x 10⁵ cells/ml) based on the titration results. To prevent bacterial contamination, this cell culture was carried out inside a laminar flow hood in strict aseptic conditions. Then, 96-well Micro-Tier plates were filled with the prepared cell suspension (90 µl), with 5 X 10³ cells placed into each well. The plates were then incubated for 24 hours at 37°C, 95% air, 5% CO₂, and 100% relative humidity before the administration of the experimental medicines. Prior to usage, the study medication was stored frozen after being solubilized in DMSO (Dimethyl Sulfoxide) at a concentration of 100 mg/ml and diluted to 1 mg/ml with water (18). By using Drug dispensing machine, aliquots of 10 µl of the study drug dilution were added to 96-well plates that had previously held 90 µl of triplicate cell suspension. Each negative-control well received 10 µl of 10% v/v DMSO, while each positive-control well received 10 µl of Adriamycin. Drug dosage levels of 40, 80, 120, and 160 µg/ml were tested. Three times each experiment was conducted. Then, 25 µl cold 50% (wt/vol), Trichloroacetic acid was used to fix the cells, and the plates were incubated for 1 hour at 4 °C.

The plates were then stained for 15 minutes with 50 l of a 0.04% (wt/vol) SRB solution added to each well. The plates were then washed with tap water to remove the SRB color. After plates were dried, 1% acetic acid was used to wash away the unbound dye. After 30 minutes, the protein-bound dye was dissolved in Tris base solution. The Elisa-Plate Reader was then used to measure absorbance at 540 nm with reference to 690 nm. Graphs were plotted and results were given in terms of GI50, TGI, LC50 values. After that, the optical densities of drug-treated and control cells were examined, and growth inhibition was estimated as percentage values. The percentage growth at each of the four drug concentration levels was computed using the six absorbance measurements [time zero (Tz), control growth (C), and the test growth in the presence of drug at the four concentration levels (Ti)]. For test wells in comparison to control wells, percentage increase was calculated plate by plate. The ratio of the average absorbance of the test well to the average absorbance of the control wells was used to express percent increase. For concentrations where $T_i \geq T_z$ ($T_i - T_z$) positive, it was calculated as $[(T_i - T_z) / (C - T_z)] \times 100$, while for concentrations where $T_i < T_z$ ($T_i - T_z$) negative, it was computed as zero. In order to determine the drug concentration that would result in a 50% reduction in the net protein increase (as shown by SRB staining) in control cells during the drug incubation, the growth inhibition of 50% (GI50) was calculated from $[(T_i - T_z) / (C - T_z)] \times 100 = 50$. $T_i = T_z$ was used to calculate the medication concentration that resulted in total growth inhibition (TGI). Calculated from $[(T_i - T_z) / T_z] \times 100 = -50$, the LC50 (concentration of drug resulting in a 50% drop in the measured protein at the conclusion of the drug treatment as opposed to that at the beginning) indicates a net loss of cells after treatment (19, 20).

Observation and Results:

The results of anticancer study on selected cancer cell lines are as follows:

Table no 1: % Control growth of human lung cell line A549:

	Human Lung Cancer Cell Line A549															
	% Control Growth															
	Drug Concentrations (µg/ml)															
	Experiment 1				Experiment 2				Experiment 3				Average Values			
	40	80	120	160	40	80	120	160	40	80	120	160	40	80	120	160
KG	100.0	100.0	100.0	91.5	96.4	96.3	91.8	82.1	97.9	93.2	83.9	83.4	98.1	96.5	91.9	85.7
ADR	8.5	5.8	2.6	2.4	6.1	4.1	3.6	3.4	-5.2	-6.0	-7.1	-14.0	3.1	1.3	-0.3	-2.7

Graph no 1: Growth curve of human lung cell line A549:

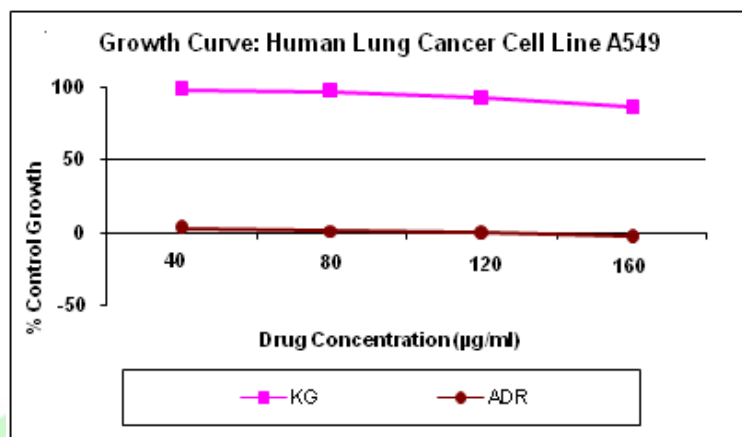
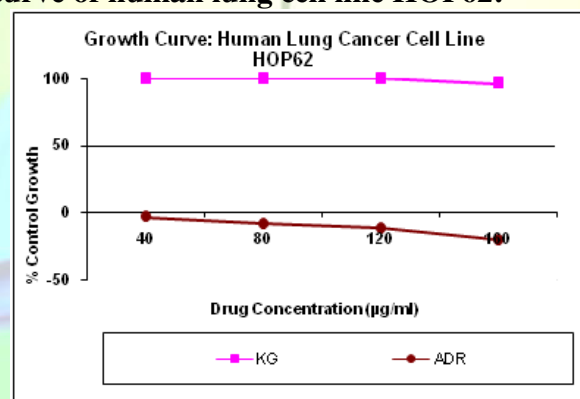


Table no 2: % Control growth of human lung cell line HOP62:

Human Lung Cancer Cell Line HOP62																
% Control Growth																
Drug Concentrations (µg/ml)																
	Experiment 1				Experiment 2				Experiment 3				Average Values			
	40	80	120	160	40	80	120	160	40	80	120	160	40	80	120	160
KG	100.0	100.0	100.0	93.4	100.0	100.0	100.0	95.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.3
ADR	-0.5	-3.7	-11.3	-21.3	-2.3	-4.3	-4.9	-15.5	-7.1	-17.7	-19.7	-25.2	-3.3	-8.6	-12.0	-20.6

Graph no 2: Growth curve of human lung cell line HOP62:



KG: Kukkutnakhi guggul, **ADR:** Adriamycin

Discussion:

Prior to conducting in vivo studies to assess their efficacy, in-vitro mechanism-based screening of plant drugs is required in the early stages of plant drug research. Due to its widespread use in tribal communities and by senior *Vaidyas* in clinical practice for conditions like *Granthi* (cyst), *Arbuda* (tumor) and *Galaganda* (enlargement of the neck glands) etc, *Kukkutnakhi Guggul* was

chosen for study of its anticancer efficacy. This proprietary medication is made in a teaching pharmacy utilizing authentic *Kukkutnakhi* and *Guggula* in an exact ratio for oral use. Organoleptic analysis revealed that the product's color was dark brown, its *Rasa* (taste) was *Tikta* (bitter), *Katu* (bitter), *Kashaya* (astringent), and its fragrance was distinct, resembling a *Guggula*-like aroma. This is because one of the main ingredients is *Guggula*, which contains a small number of volatile phyto-constituents with a distinct odor. *Triphala kwath* (decoction), which has demonstrated anticancer potential, was utilized to purify crude *guggul*. It possesses *Tridoshas shaman* and *Lekhana* (Scraping) characteristics that embed with pure *Guggula* to improve the impact and eliminate the undesirable effect. Sulphorhodamine B (SRB) assay was used to test the anticancer activity of the study medication, and each experiment was run in triplicate at four different dose levels (40, 80, 120, and 160 g/ml). SRB is a bright pink anionic protein staining dye that binds to the basic amino acids of cellular proteins. Based on the assessment of cellular protein content, it is primarily used to determine cell density (21).

The calculated values from the optical density were listed in the table as experiment 1, experiment 2, and experiment 3 respectively, along with the average of the observed values for each plate. On the basis of the average value obtained from each experiment, graphs were drawn to show the interaction between the study treatment and the control drug on a number of cancer cell lines. By measuring absorbance at 564 nm to estimate the dye concentration, the surviving cell count in treated samples was compared to untreated (control) samples to calculate the percentage of growth inhibition. According to table and graph no. 1, study drug findings were in the range of 82 to 91 in terms of percentage control growth and line inclination. As the drug concentration rises, it suggests moderate activity at 160 g/ml, which is the maximal drug concentration. According to table and graph numbers 2, the research drug produced results in the 93–100 range for the percentage control growth and showed very little to no inclination in the graph at the highest concentration level, which was 160 g/ml. This shows that there is minimal activity, even when the medication concentration is raised. When compared to the positive control group, the study drug's LC50, TGI, and GI50 values were all higher than 160 g/ml. Given that the study drug's LC50 values were determined to be larger than 160 g/ml, *Kukkutnakhi Guggula* is safe for oral administration and non-toxic at the cellular level. SRB assay is particularly helpful for qualitative analysis since it is very sensitive and gives greater linearity with cell number than other assays. Other advanced in-vitro screening techniques include MTT, Clonogenic assay, Fluorescent assays, and Dye Exclusion Test (22). SRB assay is frequently employed in cell-based investigations to look into cytotoxicity and is also a highly cost-effective screening method. It was used to assess the

possible anticancer medicines' selectivity of activity (23, 24). The SRB assay has certain drawbacks, such as being less sensitive with non-adherent cells, requiring multiple wash steps but fixing nonetheless, and being challenging to conduct if the drug is insoluble in solvent (25-27). This preclinical study had shown encouraging result in the parameter of growth inhibition i.e. GI50 on particular cell lines which shows the efficacy of the drug. But there was negligible activity seen on some cell line which suggests that inactivity of the study drug on cancer cell lines of particular organ.

Conclusion:

Based on a review of the literature, the proprietary herbal preparation *Kukkutnakhi Guggula* is assessed for its anticancer efficacy in two cancer cell lines of Lung organ. According to the SRB assay technique, *Kukkutnakhi Guggula* was found to be safe for oral administration, non-toxic at the cellular level (LC50 values were > 160), and to have moderate action on A549 cancer cell lines and negligible activity on HOP62 cell lines. This work provides scope to study its effect on targeted cancers, specific in vivo scientific studies, and human clinical trials for further researchers.

Conflict of interest- Nil

Acknowledgement- Nil

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21.

THE ROLE OF *TRIPHALADI KWATHA* IN THE MANAGEMENT OF *MADHUMEHA*: CLINICAL STUDY**¹Dr Wankhede Arun U**

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Abstract:

Ayurveda is useful to get *swasthya*-health either by preventing the diseases invading human body or by curing man from disease. *Ayurveda* emphasized on prevention rather than cure. In today's fast running world human being is inviting many diseases because of sub-standard quality of food, eating more than requirement, sleeping during day time, eating fast food and increased stress in society. Madhumeha can be correlated with Diabetes mellitus in modern medicine, is attracting the whole world as a non-infectious epidemic/pandemic. The prevalence of diabetes is on the rise, more alarmingly in the developing countries. Besides multiplying the risks for coronary heart diseases, diabetes enhances the incidence of cerebrovascular strokes. Moreover, it is the leading cause of acquired blindness and accounts for over 25% of cases with end stage renal failure as well as 50% of non-traumatic lower limb amputations. In spite of achieving new horizons in technology and getting all facilities and comforts with the help of such technology we are losing health status of our body and mind. The WHO defines 'Health' as a state of complete physical, mental, social, spiritual well being and not merely an absence of diseases and infirmity. Mithyaahar, mithyavihar and pradnyaparadha are the main etiological factors for any diseases. Madhumeha /Diabetes mellitus has become a favorite and fascinating subject for the researchers of various medical fields now a day. In this present study 'Triphaladi Kwatha' is used for the treatment of Madhumeha, to understand the effectiveness of this compound in control and prevention of diabetes and its complications.

Keywords: Madhumeha, Diabetes mellitus, amputation, cerebrovascular stroke

Introduction:

Madhumeha is the incurable and advanced stage of prameha, characterized by excretion of urine which resembles the honey is taste and characteristics and also accompanied by sweetness of whole body of the patient. Because of difficulty in treatment, seriousness and complications, prameha has been considered as one of the eight 'maharogas'.

Prameha is one of the chronic diseases described in Aurvedic texts. Prameha has been mentioned as ‘anushangiroga’ by Charakacharya and santarpanjanyavyadhi by Ashtanga Hridaya. Chakrapanidatta, the commentator of charaksamhita further elaborated the term Anushangi as anushangipunarbhavi which indicates the recurrent tendency of disorder. That is why madhumeha is regarded as a yapy disease i.e. needs treatment regularly and throughout life and symptom aggravated when treatment is stopped and when the conditions favorable to the disease. Twenty types of prameha are enumerated in classical texts/samhitas and Madhumeha is considered as a subtype of vataj category. Sushruta described Madhumeha as Medo-dushtijanyavikara. In modern medicine Diabetes mellitus is the synonymous disease with Madhumeha.

Diabetes is widely regarded as a syndrome rather than a single disease. It comprises of a group of common metabolic disorder that shares the phenotype of hyperglycemia. DM is a heterogeneous chronic metabolic disorder characterized by hyperglycemia from defect in insulin action and / or deficiency of insulin secretion. Insulin is the only anabolic hormone and it has profound effects on metabolism of carbohydrate, fat and protein. Insulin is secreted from pancreatic beta cells into the portal circulation, with a risk increase in response to rise in blood glucose after meals. A glucose sensor has been identified in the portal vein which modulates insulin secretion via neural mechanism. Insulin lowers blood glucose by suppressing hepatic glucose production and stimulating peripheral glucose uptake in skeletal muscle and fat, mediated by glucose transporter GLUT-4.

In this present study Triphaladi kwatha is used for the treatment of Madhumeha, to understand the effectiveness of this compound in control and prevention of diabetes and its complications. In this study the role of Triphaladi kwatha was studied in 25 patients of Madhumeha and its effectiveness is compared with standard/ established drug metformin.

AIMS & OBJECTIVES:

Present study is planned keeping in view following aims and objectives,

1. To explore the classical texts for the description of Madhumeha in relation to Diabetes mellitus in modern science.
2. To study whether Triphaladi Kwatha is effective in relieving signs and symptoms in patients with Madhumeha.
3. To see the effects of Triphaladi Kwatha on laboratory parameters of DM i.e. blood glucose level, urine sugar etc.

MATERIALS AND METHODS:-

A comparative clinical study done on 50 patients of both sexes, between age group of 30-70 years randomly selected in two groups. Triphaladi kwatha was administered to trial group and Tab. Metformin was administered to control group. Assessment was done after completion of therapy.

Drug	Triphaladi Kwatha	Tab. Metformin
Route Of Administration	Oral	Oral
Dose	15-30ml BD Before Meal	500 Mg
Kala	Before Meal	After Meal
Duration	8 Weeks	8 Weeks
Follow Up	Every 2 Weeks	Every Week

Selection Criteria:-

1. Patients willing to participate in the trial
2. Age 30-70 years
3. Patients belonging to any socioeconomic class.
4. Presence of sugar in urine

Symptoms: Patients having the classical symptoms of Madhumeha as described in Ayurvedic texts.

Exclusion criteria:-

1. Patients unwilling to participate in the trial.
2. Patients with IDDM/ Juvenile diabetes
3. Diabetic retinopathy, IHD, Severe Hypertension, diabetic ketoacidosis, coma and Liver dysfunction.
4. BSL- FASTING > 170mg/dl and Post meal > 270mg/ dl.

Assessment criteria: - Assessment is done on the basis of following symptoms,

1. Prabhutmutrata
2. Avilmutrata
3. Dantadinammaladhyatwam
4. Panipadayo daha
5. Chikkanatadehe
6. Trut
7. Swaduasyata

8. Angagandha
9. Shlathangatwam
10. Kshudhadhikya

Group a (Triphaladi kadha):

Sr. No.	Clinical Features	Before Treatment		After Treatment			
				Relief		No relief	
		No.	%	No.	%	No.	%
1	<i>Prabhutmutrata</i>	25	100	16	34	9	36
2	<i>Avilmutrata</i>	22	88	15	68.18	7	31.82
3	<i>Dantadinam maladhyatwam</i>	3	12	2	66.67	1	33.33
4	<i>Panipadayo daha</i>	23	92	17	73.91	6	26.09
5	<i>Chikkanatadehe</i>	20	80	13	65	7	35
6	<i>Trut</i>	25	100	17	68	8	32
7	<i>Swaduayata</i>	17	68	10	58.82	7	41.18
8	<i>Angagandha</i>	20	80	13	65	7	35
9	<i>Shlathangatwam</i>	24	96	14	58.33	10	41.67
10	<i>Kshudhadhikya</i>	7	28	5	71.42	2	28.58

Group B (Tab. Meformin):

Sr. No.	Clinical Features	Before Treatment		After Treatment			
				Relief		No relief	
		No.	%	No.	%	No.	%
1	<i>Prabhutmutrata</i>	25	100	20	80	5	20
2	<i>Avilmutrata</i>	20	80	15	75	5	25
3	<i>Dantadinam maladhyatwam</i>	2	8	0	0	2	100
4	<i>Panipadayodaha</i>	24	96	14	58.33	10	41.67
5	<i>Chikkanatadehe</i>	22	88	12	54.54	10	45.46
6	<i>Trut</i>	25	100	20	80	5	20
7	<i>Swaduayata</i>	19	76	13	68.42	6	31.58

8	<i>Angagandha</i>	22	88	12	54.54	10	45.46
9	<i>Shlathangatwam</i>	23	92	17	73.91	6	26.09
10	<i>Kshudhadhikya</i>	6	24	5	83.33	1	16.67

Discussion:

In the present study it is found that incidence of Madhumeha is more in 5th & 6th decades of life. Stress may also playing important role in it, for most the men were in service. There is no specific relation between religion and Madhumeha was observed. Result of study support the classical description that sedentary lifestyle is an important etiological factor for madhumeha. In symptom wise statistical analysis, it is found that Triphaladi kwatha is significantly effective in the symptoms of madhumeha but the onset of action of Metformin is earlier than Triphaladi kwatha. Triphaladi kwatha has significant hypoglycemic action and it is more on post meal blood sugar level. Metformin is more effective in treating the hyperglycemia than Triphaladi kwatha.

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22.

**OBSERVATIONAL STUDY TO EVALUATE ASSOCIATION
BETWEEN *STHULA* AND *KRUSH PRAMEHI* WITH UNCONTROLLED
DIABETES MELLITUS**¹Dr Wankhede Arun U, Professor & HOD, Dept of Rognidan & VV,²Dr. Khirodkar Sushama R, Associate Professor, Dept of Swasthvritta,^{1,2} Mahatma Gandhi Ayurved College Hospital and Research Centre, Salod, Wardha, Datta Meghe Institute of Higher Education and Research Centre, (D.M.I.H.E.R.), Maharashtra, India.**Abstract:**

Ayurveda is recognized as life science and describes ways to ~~part~~ and manage lifestyle disorders. Ayurveda concepts of universal interconnectedness, the body's prakriti, and life forces are the primary basis of ayurved medicine. Sushruta has described 2 types of Prameha, i.e. Sahaja and Apathyanimittaja. While describing the treatment Acharya Charak has classified the Prameha in two types especially on the basis of body constitution and other causative factors i.e. Sthula Pramehi and Krisha Pramehi and Santarpanjanya & Aptarpanjanya Prameha. Sthula pramehi is a type of santarpanajanyavyadhi (disease due to over nutrition) which has been included in classification of prameha roga. Two varieties of diabetics (pramehi) as classified in Ayurveda comprise, obese - strong (sthula and balavan) and thin-weak (krisha). Aim: To establish an association between Sthula-Krusha Pramehi and Uncontrolled. Objective: To study Sthoulya and Karshya in Prameha to study relation between Uncontrolled Diabetes Mellitus with sthula-krusha pramehi. Based upon the above observation and results in the presents study sthulata and krushata concept in Ayurveda is having great role for the controlled and uncontrolled status of dibeties. By statistical analysis Sthula Pramehi showed significant association with Uncontrolled Diabetes Mellitus.

Key words: Diabetes Mellitus, Sahaja, Apathyanimittaja, Sthula Pramehi, Krusha Pramehi**Introduction:**

Prameha has been described in most of the available classics of Ayurved. According to Ayurved, Prameha is the disease which affects several systems; it depends on genetic and environmental factors and leads to complications if not controlled in the appropriate way. Ayurveda have invariably given detailed description of disease Prameha, like its causes, types, pathology along with complication, and line of treatment from both preventive and curative aspects. Life style disorders collectively increases Kapha, Meda and Kleda which contributes in the pathogenesis of Prameha. Acharya Sushruta has described two types of Prameha, i.e. Sahaja and Apathyanimittaja. While describing the line of treatment Acharya

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Charak has classified the Prameha in two types especially on the basis of body constitution and causative factors i.e. Sthula Pramehi (seen in obese person) and Krisha Pramehi (seen in lean and thin person) and Santarpanjanya meha & Aptarpanjanya meha Sthula pramehi is a type of santarpanajanyavyadhi (disease due to over nutrition) which has been included in classification of prameha roga. Two varieties of Pramehi as classified in Ayurveda are sthula or balavan and krisha. Treatment for obese diabetics begins with bio-cleansing procedures (panchakarma) which is aimed at reducing the obesity of the apatarpana chikitsa. Lean diabetics can undergo milder cleansing

procedures followed by the treatment to nourish the body with specific management santarpana chikitsa. Both types of diabetics successively treated with distinct therapy and diet regimen. Sthula Pramehi with clinical features of obesity along with excessive frequency of urination. In the second variety, Vata may be dominantly involved, and such patients are lean and termed as Krusha Pramehi. Diabetes mellitus is an important global health concern of the present era and needs Immediate attention. Diabetes Mellitus described as metabolic disorder of multiple etiologist characterized by insulin resistance, relative insulin deficiency, and hyperglycemias with disturbances of carbohydrate, fat & protein metabolism. According to International Diabetes Federation (IDF), total number of diabetes subjects to be around 40.9 Million in India. In Ayurveda Diabetes Mellitus can be interpreted under the broad clinical entity described as Prameha. Both the concepts of Diabetes Mellitus & Prameha go hand in hand at the level of etio-pathology & management. In brief Acharya Charak has mentioned that as the birds are attracted towards the trees where their nest lies, similarly Prameha affects persons who are voracious eater, less enthusiastic, have aversion to bath, physical as well as mental exercise, over corpulent (atisthoulya), over unctuous (atisnigdha). There is a lot of scope of research in Ayurveda including the fundamental, literary, clinical and the therapeutics. Keeping the Ayurveda fundamentals intact, it is mandatory and obligatory to pursue scientific research in this probably the oldest system of medicine still practiced and followed by millions across the globe. Despite of recent progression in medical science, several challenges still exist in the management of diabetes that requires special attention to develop unexplored fields of medical knowledge. Ayurveda offers comprehensive safe and effective approaches to manage such conditions. Ayurveda looks like a mesmerizing sleeping beauty for the modern medical.

AIM

To establish an association between Sthula-Krusha Pramehi and Uncontrolled

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Diabetes Mellitus.

OBJECTIVE

- 1) To study pathology of Prameha
- 2) To study Sthoulya and Karshya in Prameha
- 3) To study relation between Uncontrolled Diabetes Mellitus with sthula-krusha pramehi

MATERIALS & METHOD

METHODOLOGY

Type of study- Cross sectional study

Sample size- 200 Patients

Study sampling- Purposive sampling

Materials and methods-

Known case of Diabetes Mellitus attending the OPD's, IPD'S of Dr.D.Y.Patil Ayurvedic Hospital, Nerul, Navi Mumbai, fulfilling criteria for the selection irrespective of their gender, Age, Religion, Caste etc. were selected for the study.

INCLUSION CRITERIA

- Age group 30 to 60 years
- Chronicity >1 year
- Under treatment (OHA)>1year

EXCLUSION CRITERIA

- Patients having Diabetes in association with other endocrinopathies like, Acromegaly, Cushing's syndrome, Hyperthyroidism etc.
- Patients with genetic syndromes like Down's syndrome, klinefilter's syndrome, Turner's syndrome etc.
- Patients taking drugs like corticosteroids, Tricyclic anti depressant, Cycloheptadine which leads to weight loss or weight gain.
- Patients of carcinoma or any other systemic diseases affecting multiple body systems and pregnant woman etc

Assessment of Sthoulya and Karshya by BMI

Assessment of BMI _____ Kg/m²

Metric BMI Formula: $BMI = (Weight \text{ in kilogram} / Height \text{ in meters} \times Height \text{ in meters})$

Category BMI Range-kg/m²

Severely Underweight Less than 16.0

Underweight from 16.0 to 18.5

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Normal from 18.5 to 24.9

Overweight From 25 to 29.9

Obese class | from 30.0 to 34.9

Obese class || from 35 to 35.9

Obese class ||| OVER 40

2) Assessment of Waist to Hip ratio

WHR=Waist measurement/Hip measurement (measures different optimal values for both women and men)

Criteria Male Female

Low 0.95 or below 0.80 or below Moderate 0.96 to 1.0 0.81 to 0.85 High 1.0+ 0.85 +

) Assessment of HbA1C & Mean Blood Sugar

HbA1C score (%)

Mean Blood Sugar (mg/dl)

Remark

12	345	11	310	10	275	UNCONTROL	9	240	8	205	FAIR CONTROL	7
170	6	135	GOOD CONTROL	5	100							

According to ASSESSMENT CRITERIA, patient were consider as STHULA PRAMEHI when patient fulfill two out of following three criteria

- 1) Symptoms scores of sthoulya are more than 16
- 2) Waist to Hip ratio is Moderate to High
- 3) BMI is more than 25

Similarly, patient were considered as KRUSHA PRAMEHI when patient fulfill two out of following three criteria

- 1) Symptoms scores of karshya are more than 12
- 2) Waist to Hip ratio is Low
- 3) BMI is less than 18.5

OBSERVATION & RESULT

AGE WISE DISTRIBUTION:

According to this distribution, maximum no. of patients' i.e. 80(40 %) patients was in the age group of 41 – 50 yrs. There were 70patients (35%) of the age group 51 – 60 yrs & 50patients (25%) of the age group 30-40 yrs.

GENDERWISE DISTRIBUTION:

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Out of the 200 subjects, there were 87 (44%) Male and 113 female (57.0 %) subjects.

OCCUPATION WISE DISTRIBUTION:

Housewife 40% ,Businessmen 30%, Service 25% ,labour work 5% .

DISTRIBUTION OF CONTROLLED AND UNCONTROLLED DM:

In the present study were 200 subjects were taken into consideration, among them maximum of 115 patients 58% had Uncontrolled Diabetes Mellitus and 85 patients (42%) had controlled Diabetes Mellitus.

Association of Akruti and DM:

Among 200 patients, 129 patients were found fulfilling the sthaulya criteria among which 33(39%) patients had controlled DM and 96(83.5%) patients had uncontrolled DM. 71 patients were found fulfilling the karshya criteria among them 52 (61%) patients had controlled DM and 19(16.5%) patients had uncontrolled DM.

RESULT:

Out of the 200 participants, 115 subjects had HbA1c between 10-12 (58%). 113 Female (57%), overweight/obesity (83.5%), housewife (40%) and sedentary habits (55%), higher monthly income (42%), longer duration of DM were the significant determinants of uncontrolled DM. There was a significant positive correlation of uncontrolled DM with sthaulya . However, a significant positive correlation exists between sthaulya and increasing HbA1c. Aggravated kleda (liquid element of the body), medas (adipose tissue) and kapha are responsible for the causation of prameha. Keeping this in view, the physician, in the beginning, should administer depletion therapies to patients suffering with kapha and pitta dominant types of prameha

Discussion: The observations noted in 200 subjects and displayed in tables, graphs and supplementary notes are critically discussed hereafter.

Discussion on pathophysiology of Diabetes Mellitus:

Diabetes is a common life-long health condition. Diabetes is a condition where the amount of glucose in your blood is too high because the body cannot use it properly. This is because pancreas doesn't produce any insulin, or not enough insulin, to help glucose enter body's cells – or the insulin that is produced does not work properly (known as insulin resistance).

Diabetes mellitus is of two principal forms:

- Type 1 diabetes (idm) the pancreas fails to produce the insulin which is essential for survival. This form develops most frequently in children and adolescents, but is being increasingly noted later in life.
- Type 2 diabetes (niddm) results from the body's inability to respond properly to the action of insulin produced by the pancreas .this is much more common

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and accounts for about 90-95% of all diabetes cases worldwide. This form of diabetes occurs almost entirely in adults.

Discussion on Prameha:

Patients suffering from Prameha can be classified into two categories:

1. Sthula Pramehi - These who are obese and having good strength. They are given shodhan (cleansing purification treatment).
2. Krush Pramehi - These that is emaciated and weak. They are given nourishing treatment - Bramhan therapy (Bramhan therapy is aimed to improve nutrition level of the body).

Age:

85 patients(42%) of registered patients belonged to the age group of 30–40 years and 65 patients (33%) of the age group 41 – 50 yrs .This data favour the view of modern science that Diabetes is primarily a disease of middle and old age, but obese population may get it at an earlier age.The prevalence of Diabetes increases markedly with age and unfortunately the age of onset has moved down into younger adults and even adolescents in recent decades, especially in the countries where a major imbalance between energy intake and expenditure has emerged and India is one such country.

Gender:

It shows that Prameha can occur in either sex but highlighting its prevalence in females 113 (57%) subjects because they have a stressful life style. Moreover, some feminine factors like pregnancy, use of oral contraceptives, menopause etc. was predominant factors, which makes Female an Obese and finally Prameha condition occurs. Females are more conscious about their look or appearance; hence they may report more for Obesity to the clinician and try to control weight gain.

Diet:

According to Ayurvedic text patient indulged in particular diet has important relation in the etiological factor of Prameha. Acharya Sushrut enlightens Apathyanimitaj Prameha. Out of 200 patients included in the study were having Mix Ahar is 120 [60%] and vegetarian is 80 [40%]. In mixed type the patient taking more non vegetarian food stuff like chicken, mutton, fish and egg are more possibility to gain weight and body get tendency towards obesity that's why this result are observed.

Occupation:

Types of Occupations have significant association with Prameha. In this study it was found that 40% patients were Housewife, 30% were businessmen, 25% were in service and 5% were labourers. Decreased physical activities and sedentary life due to the occupation is one of the

important causes of uncontrolled Diabetes. Occupations have direct role in level of physical activities.

Discussion on Assessment Criteria:

In Ayurveda, Acharya Charaka, has classified Prameha into two types, i.e. Sthula Pramehi and Krisha Pramehi or Santarpanajanya and Apatarpanajanya Pramehi. It can also be correlated with the classification given by Acharya Vagbhata, i.e. Dhatu Kshayajanya and Avaranajanya Prameha, respectively.

Ayurveda explains obesity as 'Sthula' – a condition of excessive deposition of fat muscle in buttock and breasts, development of different body parts unequally and lack of enthusiasm. Obesity leads to Prameha. The role of Medas (fat/adipose tissue) is of great importance in the pathogenesis of Prameha. This form of Medas has been described as acting on Mamsa (muscle tissue), thereby increasing the volume of body fluid. This has been described as Sharira-Kleda (body fluid) in Ayurveda. Thus, excess water in the blood causes increased diuresis. This is how the Sharira Kleda is converted into urine which discussed in Charak Samhita. This route of pathogenesis for Prameha is closely related to obesity. Abdominal Obesity: Extra weight around the middle and upper parts of the body (central obesity). This body type may be described as "appleshaped."

Factors affecting sthula and krusha pramehi

□ Role of lifestyle & diet in pramehi: The role of life style and diet in Diabetes and Obesity in controlling the diseases are relevant in present era. □ Charak and Sushrut had recommended certain food items for Obese Diabetic patients (Sthoola Pramehi). □ These food regimes help in enhancing effect of Agni and to reducing effect of Meda and Kleda. Modern science uses the principle of low calorific value and low Glycemic index for diet application. Ayurveda prescribes Ahara Dravyas with Katu, Thikta and Kashaya in Rasa; Laghu, Rooksha and Theekshna in Guna; Ushna in Veerya and Katu in Vipaka. □ Charak Samhita explains if a person consumes such food and uses the regimen for maintaining the equilibrium / homogenous state of the dhatus, he will never suffer from Prameha, excluding Jata prameha

Factors to prevent life style disorders :

Balanced and Balancing Ahara and Vihara

Ahara Vidhi Visheshaayatanaam (Cha. Vi. 1), Ahara Vidhi Vidhaanam (Cha. Vi. 1) □ Maatraavat Bhunjeeta (Cha. Su.5). Vihaara and Life style – Dinacharya (Daily Routine), Early to bed & Early to rise (Braahma Muhoorte uttishtet), Vyaayaama (Exercise), Ritucharya (Seasonal Codes of Living), Sadvritta (Social Codes & Hygiene), Aachaara Rasayana. □ Rasayana , Vajeekarana. □ Practice of Yoga – Asanaas & Pranaayama

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The prevalence of Life style disorders like Diabetes is due to unawareness and neglect of genuine Food habits and lack of physical exercise. The many Ahara Dravyas mentioned in Ayurveda are still available in India which can be included in our present day diet. Diseases like Diabetes and Obesity are more prone to develop due to bad adoption of life style and diet. So some other ill health conditions and Diabetes can be prevented with the adoption of proper Diet and Regimen.

Discussion on Sthula Pramehi and Uncontrolled DM

Among 200 patients, 129(64%) were sthula pramehi patients 96(83.5%) patients had uncontrolled DM.

Prameha is said to be one of the complications of obesity. Physical inactivity and excessive intake of food results in to Agni dushti that causes formation of Ama. In Ayurveda, Ama is the toxic intermediary product of digestion and metabolism, result from improperly digested food. Improper Agni (digestive metabolic activity) causes accumulation of Ama. Ama leads to additional formation of Medas (fat) that causes increase in adipose tissue in the body and becomes overweight.

The multifactor involvement of Medas (fat), Kapha, Vata, and Agni (digestive metabolic activity) is common path physiologic phenomenon of both Prameha and obesity. In obese individuals carbohydrate is largely converted to fatty acids.

Discussion on Krusha Pramehi and Uncontrolled DM

71 patients were found fulfilling the karshya criteria among them 52 (61%) patients had controlled DM and 19(16.5%) patients had uncontrolled DM. Daurbalya-One may faint if he or she stands up hurriedly. The heart may beat too fast. If these symptoms are noticed suddenly or accompanied with shortness of breath, chest pain, indistinct speech, or vision loss, it is a highly complicated case. This occurs due to slowing of or clogged blood flow to the heart or brain
Fluctuations in Sweating One may not sweat even in extreme hot climate; others may sweat too frequently especially while eating or at nights. This is an indication that a person's sweat glands aren't functioning properly.

Deteriorated Sex Life An uncontrolled diabetic man may feel like finding hard to get and/or maintain an erection. Women may experience vaginal dryness and loss of stimuli while in aroused state, and they face difficulty in facing orgasms as well. Discussion on HbA1C

Glycoselated Hemoglobin (HbA1c)
HbA1c is a test that measures the amount of glycated hemoglobin in blood. Glycated hemoglobin is a substance in red blood cells that is formed when blood sugar (glucose) attaches to haemoglobin

We found a significantly high prevalence (83.8%) of uncontrolled DM in the study population. There seems to be a trend of poor glycaemia control among the population, which portends danger for their health.

CONCLUSION:

Out of 200 patients 129 patients were found sthula pramehi among which 33 patients i.e. 39% had controlled DM and 96 patients i.e. 83.8% had uncontrolled DM so it suggests that sthulaya (Obesity) is interfering in glucose control of diabetes, this might be due to avaranajanya samprampti.

Among 200 diabetic patients 71 patients were found krusha prameshi among which 52 patients i.e. 61% had controlled DM and 19 patients i.e. 16.5% had uncontrolled DM, Based upon the above observation and results in the presents study sthulata and krushata concept in Ayurveda is having great role for the controlled and uncontrolled status of diabetes. So it indicates that sthulata and krushata is interfering the glucose regulation in diabetes mellitus which is responsible for controlled and uncontrolled status of diabetes. According to Ayurveda this might be due to Avaranajanya samprampti because of vitiation of Dashavidha Dushyasangraha.

We have found a significantly high prevalence (83.8%) of uncontrolled DM among the patients, possibly attributable to overweight/obesity, sedentary living, higher income and lack of information on diabetes. Addressing these determinants will require re-engineering of primary healthcare in the district. By statistical analysis Sthula Pramehi showed significant association with Uncontrolled Diabetes Mellitus.

The subjective symptoms were found more in the subjects with Kaphapradhan or Kaphaanubandhitva prakruti.

According to Chikitsa point of view, nidanaparivarjana is the ultimate remedy in this disease.

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23.

THE ROLE OF *DASHANG LEPA* IN ACNE- A CLINICAL STUDY**¹Dr Wankhede Arun U, Professor & HOD, Dept of Rognidan & VV,****^{1,2}Mahatma Gandhi Ayurved College Hospital and Research Centre, Salod, Wardha, Datta Meghe Institute of Higher Education and Research Centre, (D.M.I.H.E.R.), Maharashtra, India.****Abstract:**

Though *Ayurveda* is India's ancient traditional medicine written Thousands years back, its concepts and principles are useful in today's era also. My small research work can be one of example of it. *Mukhdushika* also known as *Yuvanpeetika* is common health problem found in Adolescence which disturbs physical psychological and social health. *Mukhdushika* known as *acne vulgaris* is classical stigma of adolescence and inflammation of sebaceous glands which produces physiological and psychological scarring. ¹ *Dashang lepa* is commonly used for *shotha* in clinical practice, but when it was applied as lepa on face, its effectiveness was observed in mukhadushika.² So after considering effective experience in *mukhadushika* I decided to go for its systematic study through this small research work, to study effect of *dashang lepa* in *mukhadushika*.

Keywords: *Mukhadushika, Dashang Lepa, Shoth, Yuvanpitika*

INTRODUCTION:

Though *Ayurveda* is India's ancient traditional medicine written Thousands years back, its concepts and principles are useful in today's era also. My small research work can be one of example of it. *Mukhdushika* also known as *Yuvanpeetika* is common health problem found in Adolescence which disturbs physical psychological and social health. *Mukhdushika* known as *acne vulgaris* is classical stigma of adolescence and inflammation of sebaceous glands which produces physiological and psychological scarring. ¹ *Dashang lepa* is commonly used for *shotha* in clinical practice, but when it was applied as lepa on face, its effectiveness was observed in mukhadushika.² So after considering effective experience in *mukhadushika* I decided to go for its systematic study through this small research work, to study effect of *dashang lepa* in *mukhadushika*.

Aims & Objectives:

- To Study Mukhdushika
- To Study the effect of Dashanglepa

Hypothesis :- *Dashang Lepa* is effective in *Mukhdushika*

Null Hypothesis:- *Dashang Lepa* is not effective in *Mukhdushika*

Alternate Hypothesis:- *Dashang Lepa* may be or may not be effective in *Mukhdushika*

Review of Literature:

Mukhdushika also known as *yuvanpeetika* are abnormality found on face in the form of thrushes of *Shalmali* due to *kapha* , *vata* and *rakta dushti*.

Dashang lepa:

Dashang Lepa consists of 10 drugs, when applied with *ghrita* reduces *Visarpa*, *Kushtha*, *Jwara* and *Shotha*.

1. (*Albizia Lebbeck*)
2. (*Valeriana Officinalis*)
3. (*Glycyrrhiza glibra*)
4. (*Santanlum Album*)
5. (*Elettaria Cardamomum*)
6. (*Nardostachus Jatamansi*)
7. (*Curcuma Longa*)
8. (*Berberis Aristata*)
9. (*Saessurea Lappa*)
10. (*Vetiveria zizanioidis*)

Acne Vulgaris

Human Skin contains 3 types of glands *Sudorifeous* glands, *Sebaceous* glands , and *Ceruminious* glands. *Sebaceous* glands secrete an oily secretion called *sebum* a mixture of *Triglycerides*, *Cholesterol*, *Proteins* and *inorganic salts*. *Sebum* nourishes skin hairs, prevents excessive evaporation of water from skin, keeps skin soft and pliable, inhibits growth of certain bacteria.

Androgens from testes , ovaries and adrenal gland stimulate *sebaceous* glands to secrete *sebum*.

Acne Vulgaris is inflammation of *sebaceous* glands that begins at puberty. In *Acne Vulgaris* *sebaceous* glands grow in size and increase their production of *sebum*. Causes of *Acne Vulgaris* includes:

1. Increase *sebum* production
2. Abnormality of microbial flora
3. Hyperkeratinisation of *sebaceous* ducts.
4. Inflammation

Acne is a polymorphic disease characterized by comedones, papules, pustules, nodules and cysts occurring on the face and sometimes on back and chest.

Mental stress and Menstruation increases severity of the disease. Treatment includes washing face 2 to 3 times a day, topical antibiotics, oral antibiotics.⁵

Materials & Methods

1. References from BrihatrayiLaghutrayi was observed
2. Study was done in English language and necessary references in Sanskrit were noted.
3. This is randomized, Clinical, Interventional, Perspective study.
4. Dashang lepa was prepared in my own clinic.

Plan of work (Selection of Patients):

1. Patients visited OPD and diagnosed as mukhadushika and sicking treatment for mukhdushika was randomly selected for study.
2. Patients ready to undergo clinical trial.
3. Patients do not have other any disease.
4. Plan of work
5. Clinical examination of patients was thoroughly done which includes Dosha Dhatu MalaStrotasa Prakriti Koshtha Pariksha.
6. Patients was advised for dashang lepa mixed in whrat powder and water, during night after face wash after lepa get dry and gandharva Haritki 2 tab. In night was given for koshtashudhhi.
7. Patients were called for follow up after 7 days to observe improvement.
8. Patients were called for follow up for 3 weeks to note recurrence.

Conclusions

1. Out of total 30 patients 10 were male and 20 were female patients. But This data is so small that we cant say that *Mukhadushika* can be only in female patients.
2. Out of total 30 patients all were from age group 15 to 26. that is all were from young group. So we can say that *Mukhadushika* is disease of adolescence.
3. Out of total 30 pataients Mrudu Koshtha is 15 Madhyama koshta is 9 Krura Koshtha is 6. This indicates that any koshta can suffer *Mukhadushika* .
4. *Mukhadushika* is observed in all rutus.
5. Out of total 30 patients 18 patients were cured in 7 days, 6 patients were cured in 14 days , 5 patients were cured in 21 days , and 1 patient was cured in 28 days.
6. Out of 6 patients cured in 2 weeks, 3 patients were female patients and has

- menstrual cycle during first week 3 patients were having mental stress for which these patients was provided counselling.
7. Out of 5 patients cured in 3rd weeks and 1 patient in 4th week , all 6 patients was having krura Koshtha
 8. Dashang lepa is found effective in Mukhdushika though it is not maintained on text. Mukhadushika should be considered as shotha of sebaceous glands Dashang lepa shown cure in shotha that is mukhdushika.
 9. Period of cure is depends on Menstruation, Koshtha, Rutu , Mental Stress.

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24.

RANDOMIZED CONTROL TRIAL TO ASSESS THE EFFICACY OF SNIGDHA SWEDA AND RUKSHA SWEDA ON VATA-KAPHAJ GRIDHRASI**Dnyanesh Joshi¹**

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ABSTRACT

Background:- *Ghridrasi* is one of the most common disorders of *Vatai*. *Acharya Charakhas* explains *Vataj Ghridrasi* and *Vata-Kaphaj Ghridrasi*. Which closely resembles with sciatica, which is characterized by pain or discomfort associated with sciatic nerve. **Aim and Objectives:-** This Comparative research was carried out with the aim to compare efficacy of *Snigdha sweda (Nadi Sweda)* and *Ruksha Sweda (Valuka Pottali Sweda)* on the *Vata-kapha* type of *Gridhrasi*. **Materials and Method:-** A total of 60 patients were selected randomly with the lottery method and divide into group A & group B were advised *Snigdha swedan (Nadi Sweda)* and *Valuka Pottali Sweda* respectively for 15 days. **Results:-** On comparing the mean *Ruja*, Group A (28.35%) is more effective than Group B (12.90%). On comparing the mean *Gauravta*, Group A (46.93%) is more effective than Group B (13.5%). On comparing the mean *Tandra*, Group A (39.58%) is more effective than Group B (15.15%). On comparing the mean *Arochakta*, Group A (44.44%) is more effective than Group B (17.5%). On comparing the mean of SLR Test, Group A (35.59%) is more effective than Group B (10.76%). Complete remission was not observed in this study. This may be due to a short duration of treatment. **Conclusion:-** On comparison between the two groups on the basis of statistical analysis is non-significant which indicates that effects of both *sweda* types are almost equal in *Vata-Kaphaj Ghridrasi*. But on the basis of relief per followup, in every followup *Nadi Sweda* gives more relief than *valuka pottali sweda*. Hence, Group A therapy is more effective than Group B therapy.

KEYWORDS: *Ghridrasi*, *Snigdha Sweda*, *Ruksha Sweda*, *Valuka pottali Sweda*, *Nadi Sweda*, *Sciatica*, etc.

INTRODUCTION

Nature performed his work very well but due to modifying the lifestyle, human being made it fast. Due to which it goes opposite to the rules by nature. So by which now a day's diseases are turns more complicated as well as dangerous and *Ghridrasi* is one of this. *Ghridrasi* is one of the most common disorders of *Vata*, which closely resembles with sciatica, which is

characterized by pain or discomfort associated with sciatic nerve¹. As Ayurveda devoted for the *Swastha Rakshanarth* and *Vyadhi Prashamanarth*², with the use of *Adhyatma* as well as *Ahara*, *Vihara*, and *Aushadhi*, all of which are quite helpful today.

Sciatic Nerve is one of the longest and largest nerves in the body which having two branches from buttock region to tip of the fingers of both legs. It helps in the movements of calf as well as leg muscles and provides sensation to the calf to leg region.³ Sciatic nerve compression is the actual reason of *Gridhrasi* (sciatica). This compression may be caused due to herniation of the disk at level of lumbar vertebrae results in the swelling.

As *Ghridrasi* is one of the *Vata Vyadhi*. *Acharya Charak* has given the two forms of this *Vyadhi*, *Vataj Ghridrasi* and *Vata-Kaphaj Ghridrasi*⁴

In *Vataj* type *Ruja* (Pain) which runs downward from *kati-prushta-uru-janu-jangha-pad* is the prominent symptoms. But in *Vata-Kaphaj* type, it is associated with *Tandra*, *Gaurav*, *Arochak* which are *kaphaj lakshana*.⁵

Acharya Charak mentioned list of *Swedanartha vyadhi* and *Ghridrasi* is one of them.⁶ *Acharya* has advised *Swedan* in this *vyadhi*.

This study compared the effects of *Snigdha Sweda* (*Nadi Sweda*) and *Ruksha Sweda* (*Valuka Pottali Sweda*) on the *Vata-kaphaj* kind of *Gridhrasi*.

MATERIALS AND METHOD

Study design:

It was a randomized comparative clinical study.

Source of Material

- Clinical Source: - The subjects were recruited randomly from Kayachikitsa outpatient department of Shree Ayurved College, Hospital, Nagpur.
- Pharmaceutical Source: -The *Dravyas* named as *Dashmoola* includes *Brihat Panchamoola* and *Laghu Panchamool* for the preparation of *Snigdha sweda* and *Tilataila* for *Snehana* purpose were procured from reliable sources.

Inclusion criteria

- Patients who have maximum classical symptoms of *Vata-Kaphaj Ghridrasi* like Radiating Pain associated with *Tandra*, *Gaurav*, *Arochak*, etc.
- Age group in between 30-60 years irrespective of sex, caste, Educational

Qualification, Social Status, etc

- Patients who registered under OPD or admitted as IPD with appropriate consent taking.
- Patients other than fracture, TB of lumbar spine, etc excluded by the X-ray of Lumbar Spine of every patient.

Exclusion criteria

- Subjects with age group below 30 years and above 60 yrs.
- Subject having Fracture of Lumbar Spine, TB of Lumbar spine, CA of Lumbar spine, conditions like Kyphosis or Scoliosis, Fracture & Avascular necrosis of femur neck, etc.
- Pregnant Women
- Subject having serious systemic diseases.
- Subject having muscle atrophy.
- Subjects depending on regular steroids and analgesic drug for instant relief.

Investigations

X-Ray–Lumbar Spine, HB, TLC, DLC, ESR, etc. were carried out to exclude other systemic interference study.

METHODOLOGY

In this Pilot study, a total of 60 patients were selected randomly with the lottery method irrespective of gender, caste and occupation. Consent was taken from each patient before contribution to the research study. Thirty patients were included in each group (Group A and Group B) as per inclusion criteria. In total, 60 patients were screened and all had completed the treatment with no dropouts.

Diagnostic criteria

Patients with the classic signs and symptoms, such as Radiating Pain from *Kati-Prushta-Uru-Jangha-Pad*, *Stabdhatu*, *Tandra*, *Aruchi*, *Gauravata* of *Vata-Kaphaj Gridhrasi*, and Patients with positive SLR test, Sciatic Notch deep tenderness test, and Pump Handle test were selected for the study.

Grouping & Intervention

The patients enrolled in the study were grouped in two and were administered with medication as described in following table,

Table no 1.

Group –A	Group –B
<ul style="list-style-type: none">• <i>Snigdha Swedan(Nadi Sweda)</i>• No.of Patients – 30• <i>Swedan Dravya– Dashmool</i>• <i>Snehana– Tila taila</i>• From– <i>Kati to Padatala</i>• For– 15min• Duration–15days	<ul style="list-style-type: none">• <i>Valuka Pottalisweda</i>• No.of Patients – 30• From– <i>Kati to Padatala</i>• For– 15min• Duration–15days

Assessment of therapy:

The general conditions of the Subjects were thoroughly assessed through the classical lakshanas of Ghridrasi and objective criteria such as SLR Test. The detailed history, examination findings and subjective assessment were noted verbally and objective assessment were measured on 0 day (before trial, BT), 5th day (during trial, DT), 10th day (during trial, DT), 15th day (after trial, AT) and the changes in observations were documented in a specially designed case Performa. Before starting treatment and after it was finished, a comprehensive assessment of the therapy was conducted using statistical analyses and measures of percentage alleviation.

GRADING FOR VARIABLES

Table no 2: Subjective.

Subjective Parameter	Grade0	Grade1	Grade2	Grade3
<i>Ruja (Pain)</i>	NoVedana	Pain While Movement	Pain After and While movement	All time Pain
<i>Gaura (Heaviness)</i>	No Heaviness	Heaviness after food	Heaviness After Food 3-4hours	All time heaviness
<i>Arochak (Nausea)</i>	No Arochak	Sometimes not Feeling to take food	No feeling to take food	Complete aversion Towards the food
<i>Tandra</i>	No Tandra	Tandra after food	Tandra After food3-4hours	All Time Tandra

Table no 3:Objective

Objective Parameter	Grade 0	Grade 1	Grade 2	Grade 3
<i>SLR Test</i>	$75^{\circ} \leq$ more	Less than 75° – up to 60°	Less Than 60° – up to 45°	Less Than 45°

OBSERVATIONANDRESULT

Kruskal-Wallis test was used for statistical analysis. Data were analysed by using Statistical Package for the Social Science (SPSS) software program, version 17.0 and GraphPad Prism, version 6.0; GraphPad Software, La Jolla, CA, USA, A value of $P < 0.05$ was considered statistically significant.

Table no 4: Comparison of *Ruja* in Group A and Group B.

	Group	N	Mean	EffectOf Therapy	Std. Deviation	Std.Error Mean	p-value
0th day	GroupA	30	2.333	0%	0.56	0.10	NA

	GroupB	30	2.067	0%	0.69	0.12	NA
5 th day	GroupA	30	1.8	19.40%	0.77	0.13	>0.05,NS
	GroupB	30	2.03	1.61%	0.66	0.12	>0.05,NS
10 th day	GroupA	30	1.7	23.88%	0.66	0.11	<0.05,S
	GroupB	30	2	3.22%	0.69	0.12	>0.05,NS
15 th day	GroupA	30	1.6	28.35%	0.56	0.10	<0.01,S
	GroupB	30	1.8	12.90%	2	0.14	<0.05,S

Tableno5: Comparison of Gauravta in Group A and Group B

	Group	N	Mean	EffectOf Therapy	Std. Deviation	Std.Error Mean	p-value
0 th day	GroupA	30	1.63	0%	0.80	0.14	NA
	GroupB	30	1.23	0%	0.77	0.14	NA
5 th day	GroupA	30	1.33	18.36%	0.88	0.88	>0.05,NS
	GroupB	30	1.23	0%	0.77	0.77	>0.05,NS
10 th day	GroupA	30	1	38.77%	0.78	0.78	<0.05,S
	GroupB	30	1.33	8.10%	0.81	0.81	>0.05,NS
15 th day	GroupA	30	0.87	46.93%	0.62	0.62	<0.01,S
	GroupB	30	1.06	13.5%	0.78	0.78	<0.05,S

Table no 6: Comparison of Tandrain Group A and Group B.

	Group	N	Mean	Effect Of Therapy	Std. Deviation	Std.Error Mean	p-value
0 th day	GroupA	30	1.6	0%	0.62	0.11	NA
	GroupB	30	1.1	0%	0.71	0.13	NA
5thday	GroupA	30	1.37	14.58%	0.61	0.11	>0.05,NS
	GroupB	30	1.07	3.03%	0.69	0.13	>0.05,NS
10thday	GroupA	30	1.06	33.33%	0.63	0.11	<0.05,S
	GroupB	30	1.03	6.06%	0.71	0.13	>0.05,NS
15thday	GroupA	30	0.96	39.58%	0.61	0.11	<0.01,S
	GroupB	30	0.93	15.15%	0.73	0.13	<0.05,S

Tableno 7: Comparison of Arochak in Group A and Group B.

	Group	N	Mean	Effect Of Therapy	Std. Deviation	Std. Error Mean	p-value
0thday	GroupA	30	1.5	0%	0.68	0.12	NA
	GroupB	30	1.33	0%	0.66	0.12	NA
5thday	GroupA	30	1.26	15.55%	0.63	0.11	>0.05,NS
	GroupB	30	1.3	2.5%	0.65	0.11	>0.05,NS
10thday	GroupA	30	1	33.33%	0.74	0.13	<0.05,S
	GroupB	30	1.23	7.5%	0.74	0.11	>0.05,NS
15thday	GroupA	30	0.83	44.44%	0.59	0.10	<0.01,S
	GroupB	30	1.1	17.5%	0.60	0.11	<0.05,S

Table no 8: Comparison of SLR TestinggroupA and group B.

	Group	N	Mean	Effect Of Therapy	Std. Deviation	Std.Error Mean	p-value
0thday	GroupA	30	1.96	0%	0.61	0.11	NA
	GroupB	30	2.16	0%	0.69	0.12	NA
5thday	GroupA	30	1.76	10.16%	0.67	0.12	>0.05,NS
	GroupB	30	2.16	0%	0.69	0.12	>0.05,NS
10thday	GroupA	30	1.43	27.11%	0.77	0.14	<0.05,S
	GroupB	30	2.1	3.07%	0.71	0.13	>0.05,NS
15thday	GroupA	30	1.26	35.56%	0.63	0.11	<0.01,S
	GroupB	30	1.93	10.76%	0.69	0.12	<0.05,S

On comparing the effects of therapy on *Ruja*, there is a statistically highly significant difference between these groups ($p < 0.05$). On comparing the mean Group A (28.35%) is more effective than Group B (12.90%). (Table no.4) On comparing the effects of therapy on *Gauravta*, there is a statistically highly significant difference between these groups ($p < 0.05$). On comparing the mean Group A (46.93%) is more effective than Group B (13.5%). (Table no.5) On comparing

the effects of therapy on *Tandra*, there is a statistically highly significant difference between these groups ($p < 0.05$). On comparing the mean Group A (39.58%) is more effective than Group B (15.15%). (Table no.6) On comparing the effects of therapy on *Arochakta*, there is a statistically highly significant difference between these groups ($p < 0.05$). On comparing the mean Group A (44.44%) is more effective than Group B (17.5%). (Table no.7). On comparing the effects of therapy on SLR Test, there is a statistically highly significant difference between these groups ($p < 0.05$). On comparing the mean Group A (35.59%) is more effective than Group B (10.76%). (Table no.8).

DISCUSSION

Swedana having – *Ushna*, *Tikshna*, *Sara*, *Snigdha*, *Drava*, *Sthira*, *Guru guna*.⁷ Grossly these properties are opposite of *Vata dosha* hence *Swedana* pacifies vitiated *Vata dosha*. In the same way – *Tikshna*, *Ushna* properties are opposite to *Kapha dosha* hence it pacifies *Kapha dosha* also. Shortly we can say that *Swedana* pacify *Vata dosha* increases *Pitta Dosha* & decreases *Kapha Dosha*. It results proper functioning of *Vata Dosha* which triggers *Pitta Dosha* and liquefies *Kapha Dosha*. Which further results in establishment of equilibrium state of *Tridosha*.

As per modern Concept, Cellular Fluid contains Sodium Chloride, Potassium, Urea, Lactic Acid, etc. It nourishes tissues & cells. Basic Composition of Sweat also contains these nutrients. Over sweating results in the loss of nutrients from the body. Which further responsible for the Joint Pain, Cramp, weakness, etc. But continuous sweating also helps to remove impurities from body fluids. *Swedan* affects deep tissue which results proper blood circulation which gives nourishment to Skin and deep tissue which gets good immunity.

Mechanism of Action of Swedana

Swedana specially perform four functions in the body, *Stambhagna* by *Swedana* relieves *stambha* (stiffness)⁸. It is mainly due to *Shita guna* and *Swedana* relieves it by *Ushnaguna*. *Gauravghna* by *Swedana* results in the sweating which excrete watery or liquid portion from the body results in relieving from *Gauravata* (Heaviness). *Shitaghna* by *Swedana* pacify *Shitata* due to its *Ushna Guna*. *Swedkarkta* due to sweating, impurities & toxins from body get expelled out.

CONCLUSION

Manifestation of *Grighrasi* is irrespective of age, sex and *prakruti*, but predominantly seen in

madhyama vaya, females and *vata kapha prakriti* persons respectively. *Kala* (Time), *desha* (Place), *vihara* (Lifestyle) play an important role in manifestation of *Ghridrasi*. On comparison between the two groups on the basis of statistical analysis is non-significant which indicates that effects of both *sweda* types are almost equal in *Vata-Kaphaj Ghridrasi*. But on the basis of relief per follow up, in every follow up *Nadi Sweda* gives more relief than *valuka pottali sweda*. Hence, Group A therapy is more effective than Group B therapy.

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25.

SIGNIFICANCE OF RASAYANAS IN PREVENTION OF LIFESTYLE DISORDERS.***¹Dr. Shanti Manyala, ²Dr. Dipika Chakole**

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Abstract

Rasayana therapy is one of the eight specialties of Ayurveda. Aim of Ayurveda is to provide complete health physical, social and spiritual. Rasayana therapy ensures the same by promoting health, immunity and in turn longevity. The main purpose of rasayana therapy is to maintain the health of healthy individual and cure the diseases of diseased one. Rasayana acts at the level of cellular metabolism and hence improves the metabolic activities of the body. Rasayana therapy consists of certain drugs which aim at a) Preserve and promote the health of healthy individual. b) Improves the status of dhatus c) Management of diseases d) Prevents ageing and provides longevity e) Boost immunity f) Rejuvenate the system It is not only a single drug treatment but also a specialized therapeutic procedure practiced as a major specialty in Ayurvedic medicine. Properly and timely use of rasayana drugs promotes youthfulness, memory, intelligence, complexion, body glow and best physical strength. Rasayanadravyas acts at various level i.e. rasa-dhatu, agni, and srotas. Various research works are done in the field of rasayana so here an effort is made to review all classical knowledge and its implementation to achieve the goal of ayurveda “Swasthasya swastharakshanamaaturasya vikarprasamanam ch”.

KEYWORDS: Rasayana, immunity, longevity, ageing, naimitika, kama, vatatapika

Introduction:

Ayurveda science of life having two aims, one is to maintain the health of healthy person and the second is to cure diseases of diseased person. The current modern definition of health is “Health is a state of complete physical, mental and social well being and not merely absence of disease (WHO). Ayurveda has best provision to achieve good healthy life. Rasayana therapy works for it; to promote healthy life by preventing the diseases. Rasayana means the science of Rejuvenation. Rasayanachikitsa consists of certain dietary & therapeutic measures which are to correct as well as improve dhatus immunity by a proper nutrition.

The word Rasayana is composed of two words Ras + Ayan. ‘Rasa’ means fluid or juice &

'Ayan' means pathway. Hence the literal meaning of rasayana is 'fluid pathway.' Rasa is the vital fluid produced by the digestion of food. Rasa provides nutrition, enhances the immunity, and sustains life. Rasayana is the method of treatment through which the rasa is maintained in the body. The purpose of rasayana is to give strength, immunity, ojus, vitality, will power and determination. It also attains longevity, memory, intelligence, excellence of luster, complexion and voice, optimum strength of physique and sense organs. Today is the era of erroneous lifestyle in which people are not able to follow the rules of healthy and happy living due to unawareness or due to their personal, social or professional obligations like intake of substandard diet, viruddha, vidahi, abhishyandi diets and abandoning the rules of dietetics as described in texts.[1]

Rasayana appears to have been practiced as an important specialty aiming at rejuvenation, geriatric care, mental competence, increased immunity, etc to possess a long and healthy life. Thus it was the key for maintaining positive health and longevity. Rasayana deal with preservation and promotion of health and vigor and thereby is more for promotional health.[2] Lifestyle of a person is the cumulative byproduct consisting of physical activities, which are co-ordinated with psychological functioning. The combination of physical activity and psychological functioning is displayed in the form of habits, behaviour, dietary and living pattern, which is based on training sought from childhood.

Lifestyle disorders occurrence depends upon the daily habits of people. The main factors contributing to the lifestyle disorders include wrong dietary habits, physical inactivity and disturbed biological clock. Ayurveda focuses on various methodologies like Dinacharya, Ritucharya, Ratricharya, Panchakarma and Rasayanas.[3]

Rasayanas play a very vital role in improving the jatharagni, dhatwagni, which ultimately improve the strength, immunity, ojus and vitality. Also the metabolic functions of the body are improved, which is very beneficial in preventive and curative aspects of Lifestyle disorders. [4]

Aims and objectives:

1. To explore the classical Ayurveda and allied literature for understanding the fundamental concept of Rasayana Therapy and its benefits.
2. To identify the practical utility of Rasayana Therapy for the Prevention of Lifestyle Disorders.

Materials and Methods:

Classical Ayurveda texts, modern literature and journals pertaining to Rasayana Therapy were ISBN 978-93-6039-103-4

analyzed for comprehensive understanding of concept of Rasayana Therapy, its historical review, types, mode of action, need, benefits and uses.

Historical Review:

Rasayana in CharakaSamhita: The 1st chapter of chikitsasthan is devoted to Rasayana Therapy, which indicates the importance of rasayana therapy as acknowledged by Acharyacharaka due to its marvelous effects and also having role in alleviation of diseases. Acharyacharaka has described various Rasayana Yoga viz. as 6 yogas in Ch.Chi 1-1, 37 yogas in Ch. Chi 1-2, 16 yogas in Ch.Chi 1-3, 4 Rasayanayogas in Ch. Chi. 1-4. It shows that at that time maintenance of health was the priority for which Rasayana therapy was at its peak.

Rasayana in SushrutSamhita: Sushruta has described Rasayana in chikitsasthan in four chapters i.e. from 27th to 30th, which indicates that Rasayana therapy was not emphasized much by AcharyaSushruta. This is probably due to the fact SushrutaSamhita is primarily dealing with surgical discipline. He has given comprehensive, systematic and scientific classification of Rasayana therapy. New Rasayana drugs and yogas have been added by AcharyaSushruta.

Rasayana in VagbhataSamhita: The description of Rasayana Therapy in last chapters of Uttaratantra i.e. 49th chapter of AshtangSamgraha and 39th of Ashtanghrudaya indicates the fact that at that time Rasayana therapy was less admired, as aim of curing the diseases would have been more essential. The description of Rasayana resembles close to CharakaSamhita. Definition, types, modes of administration, age of administration and various Rasayanayogas have been described in detail. Numerous details of Rasayana therapy is available in SharangadharSamhitaPurvakhanda 4th chapter, Kalpasthana of Kashyapasamhita.

Rasayana drugs for specific dhatus or tissue.[5]

DHATUS	SUITABLE DRUGS
RASA (plasma)	Khajur, draksha, kashmari
RAKTA (blood)	Amalaki, bhringraj, palandu, lauha
MASA (muscle)	Bala, nagabala, ashwagandha
MEDA (adipose)	Guggulu, shilajit, amrita, haritaki

ASTHI(bone)	Laksha,shukti,shankha
MAJJA(bone marrow)	Vasa,majja,lauha
SHUKRA (reproductivetissue)	shatavari,musli.

A unique decade wise description of ageing process is given by *Acharya Sarangdhara*. [6]

AGE	AGEING PROCESS	SUITABLE DRUGS
0-10	Balya (Childhood)	Vacha,Suvarna Bhasma
11-20	Vridhhi (Growth)	Bala, Aswagandha
21-30	Chhavi	Amalaki,Louha Bhasma
31-40	Medha (Intellect)	Shankhapushpi, Jyotismati, Brahmi
41-50	Twaka (Health of skin)	Bhringaraj, Priyal, Jyotismati
51-60	Drushti (Vision)	Triphala, Shatavari, Jyotismati
61-70	Shukra(Sexual Ability)	Ashwagandha, Kappikacchu
71-80	Vikrama (Physical ability)	Bala, Amalaki
81-90	<i>Buddhi (Wisdom)</i>	<i>Brahmi, Shankhapushpi</i>
91-100	<i>Karmendriya (Locomotor Activity)</i>	<i>Ashwagandha, Bala.</i>

Selected *Naimitika Rasayana* Drugs For Following Disease [7 & 8]

Sr. No	Diseases	<i>Naiimitika Rasayana Drugs</i>
1.	Eye	Jyotismati, triphala,shatavri, yastimadhu
2.	Heart	Shalparni
3.	Skin	Gandhak rasayan, vidanga
4.	Grahni & gulma	Pippali,bhallataka

5.	Tuberculosis	Rasona,nagabala, shilajatu,pippali
6.	Anemia	Louha
7.	Asthma	Agastya rasayana, bhallataka
8.	Neuromuscular, diseases	Rasona, guggulu, bala, nagabala
9.	Diabetes	Shilajatu,amalaki, haridra
10.	Obesity, lipid disorders	Guggulu,haritaki
11.	Hypertension	Rasona, bala, rasna, medhya rasayana drugs
12.	Hypotension	Kasturi,kupilu
13.	Allergic diseases	Haridra

Discussion:

Rasayana therapy is very useful in today's era. Due to unhealthy food, unhealthy living, increased mental stress, physical exertion, not having control over mental urges, the body tissue is going under degeneration very early. To overcome this problem, as people finds very difficult to adopt all ancient fundamentals, so along with dietetics and following some principles, we can use rasayana therapy to keep them healthy, happy, stress free and bring control over their mental urges which in turn disturbs tridoshas of body. All these factors can play a very crucial role in prevention of Lifestyle disorders.

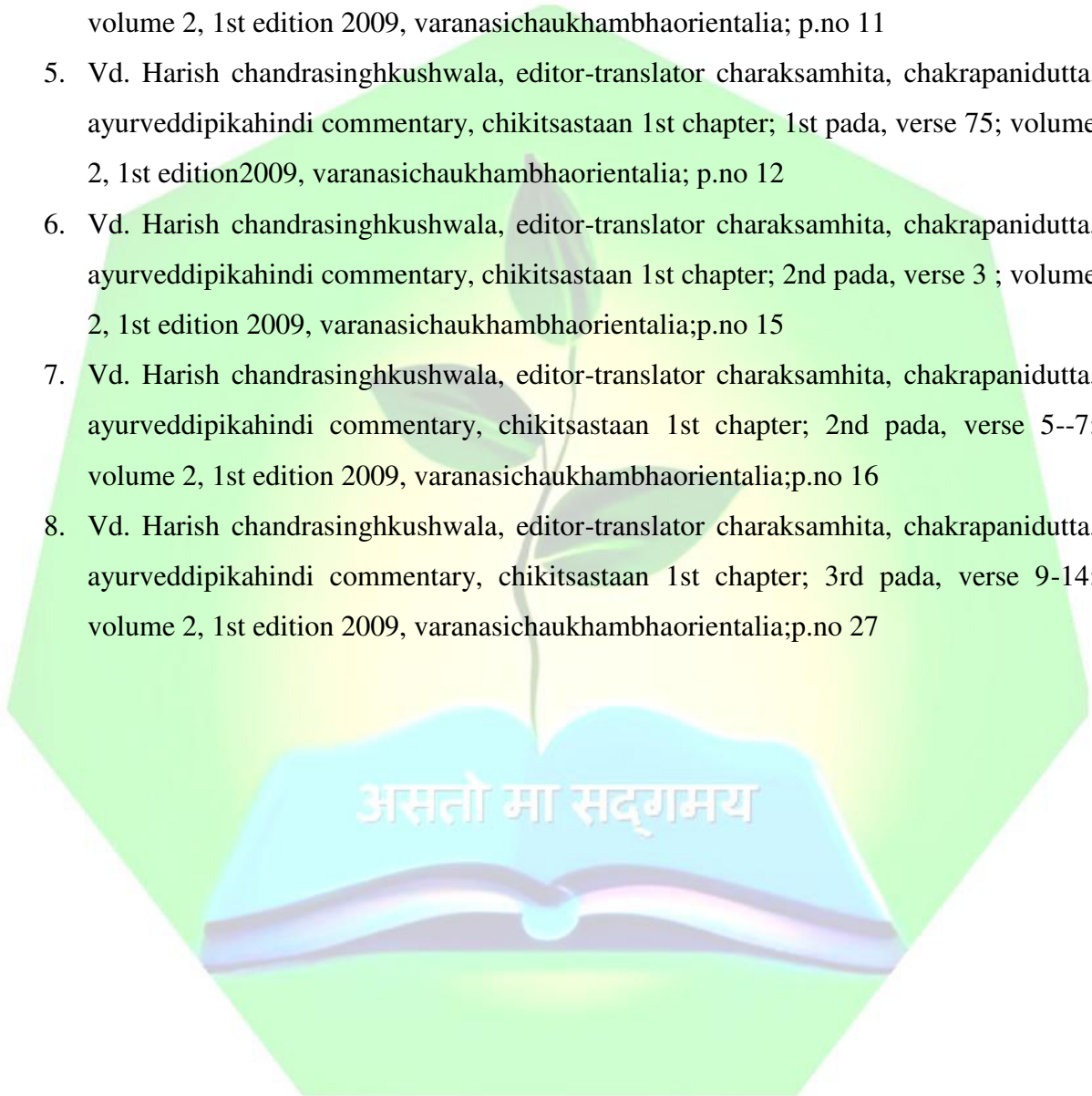
Conclusion:

Rasayana is novel concept. Hardly any of health sciences is found to have put thrust as huge as Ayurveda has. It gives an insight about what the treatment aim at establishment of Dhatu Samya should. Hence treatment of any disease would not be complete without using Rasayana.

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26.

**AETIOPATHOGENESIS OF *HRIDROG* (IHD) ACCORDING TO
AYURVEDA**^{*1}Dr.Girbide Santosh^{*1}Professor & HOD, Dept of Rognidan & VV, RA Podar Ayurved college, Mumbai**ABSTRACT:**

Ayurveda is knowledge of life. *Ayurveda* is not just a system of medicine but it also emphasises a healthy & enlightened lifestyle. The major causes of cardiovascular diseases are modified lifestyles in modern era like, tobacco usage, physical inactivity & unhealthy diet. Now days, the lifestyle is changing. Everything is running very fast like, bicycle, cars, trains, aeroplanes which gives speed to human & internet, mobiles which give speed to human work. But people have no time for food, sleep & other necessary daily routine work. These factors are causes of many diseases & specially *Hridrog*. (Ischemic Heart Disease) According to estimation of WHO 20 million people would die from cardiovascular disease by the year 2015. World health federation was organized on 26th September 2000. Based on the survey in the world, 97 crore people per year are suffering from different types of heart diseases. It may reach up to 156 crore by the year 2025. In India 1.7 crore people per year are dragged in to the heart diseases People do not take proper diet, sleep on proper time. Due to this *Rasa dhatu* is not formed in required quantity & quality. *Hriday* is *mulsthana* of *Rasavaha Strotas*. So the change in lifestyle is naturally making the heart prone to disease. Now day's competition is increased & that is the main cause of stress. This is one of the main *hetu* of *hridrog*. Addictions like smoking, consumption of alcohol are the causes of *hridrog*. *Ayurveda* is the only science which gives importance to avoid the disease, more than treating the disease. For the avoidance of disease *hetus* of *hridrog* are important factor.

KEY WORDS: *Ayurveda*, *Hridrog*, *Hetu*, Ischemic Heart Disease

INTRODUCTION: Different types of disease *Ayurveda* have explained different types of *chikitsa*. *Nidanparivarjan* is one of the types of *chikitsa*. It includes avoidance of causative factors of disease. Prevention of disease is always better than cure. *Ayurveda* is the only science which gives importance to avoid the disease more than eradication of disease. *Nidan* is the most important factor of *Nidanpanchak*. *Pathyaapathya* is also important factor after formation of disease, which avoids further complication as well as progress of *samprapti* in disease. Disturbance in *dinacharya*, *ratricharya*, *rutucharya*, *aacharrasayan*,

sadavruttapalan may lead to disturbance in *aahar*, *vihar*, regularities & improper rest to mind. In literature there are many references concern to *hriday*, *sira* & *dhamanies*. Amongst *dashapranayatana*s, *hriday* is most important. *Hriday* is also the most prominent *marma* in *threesadyapranaharamarmas* i.e. *shira*, *basti* & *hriday*. *Hriday* is seat of *chetana*.

AIM

Aim is to review the lifestyle, as *hetu* of *Hridrog*.

OBJECTIVES

1. To review the literature of *Hridrog*.
2. To review the lifestyle.

METHODOLOGY

Review of *Hridrog*: The earliest description of *hridrog* is available in *Charak Samhita*, followed by *Sushruta Samhita* & *Ashtang Hridaya*. *Charak* & *Vagbhata* have described *hridrog* as a part of other chapter while *Sushruta* has devoted a separate chapter to deal with the disease. *Sushruta* has described *hritshula* separately in *Gulma Pratishedh Adhyaya* of *Uttartantra*. Various types of acute pains have been described which occurs either as a complications of *gulma* or appear independently. *Hritshula* has put under the latter category of *shula*.

Types of *Hridrog*

Five types of *hridrog* viz. *Vataj*, *pittaj*, *kaphaj*, *sannipatik* & *krimija* have been described by *Charak*^[1] & *Vagbhata*.^[2] *Sushruta* has omitted *sannipatik* variety. [3]

General causes of *Hridrog*: According to Ayurveda, the etiological factors of *hridrog* revolve around the types as well as mode of food intake & the way of living one's life. Excessive exercise, *Atiyoga* of *Virechana* & *Bastikarma*, excessive grief, fear, stress, excessive consumption of poisonous materials, excessive vomiting, suppression of the natural urges relating to urine, faeces, semen, flatus, vomiting, sneezing, eructation, yawning, hunger, thirst, tears, sleep and breathing caused by over exertion, decreased *Sharirbala*, injury these are the general causes of *hridrog*. [4] Also excessive consumption of *Rukshaahar*, foods prepared by mixing incompatibles, eating more quantity of foods, eating food before digestion of previous food, use of articles of food which are not congenial to one's own temperament these also causes *hridrog*. [5]

Nidan of *Vataj Hridrog*

An over-indulgence in grief, fasting, inordinate physical exercise, food which have no moisture at all, food consumed in very low quantity, because of these factors vitiated

vata definitely generates *vataj hridrog* creating pain which is difficult to tolerate.^[6]

Nidan of Pittaj Hridrog

Over-indulgence in food which is very hot, sour, salty, alkaline, pungent, uncooked, alcohol, anger produces *pittaprakopa* & causes *pittaj hridrog*.^[7]

Nidan of Kaphaj Hridrog

Excessive consumption of fatty & heavy to digest food materials, not doing worries & body movements, excessive sleep & easy living these factors produce vitiation of *kapha* & causes *kaphaj hridrog*.^[8]

Nidan of Sannipatik & Krimij Hridrog

Combined *hetus* of *vataj*, *pittaj* & *kaphaj* are observed in *sannipatik hridrog*. Excessive consumption of *tila*, *gud*, alkaline food causes formation of *granthi*. If consumption of these factors persists *krimis* are developed & this causes *krimij hridrog*.^[9] Vagbhata has stated that, the etiological factors of *hridrog* are similar to *gulma*.^[10]

Samprapti of Hridrog

Doshas are aggravated by etiological factors. These aggravated doshas vitiate *rasa dhatu* present in *hridaya*. This causes abnormal functioning of *hridaya*. This is known as *hridrog*.^[11]

Review of Lifestyle

Life is a long journey from conception to death. *Ayurveda* considers four factors which constitute life 1. *Sharir* (body), 2. *Indriya* (senses), 3. *Satva* (mind), 4. *Atma* (soul). *Ayurveda* sees the living body as a sensitive instrument affected by everything in environment, first at subtle & eventually at physical level. As long as these factors function in harmony is health. But as one or more component is out of balance, affliction & sorrow develops.

Lifestyle means a set of attitudes, habits or possessions associated with particular person or group. Such attitudes are regarded as fashionable or desirable. In terms of *Ayurveda* lifestyle is a catch of all words meant to encompass all things that produce effects over our body, mind & spirit. It is our way of living, everything we eat, the people we encounter, activities we do, things we create & even our desires. Actions that are done repeatedly or things that exist in environment for a long time are the most important part of lifestyle because both have a greater impact on person.

Practically speaking, lifestyle includes what we eat regularly of course, but also includes, when we typically eat & the condition what we eat. It includes the condition of place that we live or spend a lot of time like our work places. It includes our habitual thoughts & beliefs as activities like exercise, sleep, driving, and works even life making. Lifestyle is something that we are

actively engaged in. However it sometimes seems that we are not in control of it. Work schedules can be out of our controls. As the pace of life increases, demands on our time make taking care of ourselves seems like utopian dream. Often we find the healthiest way to live in an inconvenient world or make plans to change in the future when we are able.

We are often responsible for our lifestyle. Our choice about how we live our lives is the input we have. Therefore it is quite clear that the output or result either health or disease is directly related to good or bad lifestyle.

DISCUSSION

In today's world when every good quality about health is on the decline, the age group of 45 to 60 can be considered as the *vata* prone age group. Younger age group is more prone to have effect on lifestyle because of work pressure & as a general rule little careless attitude towards health issues. Male are more affected by the modern lifestyle because they are more exposed to it. It is also commonly seen that the male is more prone to addiction, so occurrence of *hridrog* is more in male.

The modern day lifestyle mostly revolves around utilisation of the day, mostly driven by earning money or in the activities of entertainment.

The least thought is given to sleep. In this situation waking up at *brahma muhurta* seems like impossible task. When the person gets up at *brahma muhurta*, the first assigned task i.e. *mala pravritti* takes place during natural *kala* of *vata*. But when a person skips it, the *mala pravritti* takes place in *kapha kala*, which is unnatural. If it happens over a long period of time, the *kapha* which is *guru & shita* opposes the movement of *apanvayu*. This ultimately leads to *pratilomagati apanvayu*, *purishasanchiti & agnivikriti*. This helps in the *samprapti* process of *udavarta & rasadushti* which are the fundamental causes of *hridrog*.

Ratrijagaran is *hetu* of *vata prakopa*; more specifically it vitiates *prana*, *udan & apanvayu*. Also it leads to *agnivikruti* as well as *rasadushti*. These factors are contributed to *hridrog*.

Use of air conditioner may produce *hridrog* because air produced by it is *shita & ruksha gunatmak*. So frequently using air conditioner might be cause of *hridrog*.

Just as the pot, leather & the axle of hole of the cart become strong & afflicted by oiling them, similarly the body becomes strong, stable & skin becomes good by anointing it with oil. Trouble caused by *vata* subsides & become capable of withstanding fatigue & exercise. But now a day's people do not take daily *abhyang* that causes *vata vrudhi*. So it might be cause of *hridrog*. Ignoring *abhyang* has become hallmark of modern lifestyle.

In *samhitas* it is explained that, *vyayam* is *agnidipak*, *sharirlaghavkar* & gives freshness to all *indriyas*. *Avyayam* causes *agnivikruti*, *ajirna* & later leads to *amlotpatti*, *kaphavikruti*. It may causes *hridrog*. *Avyayam* causes *medovruddhi*. It leads to abnormality in *sira* because *sira* are nourished by *mrudupaka* of *sneha* of *medadhatu*. If *meda* is formed *apakwa* state, the *sneha* from such *meda* will leads to abnormal nourishment of *sira*. It leadsto possible blocking of *sira* & this is a major cause of *hridrog*.

Improper & irregular meal timing is very common in today's lifestyle. Intake of meal is depends upon strength of *agni*. Taking meal improperly & irregularly for long time causes *agnivikruti*, *ajirna* & later leads to *amlotpatti* & *kaphavikruti*. As *hriday* is *kaphapradhanavayava* & seat of *sadhakagni* it may causes *hridrog*.

Charak has described the treatment of *hridrog* in *trimarmiyachikitsaadhyaya* of *chikitsasthana*. This *adhyaya* begins with the treatment of *udavarta*. *Charak* clearly underlines the role of *udavarta* in *nidan* & *chikitsa* of *hridrog*. *Vegavrodha* is root cause of *udavarta*. This explains the importance of *vegavrodha* in the *samprapti* of *hridrog*. Consumption of alcohol is causative factor of *hridrog*. *Madya* causes *ojakshay*, *raktadushti*, *dhatukshay*, *tridoshprakopa* & *manadushti*. The heat produced by alcohol leads to abnormal nourishment of *sira* which contributes to the formation of *hridroga*.

CONCLUSION

Modern lifestyle plays major role in the genesis of *hridrog* & is responsible as *hetus* of *hridrog*.

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27.

CLINICAL STUDY OF *PRAMEHA* COMPLICATIONS WITH SPECIAL REFERENCE TO DIABETES MELLITUS¹Dr Wankhede Arun U, Professor & HOD, Dept of Rognidan & VV,²Dr. Khirodkar Sushama R, Associate Professor, Dept of Swasthvritta,^{1,2}Mahatma Gandhi Ayurved College Hospital and Research Centre, Salod, Wardha, Datta Meghe Institute of Higher Education and Research Centre, (D.M.I.H.E.R.), Maharashtra, India.**Abstract:**

Ayurved is one of the most ancient systems of the medicine in the world. It is highly evolved and codified system of life and health sciences based on its own unique and original concept and fundamental principle. *Upadrav* are complication which manifests after the manifestation of diseases. When the disease is not treated properly and indulging in the same nidhan, in the vyakta stage of the disease, *upadrav* manifests. *Upadrav's* plays very important role in Diagnosis, Prognosis and Treatment of the diseases. Diabetes mellitus is a group of metabolic diseases characterized by hyperglycemia which occurs due to defects in insulin secretion. Hence considering the fast increasing trend of Diabetic complications and its associated morbidity and mortality levels, it is very crucial to focus on Prameha and its Upadrava's for effective treatment and management. So an attempt is made to analyse and understand the Upadrav in this study.

Key words: *Prameha*, *Upadrav*, Diabetes mellitus, hyperglycemia.

Aim:

Clinical study of *Prameha* complications with special reference to Diabetes mellitus.

Objectives:

- 1) To study pathology of *Prameha* and DM
- 2) To study *Prameha Upadrava's*
- 3) To study the relation between blood sugar levels and *Prameha Upadrava's*
- 4) To study the relation between HbA-1c and *Prameha Upadrava's*

Materials and Methods:**Inclusion criteria-**

- Age group- 30 to 60 yrs
- HbA1c- >7
- Chronicity of type 2 Diabetes Mellitus more than 5 years

Exclusion criteria-

- HbA1c- <7
- Chronicity of type 2 Diabetes Mellitus less than 5 years
- Type 1 Diabetes Mellitus patients
- Patients having drug or chemical induced Diabetes Mellitus like glucocorticoids induced Diabetes Mellitus or thyroid hormone induced
- Patients having malignancy
- Patients having any other systemic disease affecting multiple body systems and pregnant women

1) Type of study-cross sectional study

2) Study population-

Patients having Diabetes for more than 5 years with HbA1c above 7

3) Sample size-100

4) Place of study-

5) Sampling method-purposive sampling

Subjective Assessment:

S.No	Upadrava's	Grade 0	Grade 1	Grade2	Grade3
1.	<i>Trisha</i> (Thirst)	8 to 10 glass of water/per	10 to 15 glass of water/per day	15 to 20 glass of water/per	>20 glass of water/perday
2.	<i>Atisara</i> (Diarrhea)	No	2-3 times per 24 hrs.	3-10 times per 24 hrs.	>10 times per 24 hrs.
3.	<i>Jwara</i> (Fever)	No (97.7 to 99.5f)	Mild fever (99.6 to 100f)	Moderate fever (101 to 102f)	Daily >102f
4.	<i>Daha</i> (Burning)	No	Burning sensation Occasionally (mild)	Constant burning sensation	Constant burning sensation requiring
5.	<i>Daurbalya</i> (weakness)	No	Mild weakness	Tired after little work	Work with great difficulty
6	<i>Arochaka</i> (Loss of taste)	No	after work Feeling test less but eating complete meal	Feeling test less but not eating complete meal	Anorexia[hat food]
7	<i>Avipak</i> (Indigestion)	No	Occasionally	Happening regularly for few	Continuous
8	<i>Shwas</i> (Dyspnoea)	No trouble in breathing except strenuous	Shortness of breath while walking	Stops while walking for breathing on a level ground	Unable to do walk due to Dyspnea
9.	<i>Aalasya</i> (Laziness)	Active	Hesitate to start work but once started complete	Starts but does not complete work	Don't have desire to work
10	<i>Pratishyay</i> (Running nose)	No	Occasionally	Frequently	Always
11.	<i>Kaphpraseka</i> (Excess salivation)	No salivation	Wet lips by salivation	Wet lips and chin by salivation	Dribbling of saliva on clothes

12	<i>Hrudrog(Heart disease)</i>	Absent	-	-	Present
13	<i>Shool (Body ache)</i>	No	Body ache but doing normal movements	Body ache but limitation to movement	Continuous Body ache and unable to do normal movement
14	<i>Chardi(vomit)</i>	No	1-2 times vomit per day	2-4 times per day	>4 times per day
15	<i>Nidra(Excess sleep)</i>	6 to 8 hrs sleep per day	8 to 10 hrs sleep per day	10 to 12 hrs sleep per day	>12hrs sleep per day
16	<i>Vrushanaavardana</i>	No	Cracks on testis	Cracks with bleeding testis	Cracks,bled with pus from testis
17	<i>Bastibhed (Pain in pubis)</i>	NO pain	Mild pain at pubis area,no difficulty in walk	pain at pubis area bairly walk	Pain at pubis area unable to walk
18	<i>Mendhratod (Pain in genital area)</i>	No pain	Mild pain attention towards pain	Pain at genital area but continue all activities	Severe pain at genitals unable to move or walk
19	<i>Hridshoola(Cardiac pain)</i>	No pain	Mild chest pain attention	Continuous pain but able to all	Severe pain unable to move or breath
20	<i>Amlika(Sore belching)</i>	No	2-3 times in a week	Sometimes in a day	Continuous throughout the
21	<i>Moorcha(Fainting)</i>	No fainting by strenuous	Fainting by strenuous work or running	Fainting after few minute walk	Fainting after routine activities
22	<i>Nidranash (Insomnia)</i>	6 to 8hrs	3 to 6 hrs sleep	1to3hrs sleep	Unable to sleep

23	<i>Panduroga (Anemia)</i>	12 to 17.5g/dl	7.0 to 9.9g/dl	7.0 to 9.9 g/dl	Less than 7g/dl
24	<i>Laulya</i>	No Craving	Craving to eat but not eating	Craving to eat but wait for few hrs.	Unable to control hunger instant eat
25	<i>Stambha (Stiffness)</i>	No Stiffness	anything Mild stiffness able to	Stiffness with pain while walk	something Stiffness in whole body unable to move
26	<i>Baddhapurishatva (constipation)</i>	NO	Daily Passing of stool with	Passing of stool with use of laxative after	Passing of stool with use of laxative >
27	<i>Putimaunsa Pidika (carbuncle)</i>	No	Carbuncle that goes himself	Carbuncle it cures after treatment	Forms again and again after treatment
28	<i>Kampa</i>	No tremors	Tremors at picking object, holds	Object falls after few seconds	Unable to grab objects
29	<i>Kasa (Cough)</i>	Absent	Cough less than 15 days	Cough with expectoration more than 15	Cough with expectoration more than 15
30	<i>Shaithilya</i>	Absent	-	-	Present

Objective assessment

- HbA1c

HbA1c	Mmol/ml	%
Normal	Below 42	Upto 6
Prediabetes	42 to 47	6.1 to 6.4
Diabetes	48 & above	6.5 & above

- Blood sugar levels –Fasting & PP

Blood sugar classification	Fasting Mg/dl	Postprandial Mg/dl
Normal	80-100	80-140
Prediabetes	101-125	141-160
Diabetes	>125	>160

Overall Assessment:

Discussion on Demographic Study

- Diet:** - Maximum number of patients i.e. 60(60%) were taking vegetarian diet & 40(40%) patients were taking mixed diet. Most of the patients were on irregular diet pattern. It might be of *alpashana*, *Samashana*, *Vishamashan*. These irregular dietary patterns lead to the *Kopa of vata dosha* progressively. Analysis on the basis of dominant rasa consumed showed that maximum patients had inclination towards *madhur ras*. *Madhur ras* is included in the *rasas* which provokes the *kapha dosha*. Irregular diet pattern and consumption of *Madhur rasa* in an excessive manner can be effectively considered in the predisposing factors of *Prameha* and later it results into *updravas*.

Due to sedentary lifestyle intake of *Mithyahara* (improper diet) is a common phenomenon in the pathogenesis of *Prameha*. All these *aharajanidana* (causative factor related to diet) are responsible for vitiating and development of *prameha upadravas* that reflect in Blood sugar level in the body. **Discussion on *Prameha Updravas vis-a-vis type 2 Diabetes mellitus***

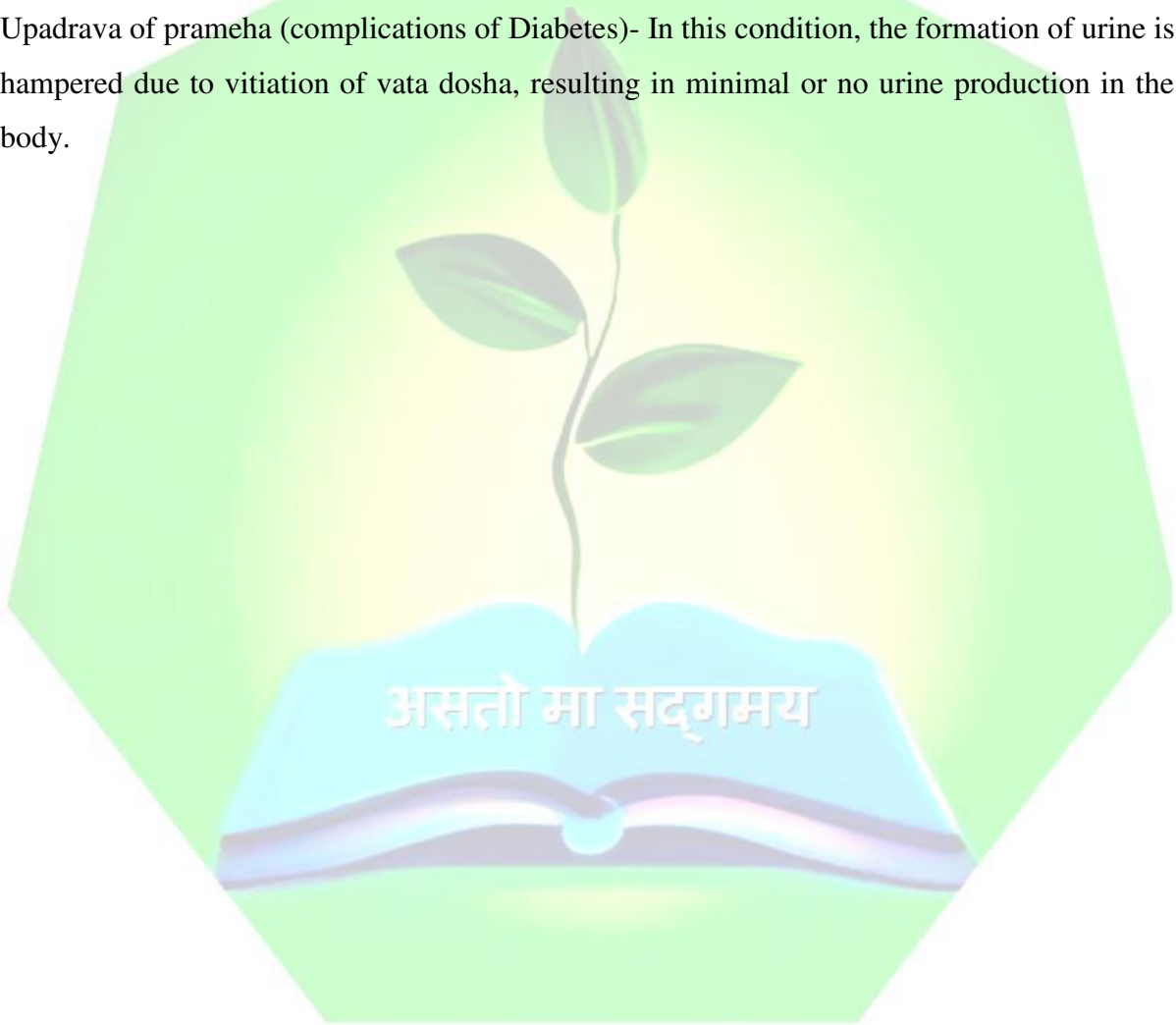
Type-2 diabetes mellitus is one of the most prevalent life style disorders in today's era. Ayurveda, the science of life mentions *Apathyanimittaja Prameha* which resembles type- 2 diabetes mellitus in terms of aetiology, pathogenesis and presentation of the disease.

Upadrava's are those which develop after the manifestation of main disease or during the disease process itself, which implies upadrava manifests in the disease process itself but at the end of it. Upadrava's are the complications which arise after the improper treatment of the vyadhi. Early treatment to the disease itself prevents from the manifestation of upadrava. Once the upadrava develops means the vyadhi is incurable or difficult to cure. Life style and diet style factors such as sedentary habits, high sugar content food articles such as simple carbohydrates, milk products, and sweets, which make an individual prone for the incidence of

type-2 diabetes mellitus, mentioned in Ayurvedic texts as predisposing factors for Apathyanimittaja Prameha.

Despite the efforts of the healthcare community to improve the quality of diabetes care, about 50% of people with type 2 diabetes do not reach their treatment targets, increasing the risk of future micro-and macro-vascular complications. Excessive sleeping, desire for sleeping during the day time, indulgence in long- term sitting, lack of exercise (sedentary life style) , lack of thinking, Atistulata (Obesity), Laziness, Heaviness of the body, Indriyas and Srotas filled with Mala, Difficulty in concentration of mind, Thoughtfulness, Edema and other related conditions - (CS.Su.23.21).

Upadrava of prameha (complications of Diabetes)- In this condition, the formation of urine is hampered due to vitiation of vata dosha, resulting in minimal or no urine production in the body.



Statistical Discussion of Parameters of HbA1C, BSL-Fasting and PP

In healthy people, the HbA1c level is less than 6% of total haemoglobin. A level of 6.5% signals that diabetes is present. Studies have demonstrated that the complications of diabetes can be delayed or prevented if the HbA1c level can be kept below 7%. It is recommended that treatment of diabetes be directed at keeping an individual's HbA1c level as close to normal as possible (<6%) without episodes of hypoglycemia (low blood glucose levels).

Discussion on Association of score of Upadrava's and HbA1c

In the present study the subjects where HbA1c level was 7-8% were considered in Group one. While conducting present study maximum of 32 patients were found in Group 1 among them 26 were in Grade one, 5 grade two, 1 grade three of Upadrav score. Total 16 patients were noted in Group two. In the subjects where HbA1c level was between 8.1 -9% were considered as Group two. The 11 patients were in Grade two, 5 patients in grade three of Upadrav score. Total 28 patients were noted in Group three. In the subjects where HbA1c level was between 9.1 -10% were considered as Group three. The 13 patients were in Grade two, 15 patients in grade three of Upadrav score. Total 24 patients were noted in Group four. . In the subjects where HbA1c level was between -11% were considered as Group four. The 2 patients were in Grade two, 22 patients in grade three of Upadrav score. By The application of Chi-Square test it was found that p-value less than that of 0.05 indicated significance of association between HbA1C and upadrava grading. HbA1c levels depend on the blood glucose concentration. That is, the higher the glucose concentration in blood, the higher the level of HbA1c. Levels of HbA1c are not influenced by daily fluctuations in the blood glucose concentration but reflect the average glucose levels over the prior six to eight weeks. Therefore, HbA1c is a useful indicator of how well the blood glucose level has been controlled in the recent past (over two to three months) and may be used to monitor the effects of diet, exercise, and drug therapy on blood glucose in people with diabetes

Discussion on Association of score of Upadrava's and BSL-Fasting and PP

The blood sugar level-fasting and PP: The pancreas makes enough insulin but the cells have trouble using it properly, causing blood glucose levels to rise. This is called insulin resistance and is the hallmark of type 2 diabetes. High sugar degrees gradually deteriorate the ability of cells in pancreas to earn insulin. The body organ overcompensates and also insulin degrees remain too expensive. Over time, the pancreas is completely harmed. In the subjects where BSL-Fasting level was <100 mg/dl were considered in Group one. In the present study 5

patients were found in Group 1 among them 4(15.4%) were in Grade one and 1(3.2%) patient in grade two Upadrav score. Total 50 patients maximum were noted in Group two. In the subjects where blood sugar level –fasting was between 101-150 mg/dl were considered as Group two. The 18 patients were in Grade one, 13 patients in grade two and 19 patients in grade three of Upadrav score. Total 45 patients were noted in Group three. In the subjects where blood sugar level –fasting was >150mg/dl were considered as Group three. The 4 patients were in Grade one, 17 patients in grade two and 24 patients in grade three of Upadrav score. The Chi-Square test interpreted p-value less than that of 0.05 indicate significance of association between BSL-fasting and upadrav score.

Conclusions

1. The prameha (type 2 DM) updravas and symptoms are more when biochemical parameters are on higher side
2. When biochemical parameters are on higher side and uncontrolled state of type 2 DM, some upadravas as like hrudroga, daha , moorcha, shawas, putimamamsa peedika are seen more significantly
3. It is necessary to see biochemical parameters of type 2 DM for diagnostic and prognostic value of Prameha vyadhi.
4. The complications of Prameha vyadhi are directly proportional to chronicity of uncontrolled state of type 2 DM.
5. If nidan sevan of Prameha is continued by the diabetic patient, the symptoms and complications are developed with reference to treatment of type 2 DM.
6. These biochemical analyses are objective indicators related to Diabetes Mellitus and timely assessment could help to prevent further development of type 2 diabetes.
7. Thus, the association between these biomarkers and complications in type 2 DM could provide insight into the association of Prameha Upadrav's.

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28.

EFFECT OF YOGA ON MENOPAUSE IN MENTAL HEALTH

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Abstract:

Permanent cessation of menstruation at the end of reproductive life due to loss of ovarian follicular activity. Complete stoppage of menstruation for twelve consecutive months without any other pathology. Around 45 to 55 yrs averages. But now a days the age of menarche and menopause is changing to 12 yr to around 40 to 45 yrs due to changing life style of females. Pranayama serves as the link between the consciousness and the mind .it is breathing technique which help in stress and relaxation. This helps the women to focus on the simplicity of movement and get about work responsibility and demands thus reduce anxiety as well as depression.

Key words: Rajonivrutti, Pranayam, Dhyana, Asan, Mental health

Introduction:

Rajonivrutti” means permanent cessation of Rajakal at the end of reproductive life due to loss of ovarian follicular activity i.e Artavnash, “Rajonivrutti” duration female is suffering from mental health problems like Insomnia, Depression and mood swings,lack of concentration.,,Pranayam” means extension of the prana (breath of life force) or breath control.Prana –meaning life force Ayam- to restrain or control the prana, implying a set of breathing techniques where the breath is internationally altered in order to produce Specific result. Management of Rajonivrutti lakshan, yogic lifestyle is away of living which aims to improve the body ,mind and day to day life of individuals .The most commonly performed yoga practice are posture (Asan) controlling. Breathing (Pranayam) and mediation (Dhyana) .Pranayam has been utilized tool. To achieve position health and control and cure disease.

AIM: to study the effect of yoga on menopause in mental health

OBJECTIVE:

1. To study the mental health issue in women during menopause.
2. To study Ayurvedic rajonivrutti.
3. To study Pranayama

METHOD: Conceptual study

MATERIAL:

1. Literature regarding the Rajonivruti, Pranayama will be reviewed from Ayurvedic classics.
2. Modern review of Menopause will be taken for study from modern text books.
3. Internet data and various research papers will be reviewed.

OBSERVATION:**1.RAJONIVRUTI:**

Permanent cessation of menstruation at the end of reproductive life due to loss of ovarian follicular activity. Complete stoppage of menstruation for twelve consecutive months without any other pathology. Around 45 to 55 yrs averages. But now a days the age of menarche and menopause is changing to 12 yr to around 40 to 45 yrs due to changing life style of females.

2.SYMPTOMS IN RAJONIVRUTI:

1. Depletion of ovarian follicle
2. Fall in level of serum estradiol 50 -300 pg /ml to 10-20 pg/ml
3. Distrubed follicogenesis
4. Sustained level of oestrogen ,Decrease in level Oestrogen :Androgen ratio
5. Trace amount of progesterone.
6. Enhance responsiveness of pituitary to GNRH
7. Changes in organ
8. Risk in cardiovascular system after menopause
9. Physiological and mental and mental health changes:
10. Insomnia :Problem in sleeping
11. Depression and mood swings : Feeling of irritability, mood swings i.e extreme high to sever low in a short period of time.

PRANAYAM:

Pranayam is an ancient Indian practice concerned with controlling your breath. Pranayam is a word alternatively translated as extension of the prana or breath control. The word composed from two Sanskrit words, Prana meaning life force and eighter Ayam, The prana implying set of breathing techniques where the breath is intentionally altered in order to produce specific result or the negative form may mean to extend or draw out. Anulom vilom pranayam and benefits, excellent breathing exercise for improving Blood circulation. Remove heart blockages, releases stress anxiety and depression. Importance and benefits of practicing Pranayam in Yoga. The word, „Prana“ stands for life force and this is believed to be the vital energy or life force that encompasses the body. This also serves as the link between the consciousness and the mind. It is a breathing technique which helps in stress and relaxation.

RESULT:

- Practice of Pranayam develops a steady mind, strong willpower and sound judgment. Pranayam strengthens the lungs, improves their function and enhances the lung power.
- It improves the defence mechanism of the body, slows down mental chatter and infuses positive thinking.
- Meditation is a process whereby consciousness looks in and acts upon itself. The aim of meditation is a process whereby consciousness looks in and acts upon itself. The aim of meditation is to help still the mind and to practice some form of contemplation or introspection, which is helpful in preventing impaired memory and concentration, mood swings also.
- Meditation is simply and easy meditation techniques can be a source of relief. When there is overload during stressful time, meditation stills the mind of excessive thoughts and can give the clarity and focus needed to cope with mood swings and mental imbalance. It restores a sense of inner peace and balance and renews focus and control. Irritability, depression and mood swings can be greatly eased by regular meditation which will help to stabilize the emotion.
- Meditation has been found to be associated with increased plasma melatonin level and improved sleep quality particularly if done in the evening before rest.
- The exact mechanism as to how yoga helps in various disease states is not known. It has been suggested that there could be neurohormonal pathways with a selective effect in each pathological situation.

DISCUSSION:

- It is possible that Yogic exercises about normalization of the pathological state by control of counter regulatory hormone or by increased receptor sites .it has been also been suggested that yogic practices creates a hypothermic state and an alternation in the sympho- parasympathetic axis.
- Yoga practices may provide a source of distraction from daily life and enhancement of self easteem. Helping woman to focus on the simplicity of movement and get about work responsibility and demands thus reduce anxiety as well as depression.

CONCLUSION:

Thus from all qualities of Pranayam a free of cost, non invasive method is fairly effective and is strongly recommended to all women of menopausal age. Pranayam dose have the potential to provide physical, mental, emotional health benefits to those who practice it with proper guidelines.

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29.

**MEDOVAH SROTASJANYA VIKAR-STHOULYA:
CLINICAL REVIEW**¹Dr Wankhede Arun U, Professor & HOD, Dept of Rognidan & VV,²Dr.Khirodkar Sushama R, Associate Professor, Dept of Swasthvritta,^{1,2}Mahatma Gandhi Ayurved College Hospital and Research Centre, Salod, Wardha, Datta Meghe Institute of Higher Education and Research Centre, (D.M.I.H.E.R.), Maharashtra, India.**Abstract:**

Ayurveda, the Indian system of medicine can be aptly defined as the “Science of life”. Today, in spite of development of various techniques in the field of diagnosis and medicine, Due to the artificial living life-style, Persons have got so many disorders for themselves. Sthaulya (obesity) is one of them. Obesity is due to the modern age of using more machines and more materialism. It is mostly physiological, psychological and also social disorder. Obesity is such a disorder which provokes other diseases like hypertension, Ischemic heart disease, diabetes osteoarthritis and also psychological disorders like stress, anxiety, depression etc. Obesity with hyperlipidemia also being the most common problems in all age group. Acharya Charaka quoted that Sthaulya under the eight varieties of impediments which designated as “Astha-Nindita Purusha “(Cha.su.21). It represents the inceptive stage of disease when the Doshas are stagnated in their own natural abodes. According to Sushruta Sthaulya is „Rasa Nimittaja Vyadhi“. The Samprapti of Sthaulya begins with the Sanchay of Kapha Dosha .The causes by which Medovaha srotas gets vitiated are excessive intake of fatty food, day sleep, lack of exercise etc. these are similar to that of Kapha Vriddhikar Bhav. Sanchay of Kledak Kapha in Amashaya because of excessive consumption of Guru, sheet, snigdha, Madhur Ahar and Kaphakar Vihar leads to formation of Ama- annarasa. Charak has stated that Meda Dhatu, Kapha dosha sitted in Medo Dhatu and hence, a Vriddhi of Kapha dosha occurs in the site of Meda Dhatu. Therefore Kapha sanchaya and Meda Dhatu vriddhi are the footsteps of Sthaulya. Due to Kapha Sanchaya the person feels Alasya and Gaurav. In Sanchaya avastha, there is formation of Ama-Annarasa because Pittadhara Kala is unable to secrete Pachaka Rasa which results in Jatharagnimandya leading to Strotovaigunya. In this stage the Dravyatah Vriddhi or quantitative increase is seen.

Key Words: Sthaulya, Obesity, Medovaha srotas, Kapha Sanchaya, Ama

Introduction:

Ayurveda, the Indian system of medicine can be aptly defined as the “Science of life”. Today, in spite of development of various techniques in the field of diagnosis and medicine, Ayurveda is in high profile in saving mankind. Now a day, No one have time to think and act for the healthy life and not able to follow the proper Dinacharya, Ritucharya, Dietic Rules and Regulations. Due to the artificial living life-style, Persons have got so many disorders for themselves. Sthaulya (obesity) is one of them. Obesity is due to the modern age of using more machines and more materialism. It is mostly physiological, psychological and also social disorder. Obesity is such a disorder which provokes other diseases like hypertension, Ischemic heart disease, diabetes, osteoarthritis and also psychological disorders like stress, anxiety, depression etc. Obesity with hyperlipidemia also being the most common problems in all age group. Acharya Charaka quoted that Sthaulya under the eight varieties of impediments which designated as **“Astha-Nindita Purusha”** (Cha.su.21).. The present day society expects peak physical and mental performance from each of its member and obese person is unable to find out him physical and mental fit for it. It occurs as a result of lack of physical activities with increased intake of daily diet results into the clinical entity, which can be called as obesity. Obesity is such a disorder which provokes other diseases like hypertension, Ischemic heart disease, diabetes, osteoarthritis and also psychological disorders like stress, anxiety, depression etc. Obesity and Hyperlipidemia being the most common problems in all age group. Acharya Charaka has quoted Sthaulya under the eight varieties of impediments which designated as **“Astha-Nindita Purusha”** (Cha.su.21). Ati-sthauilya comprises one of them. Acharya Charaka also lists this problem under Samtarpanjanita vyadhi (Ch. Su. 23). According to Ashtanga Hridaya (A. HN.12/1), derangement of Agni or digestive power leads to production of Ama, which disturbs tissue fire of meda dhatu and blocks the proper formation of further dhatus. Hetu/Nidana is one of the most important factor for every disease. In nidansthana 8/24-25, Acharya Charka has mentioned that a single Hetu (etiological factor) may produce single disease or group of diseases or many factors together produces single disease or group of diseases. Many etiological factors mentioned in the Ayurvedic texts but Diwaswapna is observed commonly in all housewives which cause obesity.

According to various Acharyas; Diwaswapna (Day time sleeping) is one of the cause of Sthaulya. It Aggravates the Kaphadosha. Kapha and Meda have similar properties. Sthaulya is counted as a disorder of Sleshma Dosha seated in Medodhatu (A.S.Su.19/26). On the basis of **“Ashrayashrayeebhava”**, vitiation of Kapha leads to vitiation of Medodhatu.

Ethymology (Vyutpatti) of word “STHAULYA” :-

The word “Sthaulya” is derived from Mula Dathu “Sthu” with suffix “ach” respectively which means “Sthaulya”.

According to Amarkosha, it means excessive growth of the body.

According to Hemachandra stated that it is of over nutrition of the body or dullness of intellect.

Meda Nirukti -

According to Amarkosha :

Meda: Medastu Vapa Vasa (2/6/64 Manushya Varga)

Medaha: Na, Vapa, Vasa (2- Stri), Charvi

|| Trini Sudha Mamsa Snehasya ||

Vapa Vivira Medosoha iti Hemaha 2/303.

HISTORICAL REVIEW**SAMHITA KALA (200B.C. - 800A.D.) :**

Charak Samhita (200 B.C.): In Samhita kala, Charak Samhita has described Sthaulya in broad aspect. Charak described 20 type of Kapha Nanatmaja Vikara. He counted,, Atisthauilya,,or (Medoroga) is one of them. Again Charak explained Atisthauilya in Sutrasthana, 21st chapter. Amongst these, the too obese and too lean physical appearances are considered the most undesirable ones. The excessively obese have eight inherent defects in them: reduced lifespan, constricted or limited movement (hampered due to loose, tender and heavy fats), reduced sexual activities or impotence (due to small quantity of semen produced and obstruction of the channel of semen by meda dhatu, debility , emit bad smell, profuse sweating, and excessive hunger and thirst . Excessive obesity is caused due to over-nourishment as a consequence of the intake of a heavy, sweet, cold and fatty diet, lack of physical exercise, abstinence from sexual intercourse, sleeping during the day, uninterrupted cheerfulness, lack of mental activities, and hereditary/genetic defects. These consequences may lead to an excess of fat (with further accumulation of only fat) and consequent depletion of dhatu. Due to the obstruction of body channels by meda dhatu, the movement of vata is specially confined to *koshtha* (abdominal viscera) resulting in the stimulation of digestive power and absorption of food. Hence,the person digests food quickly and becomes a voracious eater. By not following rules of taking meals at specific times during the day, he is afflicted by dreadful diseases. *Agni* (pitta component responsible for digestion) and vata are the two most troublesome factors from the standpoint of obesity. These factors blight an obese person as

wildfire destroys a forest. As the body gains excessive fat, vitiated dosha suddenly cause severe diseases resulting in rapid deterioration of life. The person is considered too obese when there is an excessive increase in fat and muscle tissue in the regions of buttocks, abdomen, and breasts, which become pendulous and suffer from deficient metabolism and energy. These are the causes, signs, and symptoms of an obese person.

Sushruta Samhita (2 A.D.):

In Sushruta Samhita (Su.Su.15), Sushruta narrated the etiopathogenesis of Sthaulya Roga on the basis of an endogenous entity being caused due to "Dhatvagni Mandya". Further, the course and complication of the disease with some different line of treatment are discussed at various places in Sushruta Samhita. Sthaulya is considered as the physical condition of the body (Su.35/40), result of vitiated Meda Dosa (Su. 24/13), as symptom of disrupt Medo Vaha Srotas (Sa. 9/12), Rasa Nimitaja disorders (Su. 15/37). A new synonym Jatharya has been used in Chi 12/11 for Sthaulya.

Ashtanga Sangraha (600A.D.):

In 24th chapter of Sutrasthana, Vriddha Vagbhata described the different aspects of Sthaulya. He explained that Sthaulya is because of excessive Brihan in 19th chapter of Sutrasthana, which results in Atisthulata.

Ashtang Hridaya (700 A.D.):

In 14th chapter of Sutrasthan Vagbhata has explained the Atisthauilya and the treatment of Atibrihana etc. Kashyapa Samhita (600 – 700 A.D.) :

Kashyapa Samhita is more related with "Kaumarbhritya" and "Prasuti Tantra". Kashyapa has given some new aspect of "Medasvi Dhatri Chikitsa". In Dhatri Chikitsa Adhyaya of Chikitsasthana he described Sira Karma (Raktamokshana) as one of the best treatment for Medasvi Dhatri i.e. obese frostier mother.

Bhel Samhita:

Bhel is one of the six brilliant disciples of Atreya. In 12th chapter of Sutrasthana he described Sthaulya as a disorder of vitiated meda.

Madhava Nidana (700 A.D.):

He is the first author who elaborates this disease under the separate chapter called "MEDOROGA NIDANAM" in 34th chapter of Uttartantra. Madhava Nidana has described the pathophysiology of this disease on the basis of fat tissue and fat depot site. He has

mentioned Hetus, Symptomatology, Causes of Bubhuksha Vriddhi, Asadhya condition in respect of Medovriddhi (Ma.Ni. 34/1-4).

Sharangadhara Samhita (13th Century):

In 7th chapter of Madhyama Khanda Sharangadhara described the treatment of Medoroga. Jatharastha meda (Fat in abdomen and omentum) is nourished by Vrikka was first time observed by him. According to him Sthaulya is narrated as a characteristic of Shleshma prakriti.

Vangasena Samhita:

In 16th chapter of “Medovikar”, Vangasena has explained the treatment of Medoroga. In this chapter he described the Nidana, Lakshana, Samprapti and Chikitsa. Samprapti and Chikitsa are almost same as mentioned in Charak Samhita.

Chakrapani (11th century) :

Chakrapani is commentator of Charak Samhita. In 36th chapter, “Sthaulyadhikarah” he described the treatment of Sthaulya. In this chapter he has commented that Apatarpana property helps to reduce Meda and Guru property helps to alleviate Kshudha.

Dalhana (12.th Century) :

Dalhana is commentator of Sushrut Samhita, he explained the phenomenon of Ama formation in Tikshna- Agni condition. He also gives line of treatment by Chhedaniya as Strotovishodhana and interpreting Virukshana as Medoghna.

Indu (13th Century) :

He has given explanation of Saktu, Lohodaka Pulaka etc. words used in the line of treatment of Sthaulya, in his Shashilekha commentary on (AS. Su. 24/20).

Arundatta (13th Century) :

Arundatta is commentator of Ashtang Hridaya and Sangraha. In his Sarvang Sunadari Commentry he has used the word “Sthvima” for Sthaulya and explained it on the basis of etymology. **Hemadri (13th Century):** Hemadri is commentator of Ashtanga Hridaya Samhita. In his Ayurveda Rasayana Commentry he has advised to take Agnimantha as Tarkari, Dantahata as Takra, Madhukajalam as Madhumishritaudaka, and Kshara as Yavakshara while describing management of Sthaulya.

Shrikanthadatta and Vijay Rakshita (12th Century) :

According to them in broad aspect, Medodusti word is indicated for Sthaulya and Madhura Annarsa is explained as Madhura Praya Ama Iva Annarasa i.e. Madhura rasa dominant vitiated Annarasa, Shrikanthadatta has indicated Vishamagni in place of Tikshnagni as main pathology in genesis of Sthaulya (Ma.Ni.34/1-9).

Bangasena (12th century), In Medorogadhikara Sodhala (11th century), in 36th Chapter of Gadanigraha and Vrunda (7th century), in 34th Chapter of Siddhyog. They have elaborated the management side of the disease and narrated various remedies for it.

Bhava Prakash (16th Century):

In 36th Chapter of Madhya Khanda, Bhavamishra has given more emphasis on morbidity, risk factor and behavioral therapy. Furthermore he has explained distressing symptoms like Abdominal Adiposity, Svedabadha and Gatra-Daurgandhya.

Yoga Ratnakara (17th Century):

In Uttarardha of Yogaratnakar; Medoroga is explained under separate chapter. He has mentioned Medoroga Nidanam, Chikitsa and Pathyapathya separately (Yo.Ra.Ut/Me/p.N.1-3). He has mentioned Tikta Rasa as Meda Pravardhaka, drink water after meal is also a cause of increasing Sthaulya and so seat after meal is mentioned as predisposing factor for development of Tunda (Abdominal Adiposity).

Bhaishajya Ratnavali:

Bhaishajya Ratnavali is written by Govind Das Sen. In 55th chapter “Sthaulyadhikarah” he has described; Sthaulya Chikitsa, Arishta, Pathyapathya etc. (Bh.Ra.55|5/1).

Adhmalla (14th century) and Kashiram (17th Century):

In Dipika commentary of Sharangdhara Samhita, Adhamalla has thrown light on consideration of Meda as Dosha, due to” Karya Karan Bhava “concept and the efficacy of Meda to obstruct the channel and to produce the disease independently (Sha. Pu. 7/65). In Gudhartha Dipika commentary, Kashiram Vaidya has tried to explain about controversy and given solution that Medodosha is enumerated of one type due to aggravation and dominance of Vata Dosha hence, Meda is not considered as Dosha.

SAMPRAPTI -

The physiological consequences from commencement till manifestation of any disease are known as „Samprapti“. Though Sthaulya is mostly dushya dominant disorder, in which

pathogenesis of Sthaulya, all the three doshas are vitiated especially Kledaka Kapha, Saman and Vyana Vayu, Pachak pitta which are responsible factor for proper metabolism and digestion of food at the level of alimentary tract. Sushruta has explained a general pathogenesis of all diseases in six stages. In healthy individual, the Tridoshas are in equilibrium in respect to their Guna, Karma, Pramana. When the equilibrium is disturbed due to this Doshas decreases or increases quantitatively, qualitatively or functionally, the disease is formed. Sushruta has explained this process in six stages known as „Shatakriyakala“. They are –Chaya, Prakopa, Prasara, Sthanasanshraya, Vyakti and Bheda.

Sanchayavastha :

It represents the inceptive stage of disease when the Doshas are stagnated in their own natural abodes. According to Sushruta Sthaulya is „Rasa Nimittaja Vyadhi“. The Samprapti of Sthaulya begins with the Sanchay of Kapha Dosha. The causes by which Medovaha srotas gets vitiated are excessive intake of fatty food, day sleep, lack of exercise etc. these are similar to that of Kapha Vriddhikar Bhav. Sanchay of Kledak Kapha in Amashaya because of excessive consumption of Guru, sheet, snigdha, Madhur Ahar and Kaphakar Vihar leads to formation of Ama- annarasa. Charak has stated that Meda Dhatu, Kapha dosha sits in Medo Dhatu and hence, a Vriddhi of Kapha dosha occurs in the site of Meda Dhatu. Therefore Kapha sanchaya and Meda Dhatu vriddhi are the footsteps of Sthaulya. Due to Kapha Sanchaya the person feels Alasya and Gaurav. In Sanchaya avastha, there is formation of Ama-Annarasa because Pittadhara Kala is unable to secrete Pachaka Rasa which results in Jatharagnimandya leading to Strotovaigunya. In this stage the Dravyatah Vriddhi or quantitative increase is seen. **Prakopavastha :**

Dalhana has said that an increase in Dosha due to liquefaction is known as Prakopa. While undergoing through these Kriyakala Kapha Dosha in Sanchaya stage is accumulated in its chief site i.e. „Urapradesh“. In Prakopavastha it spreads to its other site i.e. Rasa, Meda, Amashaya, Sheera, kloma, Kantha etc. In this stage there is increased vitiation of Kapha Dosha leading to its morbidity in the site of Medo Dhatu. This Prakopa is of two types, Achaya and Chaya. Achaya Purvak Prakopa is due to Viharatmaka causes i.e. sleeping at day time and lack of physical exercise. Chaya Purvak Prakopa it's due to frequently eating habits and excessive consumption of Sleshmahar.

Prasaravastha:

According to Sushruta in this Aavstha, the vitiated Doshas expand and overflow the limits of their respective location. In the next „Prasar“ stage Kapha is so increased that it occupies the site of other Doshas. Here the Kapha Dosha increases qualitatively as well as quantitatively.

During these first three Shatkriyakala, two major incidences occur. Medadhātu is continuously being produced in more amounts and gets deposited mainly at its original sites Vapavahana and Kati, Kapha from normal stage, reaches upto Prasar stage. At the same time, excessive production and deposition of Medadhātu leads to sthanavaigunya in Medovaha strotas. Charak has explained 4 types of vitiation of strotas. They are Atipravrutti, sanga, siragranthi and vimarga Gamana. In Sthaulya, the Khavaigunya is produced by Atipravrutti (excessive production) and Sanga (deposition).

Sthanasanshrayavastha :

In this stage of Kriyakala, the pathogenesis becomes more morbid and Medovaha strotas gets vitiated functionally. The Kha- vaigunya exists at Medovaha strotas and Dosha-Dushya sammurchhana occurs. Meda-Kapha sammurchhana results in Ama which is neither similar to kapha nor Meda. It is sticky, raw like and possesses very bad odour. This Ama disturbs the metabolism of Medo dhātu and Apakva, Apachit Meda is formed, which only gets deposited and has no fate in the body. This excessive deposition leads to strotasavarodha. Due to strotasavarodha, vimarga gamana of Vayu take place and it accumulates in Koshta resulting in Jatharagni Pradeepana. The deposited undigested raw Meda dhātu is not in a position to supply nutrition to Asthi Dhātu. So, the further Dhatus deprived of nutrition. The Medovaha strotas which was vitiated functionally now also vitiated structurally. This takes place at the Strotas level and represents the prodromal phase or the phase of Purvarupa (Su.Su.21/33).

Vyakti Avastha:

In this stage the manifestation of all the signs and symptoms of a disease occurred (Su.Su.21/34). Hence, this stage is also called as “Rupa Avastha”. All the symptoms (Rupa) of Sthaulya are seen in this Avastha. Daurbalya, Daurgandhya, Kshudrashwas, Atisthauilya, Atisweda, Kshudhahikya, Pipasatiyog etc.

Bheda Avastha:

This stage marks the chronicity of the disease where it becomes incurable or sub-acute (Su.Su.21/35). The pathology of disease becomes more and more morbid as chronicity increases. At this stage the patient still follows the Nidanas. According to **Khalekapot nyaya** only meda Dhātu gets inadequate nutrition. The excessive Meda Dhātu formation goes on increasing and this vicious cycle continues. Over nutrition Meda dhātu and at the same time poor nutrition of other Dhatus is a basic pathology of Sthaulya.

Samprapti Ghataka:

Samprapti of Sthaulya.

Dosha:

- Vata : Samana, Vyana
- Kapha : Kledaka
- Pitta : Pachaka

- **Dushya** : Meda, Rasa Dhatu

- **Strotas :-**

- Medovaha Strotas
- Rasavaha Strotas

- **Strotodushti :-**

- Margavarodha (Ch.Su.21/5-9)
- Sanga

- Amatah (A.H.13/25)

- **Agni :**

- Jatharagni
- Rasa and Meda Dhatvagni
- Parthiva, Apya Bhutagni

- **Udbhavasthana :** Amashaya

- **Roga Marga :** Bahya

- **Prasara :** Rasayani

- **Ama**

- Dhatvagni Mandyajanita Ama

- Jatharagni Mandyajanita Ama

- **Adhistsana:**

- Udara, sphika and stana.
- Particular Vapavahana and Medodhara Kala

- **Vyaktisthana :** Sarvanga

DISCUSSION

In the present era, today's lifestyle includes less exercise, use of machineries for each and every small work, changed regular diet which contains junk food, high calorie food and non-vegetarian food and sedentary habits. In concern with H.W. lot of time for relaxing at home, no

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outdoor workloads, less time and energy consuming machineries for household work, these groups of ladies are more prone to Sthaulya. The disease Sthaulya is a well recognized disease from the Samhita period. It has been mentioned by Acharya Charaka in Ashtaninditapurushadhyaya (Cha.Su. 21). In today's era we observe growing popularity to Ayurveda globally. The need is to provide modern parameters for everything which we study. Dosha, Dhatu, Mala, Agni are no exception to this. The first line treatment advised by Ayurveda is the “**Nidana Parivarjana**” which is one of the best methods to stop further progress of the disease (Su.U.1/25).

CONCLUSION

Kaphavataj Prakriti H.W. were found more prone to Sthaulya so they should be advised proper diet regimens with exercise and made awareness about proper sleeping habits. Excessive indulgence of non-veg diet, nuclear family type, sedentary type of work, decreased awareness regarding exercise and food, faulty sleeping habits, Harshyanitya plays a major role in etiopathogenesis of Sthaulya. With continuing the habit of Diwaswapna, there is no reduction on sthauya parameters. This shows that Diwaswapna is an aggravating factor for Sthaulya and dislipidemia.

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**MANAGEMENT OF PREDIABETES WITH AHAR AND VIHAR
(LIFESTYLE MANAGEMENT) WITH SPECIAL REFERENCE TO
PRAMEHA PURVARUPAVASHTHA- A REVIEW ARTICLE**^{*1} Dr.Gharge Archana Rajaram, ^{*2} Dr. Mundane Rajiv.¹.M.D.,Ph.D.(Sch.),Professor & HOD (Rognidan & Vikruti Vigyan department), Y.M.T. Ayurvedic Medical College & Hospital, Kharghar, Navi Mumbai.².M.D., Professor, HOD (Rognidan and Vikriti Vigyan Dept.) & Dean, D.M.M.Ayurvedic Mahavidyalaya,Yavatmal.**ABSTRACT**

Pre-diabetes is an early stage of diabetes. Diabetes Mellitus type 2 is a metabolic disorder caused due to insulin resistance. It is basically a lifestyle disorder caused due to habits of eating unhealthy food and sedentary lifestyle. Due to modernization in society, the prevalence of consumption of junk food has been increased and people are lacking of exercise due to busy schedule. Pre-diabetes is a condition in which patients blood glucose level is higher than normal but not high to be labelled as Diabetes. Overweight and physical inactivity are the lifestyle risk factors for pre-diabetes. Now it is recognized as a reversible condition. In *samhitas*, the purvarupas of prameha are also mentioned which can be considered as an early stage of prameha. Prameha and diabetes simulate with each other upto some extent. Some of Prameha purvarupa are also similar to pre-diabetes symptoms. So an attempt of understanding the importance of ahar-vihar changes in reverting pre-diabetes through literature is made.

Aims: To discuss about the management of pre-diabetes with *ahar* and *vihar* (lifestyle management) with special reference to *Prameha purvarupavastha*. **Objectives:** To study the *aharjanit* and *viharjanit* changes in pre-diabetic patients as lifestyle management.

Observations and discussion: The dietary changes and physical activities are recommended in various literatures. **Conclusion:** Risk of conversion of Pre-diabetes to diabetes can be reduced by 58% by physical activity, healthy diet and weight loss in people with IGT.

Final conclusion: The changes in the diet and lifestyle can be helpful to revert pre-diabetes.

Keywords: Pre-Diabetes, *Prameha purvarupavastha*, *ahar*, *vihar*, lifestyle management.

INTRODUCTION

Diabetes is characterized by polyuria and glycosuria with high blood sugar levels. Diabetes is now a days becoming a severe silent threat to human mankind. Pre-diabetes is an early stage of diabetes and is also considered a major risk factor for heart diseases mainly coronary artery disease (CAD) due to atherosclerosis. India today is the second highest country to have diabetic patients. Sedentary life style, lack of exercise and unhealthy food eating habits are playing an

important role in the metabolism changes. Prediabetes is a condition in which people have blood glucose levels higher than normal but not as high as required for the diagnosis of diabetes. American Diabetes Association has given the diagnostic criteria for pre-diabetes as fasting plasma glucose level (100 mg/dl to 125 mg/dl), plasma glucose level after an oral glucose tolerance test (140–199 mg/dl) and the glycated haemoglobin (HbA1C) value of 5.7% to 6.4%.

Diagnostic criteria for normal glucose, prediabetes, and diabetes according to the American diabetic association:

Diagnostic test	Normal	Pre-diabetes	Diabetes
HbA1C %	< 5.7	5.7–6.4	≥ 6.5
Fasting blood glucose, mg/dl	< 100	100–125	> 125
Oral glucose tolerance, mg/dl	< 140	140–199	> 199

As per American Diabetes Association, diabetes testing should be started from age 45 years for all overweight adults having body mass index [BMI] $\geq 25 \text{ kg/m}^2$ and having any of the following additional risk factors. The risk factors are as follows: People having physical inactivity, low levels of high-density lipoprotein cholesterol, high triglycerides, hypertension or history of cardiovascular disease, history of previous elevated blood glucose level or HbA1C, first-degree relative with diabetes, women with polycystic ovarian disease, history of gestational diabetes or giving birth to a baby having weight more than 4.082 kg, an ethnic or minority racial group member.

Prameha in *Ayurveda* has been described as *Santarpanajanaya vyadhi* which is mostly caused due to excessive, unhealthy nourishment. *Prabhutmutrata* (Excessive urination) and *avilmutrata* (turbid urination) are its chief symptoms. *Santarpan* which vitiates *kaphadosha* is a major cause of Obesity which in turn leads to many metabolic disorders. Obesity also known as *Sthaulya* which is *Asthaunindit vyadhi* as mentioned by *Acharya Charaka*. *Acharya Charaka* clearly indicates that *jatharagnimandya* and *dhatwagnimandya* caused in *sthaulya vyadhi* leads to many diseases. *Viruddha aharasevan* is also one of the common factors resulting in *jataharagni vikruti*, causing *Dhatu agnimandhya*. Now a day's mental stress has been also increased due to fast growing instability in socio economic area, causing anxiety which in turn causes many disturbed sleep patterns and digestion related problems.

Prameha Purvarupas are *Dantadi maladyata, kara-pada-tal-daha, alasya, tandra, sweda, deha chikkanata, Trushna, Sharir-mutra visragandhata, Kantha-talu-mukha shosha*. So according ISBN 978-93-6039-103-4

to *Ayurveda* the early stage of *prameha* can be identified by examining the *purvarupas* in patients. Prediabetes is an intermediate state of hyperglycaemia with blood sugar levels above normal but low to be labelled as diabetic. Prediabetes can be diagnosed with blood tests. Fasting Blood Sugar of 110 to 125 mg/dl (6.1 mmol/L to 6.9 mmol/L) WHO criteria. Fasting Blood Sugar of 100 to 125 mg/dl (5.6 mmol/L to 6.9 mmol/L) ADA criteria and Glucose tolerance test: Blood sugar level of 140 to 199 mg/dl (7.8 to 11.0 mmol/L) 2 hours after ingesting a standardized 75 gram glucose.

AIMS: To discuss about the management of pre-diabetes with *ahar* and *vihar* (lifestyle management) with special reference to *prameha purvarupavastha*.

OBJECTIVES:

1. To study the *aharjanit* (dietary) and *viharjanit* (physical activity related) changes in the lifestyle of pre-diabetic patients for management from literature.
2. The primary aim of lifestyle interventions is to prevent diabetes and its complications by targeting obesity and physical inactivity. The goal for prediabetes treatment should be to normalize blood glucose levels.

MATERIAL AND METHODS: To study the review of literature from *ayurvedic* and modern text and internet literature.

OBSERVATION AND DISCUSSION

The best way to prevent diabetes is by eating a balanced diet that includes plenty of dark green leafy vegetables, tomatoes, beans, berries, whole grains, nuts and seeds, garlic.

Energy balance equation is linked with energy intake and energy expenditure, the former linked to diet and the latter to physical activity. Excess energy intake levels has shown the evidence of increasing risk of diabetes by 11% to 26%, and adequate levels of physical activity reduces risk of diabetes by 8% to 30%. A positive energy balance, in which energy intake is more than energy expenditure, results in overweight or obesity, ultimately increasing diabetes risk.

Obesity and physical inactivity results in insulin resistance by increasing the pathological deposition of fat in visceral, hepatic, and muscle tissues. Insulin resistance is also caused by intracellular sequestration of glucose transporter-4 (GLUT-4) in unexercised muscle. Visceral, particularly intrahepatic fat, is responsible for insulin resistance and lipid

accumulation in muscle cells. Glucose transport signalling is affected by the excess adipose tissue, mainly by sending toxic messages in the form of free fatty acids, cytokines, and oxidative stress. It impairs the ability of insulin to regulate glucose production by the liver and glucose uptake by the muscle.

Lifestyle changes are often advised for people at higher risk of diabetes and those who are newly diagnosed with prediabetes. The lifestyle interventions recommended by NICE are as follows:

1. Patients are asked to take moderate intensity physical activity for 2 ½ hours each week or high intensity exercise for 1 ¼ hours.
2. They are advised to achieve a healthy body mass index by losing weight gradually.
3. They are advised to replace refined carbohydrates with whole grain foods and increase intake of vegetables and other foods high in dietary fibre.
4. They are also asked to reduce the amount of saturated fat in the diet.

Physical activity

The physical activities of moderate intensity included are cycling, brisk walking, hiking, water aerobics, roller blading, using a manual lawnmower. The vigorous physical activities included are skipping, football, swimming, jogging, gymnastics and cycling either rapidly or over steep terrain.

Weight loss

NICE has recommended that the overweight person should aim to lose weight gradually with a target to reduce weight by 5 to 10% over a period of a year to achieve a healthy BMI i.e. in 18.5 to 24.9 range. This reduces the risk of developing diabetes. It can also enable people with existing pre-diabetes to better control blood glucose levels.

Dietary changes

According to NICE the risk of type 2 diabetes is decreased by reducing intake of fats, carbohydrates and increasing intake of dietary fibre. Overweight people are also advised to eat smaller portions so as to consume fewer calories.

According to *Ayurveda*, *laghu santarpan* like *Java*, honey as well as cutting of *madhur*, *snigdha* *kapha* *prakopak ahar* is said to be avoided. *Nidan parivarjan* i.e. the *hetus* like *Asyasukham*, *Swapnasukham* i.e. physical inactivity also should be avoided.

We may be able to develop a strategy to prevent pre-diabetes from progressing to diabetes by screening and risk-stratifying individuals as pre-diabetic. We should not accept a pre-diabetic state but should actually try to convert prediabetes to a normal glucose state. By achieving a normal glucose state of pre-diabetics can prevent its conversion to diabetes and its complications.

The identification and treatment of pre-diabetics is very important to make health care affordable, prevent preventable disease, and save lives. Present case report in this article suggests that prevention of progression of pre-diabetes to diabetes and conversion of pre-diabetes to a normal glucose state is possible. On the basis of a literature review, it can be concluded that physicians should screen and risk-stratify individuals pre-diabetes with FBS, PPBS, HbA1C and BMI. All prediabetics' patients should be given: 1) lifestyle modification guidance, 2) physical activity of 150 minutes per week, and 3) If BMI exceeds 25 kg/m², then 7% weight loss.

Diabetes develops progressively as a result of the complex interaction between insulin resistance and β -cell dysfunction. Insulin resistance triggers a compensatory response, where the β -cells increase insulin secretion to maintain glucose homeostasis. The degree of insulin resistance and the extent of β -cell dysfunction influence the development of glucose intolerance and progression to diabetes. People with insulin resistance will not necessarily develop glucose intolerance, nor will all people with prediabetes necessarily progress to diabetes. However, it is important to note that physical inactivity increases diabetes risk by 20%, and each additional kilogram of weight gained translates into a 4.5% increase in diabetes risk. Considering the high obesity and physical inactivity rates and poor diets among people, promoting lifestyle changes among at-risk adults before they develop the disease is imperative.

CONCLUSION

Diabetes risk can be reduced by 58% by physical activity, healthy diets, and weight loss in people with IGT. In populations with high BMI, weight loss is the main factor for diabetes risk reduction. Risk of obesity and diabetes can be reduced with a diet rich in fibre, whole grains and low saturated fat. Diet with low to moderate fat (10%-45%), high proteins, low carbohydrate, and low glycemic index is helpful in weight reduction and improving diabetes risk factors. Lifestyle interventions achieve reductions in IFG, post prandial glucose levels and HbA1C, among individuals with IGT and promote regression of pre-diabetes to normoglycemia. It also promotes clinically meaningful weight reductions. The effects of genes on diabetes risk can be mitigated by lifestyle changes.

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Moderate to vigorous physical activity is associated with the enhanced β -cell function, insulin sensitivity, and glucose regulation. Combined diet and physical activity programs decreased diabetes incidence and improving cardio-metabolic risk factors among high risk patients. The *kaphaprakopak ahar* (*Santarpanjanya*) and vihar (Physical inactivity) should be avoided (*Nidanparivarjan*).

Recommendations:

Prediabetics should be given intensive diet and physical activity guidance for a weight loss of 7% and increasing moderate intensity physical activity for at least 150 min/week. They should give follow-up for counselling regarding maintenance of lifestyle changes. They should engage in 150 minutes of moderate intensity or 75 minutes of vigorous intensity physical activity (or a combination of these) per week.

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31.

**ROLE OF UTTAR BASTI IN INFERTILITY:
A CASE REPORT**

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Introduction:

As per *Ayurveda*, four basic factors are required in healthy form for human reproduction i.e. *Rutu, Kshetra, Ambu and beej*. Abnormality among any of these factors may lead to infertility. All anatomical and physiological diseases of female genital organs are described as *yoniroga* (*yonivyapada*) in ancient *Ayurvedic* texts. It is also mentioned that not a single *yonivyapada* can occur without *Vatadosha*¹. Hence first line of treatment for *yonivyapada* should be *basti karma* as it is best remedy for *vatarogas*². *Garbhashayagat uttar basti* is another modality to treat *yonirogas*³.

Vandhya yoni vyapad (infertility) is defined as cessation of *artava*⁴. Where the word *artava* stands for menstruation as well as ovum. So for the treatment of infertility, correcting *artava vikruti* and strengthening of reproductive organs can be achieved by *uttar basti* by *til taila*. Properties of *til taila* are described as it is *madhur, ushna, teekshna, vyavayi, brihana, vrishya* and *garbhashaya shodhan*⁵. It is best among *vaatashaman dravyas*. Hence it cures diseases of *vata* and corrects most of the *yonirogas*.

Case History:

A 42-year-old woman had come for treatment of secondary infertility. She had obstetric history of two full term normal deliveries having both female, 13 years and 7 years before respectively. Her younger daughter died accidentally before six months i.e. at the age of six and half years. So patient was emotionally disturbed and strongly willing for another child. She was suffering from heavy menses too. During this period of time she didn't conceive in spite of not using any contraceptive. Her ultrasound report revealed small left hemorrhagic ovarian cyst with normal uterus. Related serological and radiological investigations were done. In which no abnormality found except low hemoglobin.

Treatment protocol:

Shatavari, Gokshur and Latakaranj churna in combination 10 gm. Bid with milk as anupana was given along with iron supplementation.

Yoga basti was given from 5th day of menstrual cycle. For anuvasana basti 60 ml. luke warm Til taila was used while for niruha basti Dashmoola kwatha 500 ml. was given.

Starting with anuvasan, both were given alternately for six days and ending with two anuvasan. Such yoga basti was given for three consecutive menstrual cycles.

Garbhashayagat uttarbasti was given for next three consecutive menstrual cycles.

For uttarbasti Til taila 10 ml was used under all aseptic precautions in operation theatre.

The uttarbasti was started on 5th day of menstrual cycle, after cessation of menstrual bleeding, daily for five days.

In the third month of treatment, follicle got ruptured on 14th day of menstrual cycle and patient conceived.

The patient was examined by regular follow-ups and routine antenatal care was given and patient delivered normally a full term healthy male baby.

Discussion:

Even though female reproductive age considered from menarche to menopause i.e. 16 to 45 years but after age of 35 years, chances of conception becomes low. The patient was of 42 years of age but strongly willing for child due to her own reasons. So this case has considered for treatment.

All necessary investigations have done. All of them found to be within normal limits except mild anemia of Hb

Gm/dl. After examination, the fact came to know that there was age related dhatu daurbalya and dhatukshaya janya vata prakopa. As patient was in premenopausal age and had secondary infertility. Hence patient was diagnosed as a case of Vandhya yonivyapada. The Basti is mainly indicated in vata prakopa janya diseases.

Use of anuvasana basti and niruha basti is also beneficial in all kinds of ailments implicating vaata adhishtanas. Charaka explained that the woman, who is unable to conceive due to vata, should be treated with basti⁶. Uttarbasti is one of the efficacious remedies in Ayurveda and proved in tackling the yonivyapada successfully.

Til taila with its enormous properties has excellent vatashamak effect. Til taila is easily

absorbed through mucous membranes, provides nutrition, performs vata shaman and may potentiate the ovarian and endometrial physiological functions. Hence it empowers the reproductive organs especially fallopian tubes and uterus.

Conclusion:

Balya, bruhanya Ayurvedic medicines along with iron supplementation also played an important role in improvement of general health of the patient. By applying all the above Ayurvedic measures the patient is treated. Thus, she conceived successfully, antenatal period was uneventful, and she gave birth to a healthy baby by normal delivery in her premenopausal age. Hence the case has been reported.

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32.

STEPS FOR QUESTIONNAIRE TOOL DEVELOPMENT

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Dept of Samhita and Siddhanta, ²Mahatma Gandhi Ayurved College Hospital and Research Centre, Salod, Wardha, Datta Meghe Institute of Higher Education and Research Centre, (D.M.I.H.E.R.), Maharashtra, India**ABSTRACT:**

Survey is used in many fields of research for data collection. And questionnaire is the commonly employed method in medical educational researches. Despite of its widespread use there is very limited availability of information of the protocol for tool development. Therefore many surveys fails to adopt rigorous methodologies in survey questionnaire design, which results in inadequate reliability and validity of data collected by the survey. This leads to a poorly designed survey which do not meet the adequate information needed by the researcher. This chapter reviews the current methodology for the development and validation of questionnaire tools and proposes to incorporate this in the field of research.

INTRODUCTION: Identification of the clinically presented symptom and diagnosis of the disease is a vital part of clinical practice. Disease manifestation, diagnosis and various clinical finding are identified and documented during clinical practice as per the reasoning and knowledge of the practitioner. This process can bring discrepancies among clinicians, with regards to the application and assessment. In research studies, this poses a disadvantage and the accomplishment of reproducibility would be compromised. Yet the accuracy of clinically presented signs and symptoms becomes a query, a standard tool for appropriate documentation is the answer for this question. Diagnostic research provides more opportunity, due to less availability of standardised diagnostic tool. Questionnaire and Interviews are the most frequently used methods of organizational diagnosis and in assessment of attributes. And Questionnaires are more commonly used type of diagnostic tool. Questionnaire can be defined as a set of appropriately set questions to collect a particular data from the respondent. The main objective to obtain the appropriate information / research data from the respondent from a set of question which is easily understandable. It is a mean of data collection for a qualitative data and converts the qualitative data to a quantitative data so the data is internally consistent and

coherent for analysis. This process of data collection ensures the standardization and comparability of data across large population.

The research work on tool development for measurement of any criteria must be concerned with accuracy, also called as reliability tests. Reliability tests helps to find whether the developed tool is able to collect the data to yield interpretable statement above individual differences. Likewise the tool development involves various steps which will be discussed in details in next session.

MATERIALS AND METHODS: Before initiation of a research work on tool development the identification of the problem and stating the Aims and objectives becomes an important step. This helps in proper formation of blue print or road map for the study. The type of tool to be developed, the rating scale is also the important point before the initiation of the work. Example: Questionnaire, interview, Survey tool, self-assessed of examiner assessed tool. A methodical, survey scale/tool development design involves seven-step.

Sly no	Steps of tool development
1.	Conduct a literature review
2.	Item generation
3.	Synthesize the literature review and interviews/focus groups followed by Item Selection/Reduction
4.	Item wording, sequencing & formatting
5.	Expert validation
6.	Pre-tests and pilot study
7.	Administering on sample population and Measuring reliability and validity

Step 1. Conduct a literature review: This is the primary step and helps to evidently define the construct and also to determine if the measure of construct previously exists. Literature review should be carried out through all the available literature. A proper literature review helps to solve the research problem better.

Step 2. Item generation: The process of development of tool start with identification of the criteria to be assessed through the developed tool. Before setting in towards item generation the

boundaries and the measurability of the variables has to be determined which is called as conceptualization and operationalization? At this stage the identified and generated items has to be clarified into various domains which further helps in simplification of the calculation and conclusion of the final tool. The set of such identified criteria will be listed and stated in the form of questions. This is the process of item generation.

Step 3. Synthesize the literature review and interviews/focus groups followed by Item Selection/Reduction: Further to ensure the conceptualization of the construct the focus group discuss has to be conducted. The expert for focus group should be from the field of interest and further modification in the tool will be based on the expert group suggestions.

Step 4. Item wording, sequencing & formatting: The generated Questions have to measure the variable but this sometimes may result in bias. The bias may be usually due to guess responses, no responses and inclination towards socially desirable response. The measures to minimize such bias are taken in these steps. The generated statements/questions will be formatted and presented in better sequence in this step. Generally the item has to be modified to be easily understandable to a teenager.

Step 5. Pre-tests or Expert validation: this step helps to ensure the clarity, comprehensiveness of the items in accordance with contemporary practices. In this stage of tool development the developed questionnaire is presented or circulated to a sample of expert in the concerned field. The review from the expert will be further considered for better modification in the developing tool. Here the experts can comment on the logical sequence of item, comprehensiveness of the tool.

Step 6. Pilot study: The developed tool has to be tested on a small sample of subjects which is called as Pilot study. The sample size for pilot study must be around 50 subjects. The data reduction after pilot study will further refine the tool. The variability of item has to be noted and the item which are highly skewed and reported as difficult to answer has to be reduced.

Step 7. Administering on sample population and tests of reliability and validity: thus developed tool has to be administered to large population and the sample size must be calculated with the help of statistic expert. Further reliability analysis tests like Cranach's alpha, item correlation has to be done. The Cranach's alpha above 0.70 is acceptable and the statements/questions having less than .070 can be deleted to maintain alpha value significantly. The validity tests involve content validity, face validity, criterion validity and construct

validity.

Content validity and face validity can be certified by expert opinion. Content validity gives the idea of completeness and ensured the range of coverage that is possible by the developed tool. Whereas of the related topic of the tool. Criterion validity is the step of correlation with the gold standard. Whereas construct validity helps us to find the result generated from the developed tool is in accordance to present theories.

The reliability tests involve test retest reliability, inter-observer reliability, and internal consistency reliability. These reliability tests help to assess the consistency of the tool on repeated administration after a gap period. The response must have consistency of more than 90% to fall into acceptance zone. Similarly the tool must exhibit a better consistency rate when assessed by two observers with in short interval.

IMPORTANCE OF QUESTIONNAIRE TOOL:

This type of tool is a boon for collection of qualitative and subjective data in a standard format. It provides a standardized research insight towards the data collected thus results in generating a Standardized, quantifiable and empirical data. It is easier method to research larger population and also allows comparison. The confidentiality and anonymity of data can be well maintained during collect of data.

CONCLUSION:

In this small chapter a brief description of tool development and the steps involved in tool development is presented. Many topics of survey tool development, KAP studies fall outside this topic of diagnostic tool development. Questionnaire tool development is an Empirical work and helps in development of various other fields of research. There is a vast scope for such research works in the field of Medicine, Education, Pharmacy, Industries etc. thus a standard protocol for various tool development is the need of the hour and this chapter is a small contribution.

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33.

THERAPEUTIC ANTIVIRAL POTENTIAL OF HERBAL DRUGS ON VIRAL INFECTIONS***¹Dr. Bhushan Mhaikar, ²Dr. Rutuja Mhaikar**

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Abstract**Background:**

Ayurved, an ancient system of medicine with rich heritage and antiquity, is well known since Vedic period. Viral infections are responsible for many illnesses, and recent outbreaks have raised public health concerns.

Viral infections are being managed therapeutically through available antiviral regimens with unsatisfactory clinical outcomes. The refractory viral infections immune to available antiviral drugs are alarming threats and a significant health concern. For hepatitis, the interferon and vaccine therapies solely aren't ultimate solutions thanks to recurrence of hepatitis C virus. Owing to the growing incidences of viral infections and particularly of resistant viral strains, the available therapeutic modalities got to be improved, complemented with the invention of novel antiviral agents to combat refractory viral infections. It is widely accepted that medicinal plant heritage is nature gifted, precious, and fueled with the valuable resources for treatment of metabolic and infectious disorders. The aims of this review are to assemble the facts and to conclude the therapeutic potential of medicinal plants within the eradication and management of various viral diseases such as influenza, human immunodeficiency virus (HIV), herpes simplex virus (HSV), hepatitis, and coxsackievirus infections, which have been proven in diverse clinical studies.

The scientific literature mainly focusing on plant extracts and herbal products with therapeutic efficacies against experimental models of influenza, HIV, HSV, hepatitis, and coxsackievirus were included in the study. Pure compounds possessing antiviral activity were excluded, and plants possessing activity against viruses other than viruses in inclusion criteria were excluded. Hundreds of plant extracts with antiviral effect were recognized. On the basis of the work of several independent research groups, the therapeutic potential of medicinal

plants against listed common viral diseases in the region has been proclaimed. In this context, the herbal formulations as alternative medicine may contribute to the eradication of complicated viral infection significantly. The current review consolidates the data of the various medicinal plants, holding promising specific antiviral activities scientifically proven through studies on experimental animal models. Consequently, the original research addressing the development of novel nutraceuticals based on listed medicinal plants is highly recommended for the management of viral disorders.

Keywords: Ayurved, COVID 19, Virus,

Introduction

SARS-COV2 is the causative agent of the potentially fatal disease known as Coronavirus Disease (COVID-19), which is a major issue for worldwide public health. It is hypothesised that this is probably the COVID-19 zoonotic origin due to the high number of affected individuals who were exposed to the wet animal market in Wuhan City, China. Patients who contracted the COVID-19 infection from another person had to be isolated and then received a range of therapies. To contain the present outbreak, numerous steps have been put in place to lessen Covid-19 transfer from person to person. Children, healthcare workers, and the elderly are among the sensitive populations that require special protection or transmission-reduction measures. We emphasise the symptoms, epidemiology, transmission, pathophysiology, and Phylogenetic research and upcoming strategies to stop the spread of this deadly illness. [1]

Due to growing worries about the emergence of medication resistance and slow progress in the creation of antiviral drugs, there has recently been a notable advancement in the field of herbal antiviral therapy. Due to their vast therapeutic range and few to no side effects, medicinal plants have been utilized extensively throughout history in almost all nations for the treatment of illnesses and infections as traditional healing treatments. Since most viral agents cannot be treated with synthetic antiviral, every effort has been made to find new medications and complementary/alternative treatments derived from various herbal preparations.[2]

Surprisingly little overlap exists in the research on the several hundred plant and herb species with potential as novel antiviral agents. Flavonoids, terpenoids, lignans, sulphides, polyphenolics, coumarins, saponins, furyl compounds, alkaloids, polyines, thiophenes, proteins, and peptides are just a few of the many active phytochemicals that have been found. A significant amount of antiviral activity has also been seen in several volatile essential oils of

frequently used culinary herbs, spices, and herbal teas. The majority of the pharmacopoeia of chemicals in medicinal plants with antiviral action, however, remains unknown due to the few classes of compounds examined. Many of these phytochemicals act in ways that are complementary to one another and overlap, such as having antiviral effects by preventing the synthesis of viral DNA or RNA or by preventing the activity of viral reproduction. Multiple-arm trials, randomised crossover studies, and more compromising designs including nonrandomized crossovers and pre- and post-treatment analyses are examples of assay methods to determine antiviral activity.[3]

Literature Review of Novel antiviral agents:

Medicinal plant viewpoint Methods are required to connect laboratory-based studies on antiviral efficacy/potency. Despite this, there is reason for optimism regarding the long-term effectiveness of phyto-antiviral agents given the recent relative success obtained using medicinal plant/herb extracts of various species that can act therapeutically in various viral infections. This review highlights the vast array of potentially beneficial medicinal plants and herbs that are awaiting evaluation and use for therapeutic applications against genetically and functionally varied virus families like Retroviridae, Hepadnaviridae, and Herpesviridae. [4].

Materials and Methods:

Through searches on various websites and web pages like Google Scholar, Medscape, BMC Medicine, the MEDLINE database, ScopeMed, and other relevant information was found using keywords like COVID 19, potential antiviral herbal remedies, relevant literature was gathered to investigate NG. Literature was also taken from a variety of Ayurvedic treatises, Ayurvedic textbooks, and available dissertations and theses, and a number of research publications were looked into literature was also taken from a variety of Ayurvedic treatises, Ayurvedic textbooks, and available dissertations and theses, and a number of research publications were looked into.

Antiviral agents:

Antiviral drugs are a class of medication used specifically for treating viral infections rather than bacterial ones.[5] Most antivirals are used for specific viral infections, while a broad-spectrum antiviral is effective against a wide range of viruses.[6] Unlike most antibiotics, antiviral drugs do not destroy their target pathogen; instead they inhibit their development. [7] Antiviral drugs are one class of antimicrobials, a larger group which also

includes antibiotic (also termed antibacterial), antifungal and antiparasitic drugs [8] or antiviral drugs based on monoclonal antibodies.[9]The majority of antivirals are thought to be generally safe for the host, making them useful for treating infections. It is important to separate them from viricides, which aren't medications but instead deactivate or kill virus particles either inside the body or outside it. Some plants, including Australian tea trees and eucalyptus, naturally produce viricides.[10]

Virus life cycle

Viruses are made up of a genome and occasionally a small number of enzymes that are kept in a protein capsule called a capsid and occasionally wrapped with a lipid coating known as a "envelope." Since viruses are unable to reproduce on their own, they spread by controlling a host cell to make copies of themselves, giving rise to the following generation. [11] [Researchers trying to create antivirals using such "rational drug design" techniques have attempted to combat viruses at every stage of their life cycles. It has been discovered that some types of mushrooms contain several antiviral compounds that work together in a similar manner.[12]

Compounds broad-spectrum antiviral properties when isolated from fruiting bodies and filtrates of different mushrooms, but it will be a considerable time before these substances can be produced and made readily available as frontline antivirals. [13]

1. The specifics of viral life cycles vary based on the type of virus, but they all follow the same fundamental pattern:
2. Attachment to a host cell.
3. Release of viral genes and possibly enzymes into the host cell.
4. Replication of viral components using host-cell machinery.
5. Assembly of viral components into complete viral particles.
6. Release of viral particles to infect new host cells.

Anti-viral targeting

The main goal of current antiviral medication development is to find viral proteins or segments of viral proteins that can be inhibited. To lessen the possibility of adverse effects, these "targets" should typically be as unlike to any proteins or portions of proteins found in humans as feasible. In order for a single treatment to be effective across a wide range of virus strains, or even across distinct species of virus within the same family, the targets must also be shared. For instance, a researcher may focus on a vital enzyme that is produced by all strains of

the virus but not by the patient and investigate what can be done to prevent it from functioning. [14]

Candidate medications can be chosen once targets have been identified, either by choosing ones that are already known to have the desired effects or by actually designing the candidate at the molecular level using a computer-aided design program. [15]

By introducing the gene that produces the target protein into bacteria or other types of cells, the target proteins can be produced in the lab for testing with potential treatments. The protein is subsequently produced in large quantities by the cells, which can then be exposed to different treatment options and assessed using "rapid screening" methods. [16]

Before cell entry

Interfering with a virus' ability to enter a target cell is one anti-viral tactic. To accomplish this, the virus must first bind to a certain "receptor" molecule on the surface of the host cell, and then it must follow a series of steps that culminate in the virus "uncoating" inside the cell and releasing its contents. Before they may uncoat, viruses with lipid envelopes must fuse their envelope with the target cell or with a vesicle that carries them there. [17]

This stage of viral replication can be inhibited in two ways

1. Using substances that attach to the cellular receptors and mimic the virus-associated protein (VAP). This could include anti-receptor antibodies, natural receptor ligands, and VAP anti-idiotypic antibodies
2. Using substances that bind to the VAP and mimic the biological receptor. This comprises synthetic receptor mimics, exogenous receptors, anti-VAP antibodies, and antibodies against receptor idiotypes. [18]

During viral synthesis

The processes that create virus components after a virus infects a cell are the focus of a second strategy. [19]

Reverse transcription

Creating analogues of the nucleotides and nucleosides that make up RNA and DNA and disable the enzymes responsible for RNA and DNA synthesis is one technique to achieve this. As opposed to "normal" transcriptase (DNA to RNA), reverse transcriptase inhibition is more frequently linked to this method. [20]

Long dsRNA helix targeting

Long dsRNA helices are produced by the majority of viruses during transcription and

replication. Contrarily, during transcription, uninfected mammalian cells often create dsRNA helices with less than 24 base pairs. A class of investigational antiviral medications known as DRACO (double-stranded RNA activated caspase oligomerizer) was first created at the Massachusetts Institute of Technology. DRACO was discovered to be effective against influenza in vivo in weanling mice, in addition to being claimed to have broad-spectrum activity against several infectious viruses in cell culture, including dengue flavivirus, Amapari and Tacaribe arenavirus, Guama bunyavirus, H1N1 influenza, and rhinovirus. According to reports, it selectively causes fast apoptosis in virus-infected mammalian cells while sparing uninfected cells. DRACO causes cell death through one of the final stages of the apoptosis pathway, where complexes with intracellular apoptosis signals are involved. bind many procaspases at once. The procaspases kill the cell by cleaving a variety of cellular proteins, activating other caspases in the cascade, and transactivating other caspases.[21]

Immune system stimulation

Another type of virus-fighting strategies encourages the body's immune system to combat viruses rather than directly attacking them. Some of these antivirals stimulate the immune system to attack a variety of pathogens rather than concentrating on a single pathogen. [22]

Interferons, which prevent the generation of viruses in infected cells, are among the most well-known medications in this group.[23] "Interferon alpha" is a well-known kind of human interferon that is frequently used in the standard care for hepatitis B and C and other interferons are also being investigated as treatments for various diseases. [24] A more specific approach is to synthesize antibodies, protein molecules that can bind to a pathogen and mark it for attack by other elements of the immune system. Once researchers identify a particular target on the pathogen, they can synthesize quantities of identical "monoclonal" antibodies to link up that target. A monoclonal drug is now being sold to help fight respiratory syncytial virus in babies,[25].and antibodies purified from infected individuals are also used as a treatment for hepatitis B.[26]

Acquired resistance

Antiviral resistance is characterised by a diminished treatment response brought on by variations in viral genotypes. Drugs' effectiveness against their intended virus is reduced or

absent in cases of antiviral resistance. Since the problem has evolved to almost all specific and powerful antimicrobials, including antiviral agents, it inevitably remains a significant barrier to antiviral therapy. [27]

Herbal Antiviral agents:

Preliminary screening by the CPE inhibition assay was carried out against BVDV-1, HSV-1, HSV-2, and influenza A to ascertain the antiviral activity of 15 medicinal plants. The samples that decreased the viral CPE by 2 logs at the MNCC were deemed to be active; their activity was verified using the MTT technique for influenza or the plaque reduction assay for BVDV-1, HSV-1, and HSV-2. For all of the active plant extracts, the Selective Index ($SI_{\text{extract}} = CC_{50} \text{ extract} / EC_{50} \text{ extract}$), or the ratio between the cytotoxic cell concentration (CC_{50}) and the effective concentration (EC_{50}), was computed. *S. molle* (E and I), *Cor. didymus* (E), *M. ilicifolia* (I), *Phyllanthus* spp. (E), *Er. japonica* (I), *N. glauca* (E and I), *Pa. debilis* (E), and *L. alba* (E) were the only plants in this study that were not effective against the tested viruses. High SI values were displayed by the *H. bonariensis* (I and E), *Ce. pachystachya* (E), and *Cor. didymus* (I), all of which were active against BVDV-1 in the screening (Table 2). Only the infusion of *J. australis* (E and I) and *Er. japonica* (E) was effective against HSV-1 and 2. [28]

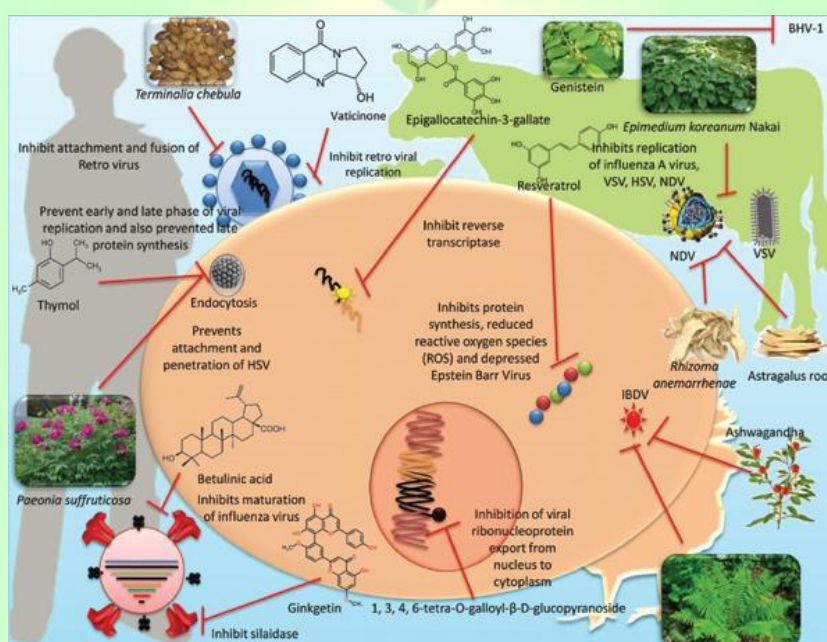
List of Herbal Antiviral drugs :

1. *Aegle Marmelos* 1. (Rutaceae), Linn. Numerous traditional uses of *A. marmelos*, such as its antibacterial, antiviral, antidiarrheal, gastroprotective, anti-ulcerative colitis, hepatoprotective, antidiabetic, cardioprotective, and radioprotective properties, have been supported by scientific research. This plant has recently attracted interest as a potential anticancer drug for the treatment of various malignancies. This study therefore concentrates on the scientific data supporting *A. marmelos*'s significant pharmacological activity, including its antioxidant, antidiabetic, antibacterial, hepatoprotective, cardioprotective, and anticancer effects.. [29]
2. The star anise plant, *Illicium verum* It is also the source of the shikimic acid precursor molecule, which is used in the production of the antiviral drug oseltamivir (Tamiflu®), a treatment for influenza A and influenza B. Moreover, the same plant has yielded a number of additional molecules, some of which have been reported to have biological advantages, such as antiviral effects. Aside from its antiviral potential, star anise also has

anti-inflammatory, anti-nociceptive, anti-microbial, anthelmintic, secretolytic, anti-inflammatory, gastroprotective, sedative, expectorant, spasmolytic, and estrogenic properties. [30]

3. *Ayurveda* uses a comprehensive methodology to create its descriptions of illness rather than just concentrating on microbiological aetiology. [31]
4. For the prevention of COVID-19, *Ayurveda* theory offers straightforward natural methods (daily regimens), herbal combinations, herbs/mineral formulations, and activities like yoga. The rejuvenating therapy known as *Swasthya Urjaskara Chikitsa* includes *rasayana* therapy. *Rasayana* is proven to be a very useful instrument in the prevention of any disease since it acts at the level of the *Dhatus* (tissues) in a *Swastha* person and administration of *Rasayana Aushadi*. [32]

Schematic Diagram of Action of Antiviral herbal drug in cell



Results and Discussion:

A variety of biochemical and bioactive components found in medicinal plants can be extracted and used to treat or prevent viral illnesses and infections. Although medicinal plants and natural products have been used for a very long time, scientific evidence and research into their prophylactic, therapeutic, and other health-related uses have only recently begun to pick up steam. Numerous scientific investigations have been made, covering everything from the identification of active ingredients to understanding the therapeutic mechanisms of antiviral herbs, to clinical trials and their effective use in neutralizing viral pathogens. As a result,

hundreds of herbs and plant metabolites have been screened, identified, and evaluated for their antiviral actions; thankfully, some of these have demonstrated notable therapeutic effectiveness in the amelioration or prevention of viral diseases. HIV/AIDS and Ayurveda In Ayurveda, the *tridosha Siddhanta*, where *tridosha* affects the *Dushya*, i.e. *dhatus* & *malas*, generating a particular quite pathologies, all the diseases mentioned in Ayurveda are frequently well understood. The discomfort, another ageing sign, a change in complexion, and other damaged organs are frequently used as the names for these illnesses. It is inevitable due to changes in environment and lifestyle; more recent conditions are gaining ground. As a result, they must be treated in accordance with the *tridosha* principle outlined in classical Ayurvedic texts.

Conclusion: This review discusses the importance of various herbal preparations made from various medicinal plants and their extracts in treating diseases brought on by various viral pathogens, including newly emerging and reemerging viruses that affect people, animals, poultry, and fish. This review certainly helps the approach of COVID 19 and related viral infections. Any remedies medicinal plants helps in fighting viral infections. Antiviral herbs fight with enhancing immune system and induced passive immunity.

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Conflicts of interest- There are no conflicts of interest.

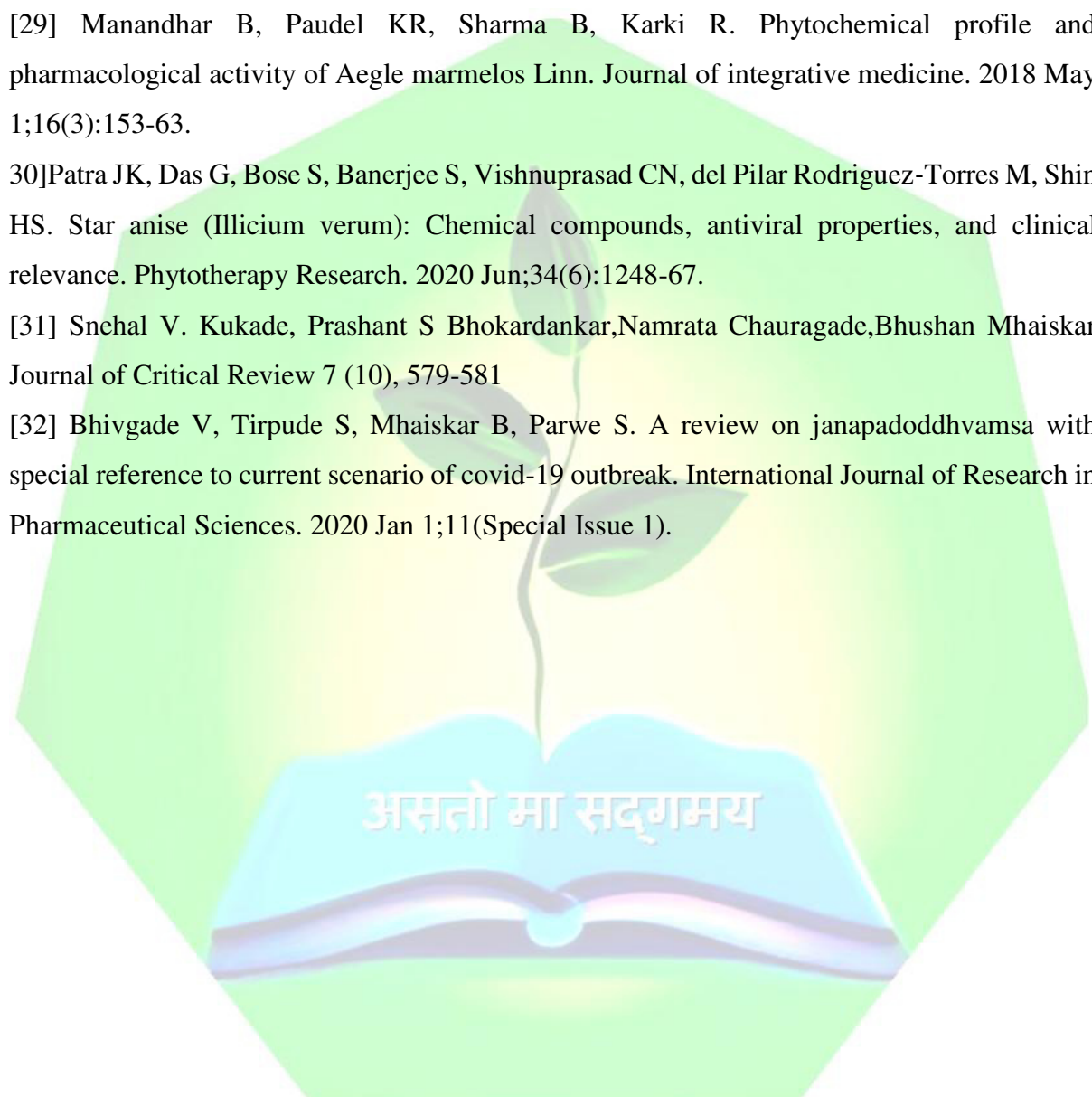
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34.

**CLINICAL REVIEW ON TESTING TISSUE REGENERATION BY
AYURVEDA MEDICATION (*AMALAKI PATRA MASHI* OINTMENT)
AND SILVER SULFADIAZINE IN *DAGDHA VRANA* (BURN WOUND)**¹Kanchan Mhaishkar, ²Pradnya Dandekar¹ PhD Scholar, Assistant Professor, Department of Rachana Sharir, Shalinitai Meghe Ayurved Medical College, Bhandara, India.² Professor, Department of Kriya Sharir, Mahatma Gandhi Ayurved College, Salod, Datta Meghe Institute of Medical Sciences, Wardha, India.**ABSTRACT****Background:**

Skin is the largest organ in the body and performs a wide variety of different function. It play an important role in the injury of the skin. Burns (*Dagdha Vrana*) are significant health challenge and healing can result in scar formation. Within the herbal medicine tradition the concept of Tonification and Trophorestoration is well established. Concepts of regeneration and Trophorestoration in Ayurveda provide another dimension to the area of regenerative medicine. Acharya Charaka suggests using drugs of Amalaki to prevent *Vrana*. Amalaki and Silver Sulfadiazine (SSD) are the two comparative drugs chosen to evaluate the Trophorestoration concept through *Dagdha Vrana* in Albino rabbits.

Materials and Methods: After identification and phytochemical study of test drugs 18 adult Albino rabbits will be divided into 3 groups with six Albino Rabbits in each group. The burn wound will be induced by using metal disc, three groups have been taken in which first is control group, second is standard control, third is experimental group. Before applying experimental drugs to respective group the tissue sample will be taken from each of albino rabbits and from one of the healthy tissue sample of normal skin will be taken by Punch Biopsy

for histopathological assay. Examination of wound area, swelling, redness, oozing will be observed. Macroscopic and Microscopic assessment of wound will be done on day 0th, 4th, 8th, and 15th, 21st day after burn. Simultaneously on 0th day and 21st day SOD and MDA test will be done. The remaining animals will be returned to the animal house for their reuse.

Expected Results: Whether *Amalaki Patra Mashi* ointment has more effect on trophorestoration property of *Twacha* in *Dagdha Vrana* (Burn wound) than Silver Sulfadiazine.

Keywords: Dagdha Vrana; Sapta twacha; Trophorestoration; Amalaki.

1. INTRODUCTION

Burns (*Dagdha Vrana*) are significant health challenge and healing can result in scar formation [1]. “Burn is defined as tissue damage caused by a variety of agents such as heat, chemicals, electricity, sunlight, or nuclear radiation. The most common are burns caused by scalds, building fires and flammable liquids and gases. Thermal burn and related injuries have remained a major cause of death and disability. Although small burns are not usually life threatening, they need the same attention as large burns, in order to achieve functional and cosmetic outcome” [2]. “Wound is defined as disruption of cellular, anatomical, and functional continuity of a living tissue. It may be produced by physical, chemical, thermal, microbial, or immunological insult to the tissue. When skin is torn, cut, or punctured it is termed as an open wound and when blunt force trauma causes a contusion, it is called closed wound, whereas the burn wounds are caused by fire, heat, radiation, chemicals, electricity, or sunlight” [3].

“Wound closure represents a primary goal in the treatment of very deep large wounds, for which mortality rate is particularly high. However, the spontaneous healing of skin eventually results in the formation of epithelized scar and scar contractures (repair) which might distort the tissues and cause lifelong deformities and disabilities. These clinical evidences suggest that wound closure attained by means of skin regeneration instead of repair, should be the true goal of burn wound management” [4].

“*Mashi Kalpana* is an important pharmaceutical preparation mentioned in Ayurveda Pharmaceutics. *Mashi Kalpana* is the form of medicine which can be prepared by heating herbal or animal content upto transfer into carbonized form. It is used externally as well as internally. It is cost effective, less time consuming preparation and having quick result” [5].

Rasa -Tarangini, Rasashastra treatise 20th century enumerated various types of *Malahar Kalpana* based on Yogratnakar mentioned *Malahar Kalapana*, it removes *Mala* (residue) etc. from wounds etc. this is similar to ointments in modern pharmaceuticals *Malahar Kalpana*. *Malahar* has a property like *Snehan* (Oleation), Cleansing, *Ropan* (Healing), *Lekhan* (Scarping) and *Varnya* (Beautifying) [6]. It has its own therapeutic advantages like easy pharmaceutical procedure ease of mode of application and higher shelf-life period [7].

The various *Dravyas* are used for applications to cure *Dagdha Vrana*. Bhavaprakash and Acharya Charak suggested that Out of all *Rasa Kashay Rasatmak Dravyas* are useful for *Vrana* *Ropan* [8]. *Amalaki* (*Embllica officinalis*) (EO) is a rich source of vitamin C, which is a potent antioxidant [9]. “It is foremost amongst the anti-aging drug (*Vayasthapan*) or best amongst the rejuvenating herbs; it has properties like *Rasayana* (adaptogenic), *ajara* (usefulness in pre-mature aging), *Ayushprada* (prolongs cell life), *Sandhana karaka* (improves cell migration and cell binding), *Kantikara* (improves complexion)” [10]. According to Acharya Charaka, *Kashay Rasa* also having the properties of *Sanshaman* (palliative), *Sangrahi*, *Sandhan* (to hold), *Pidan* (Pain killer), *Ropan* (Healing property of *Vrana*), *Shoshan* (to absorb), *Kledan* (to provide moisture). It also pacifies the *Pitta* and *Kapha Dosha* [11]. “Many researches are found the extractions of the *Amalaki* leaves are used for wound healing purpose. Leaves contains gallic acid, chebulic acid, ellagic acid, chebulinic acid, chebulagic acid, amlic acid, alkaloids phyllantine and phyllantidine etc. These phyto-Chemicals having capacity of biological activities like antioxidant, antimicrobial, anti-inflammatory, antidiabetic, antitissuive, anti-radio protective, chemo preventive, wound healing activities and so on” [12]. “Traditional system of medicine like Ayurveda which are known for their healing capabilities can offer a lot more to the science of regenerative medicine. Trophorestoration is the path to repair and regeneration. Within herbal medicine tradition notion of tonification and trophorestoration are well established” [13]. The present study will be carried out to explore the concept of trophorestoration of tissues by the test ointment with and without the treatment in second degree thermal burns and compare it with ointment Silver Sulfadiazine.

MATERIALS AND METHODS

Materials

This study will be conducted under following headings.

Experimental animal

All 18 albino rabbits weighing 3 to 3.5 kg will be used in this study. All albino rabbits will keep in a temperature-controlled ($25 \pm 1^{\circ}\text{C}$) environment with a 12-h light/dark cycle and kept in individual cages. They will feed with fresh hay, water, and fresh vegetables and given water *ad libitum* will be obtained from Central Animal House of DMIMS [14]. All experimental protocols involving the use of animals will be conducted in accordance with the CPCSEA guidelines after the approval of institutional animal ethical committee.

Selection of material/drug

The plant of *Amalaki* and other material will be identified authenticated and from Dravyaguna Department of Mahatma Gandhi Ayurved College Hospital and Research Centre, Wardha.

The material/Drug: (Both the experimental drugs will be freshly prepared)

- *Amalaki Patra* in the form of *Mashi*
- *Coconut oil*- 100% standard virgin pure oil
- Silver sulphadiazine 1% 25 gm will be used which is procured from AVBRH pharmacy

Methods**Experimental Study****Preparation of animal models**

The albino rabbits will be acclimatized to laboratory conditions for one week prior to the experiment. The albino rabbits will be anesthetized with single intramuscular injections, xylazine 2.5-10 mg/kg IM, ketamine 22-50 mg/kg IM.

Thermal injury

1. The area on the back of the rabbit was shaved and animal kept for fasting overnight. The next day the animal was anaesthetized using Ketamine in the dose of 50 mg/Kg of body weight I.M. (1 ml/kg of body weight). A metal disc of wt. 50 gm, diameter 2.5 cm (25mm), thickness 1.1cm (11mm) and area 4.910 sq. cm (491.07 sq. mm) was heated in the blue portion of the flame of spirit lamp for 5 minute and then immediately kept on the shaved part for 30 seconds with minimal pressure. This method was found to be more accurate and convenient in producing the

second degree burns in comparison with the molten wax method. The scientific paper in this regard was presented in 56th annual national conference of physiologist and pharmacologist of India, APPICON 24th December 2010, JNMC, Sawangi, Maharashtra.

2. Administration and Application of Drugs: Standard Ointment Silver Sulfadiazine and New Herbal Ointment was applied daily on the burn wound.

3. Fluid resuscitation: All animals will be immediately resuscitated with lactated Ringer's solution (2 ml/100 g body weight) applied intraperitoneally to prevent dehydration.

4. Cooling effect: After Burn the area of burn will immediately cooled by Running water and cold water. (2 to 15°C).

5. Local anesthesia: To prevent pain Novocain 5 % ointment will be used.

6. The burn should subsequently be covered with a sterile, occlusive, non-adherent dressing to reduce pain, limit contamination, and prevent further trauma.

2.2.3 Preparation of the material/drug

Preparation of *Amalaki Patra Mash* will be done on the basis of classical methods given the text of Ayurveda.

- *Amalaki Patra Mash* ointment

Preparation of the ointment will be done as per *Malhar Kalpana*.

2.2.4 Anatomical assessment criteria for burn wound

Microscopic assessment of *Dagdha Vrana*

1. According to ayurveda parameters and Grades

-*Varna* (colour)

-*Strav* (secretions)

-*Gandha* (smell)

-*Akrti* (Floor & Granulations)

2. Assessment according to *Vrana* on the day 0th, 4th, 8th, 15th and 21st

3. Wound contraction rate will be calculated according to formula-

Wound contraction rate =

Original wound area - specific day wound area/ Original wound area ×100.

4. Criteria for grading of epithelial regeneration

Microscopic Assesment of *Dagdha Vrana*-

1. Histopathology: Punch biopsy [15].

2. Parameters of histological assessment of wound.

3. Parameters of histological assessment of Ayurvediya *Twacha*.

4. Blood investigations -SOD and MDA levels.

2.3 Method of Data Collection

Data will be collected by laboratory reports and **2.4 Statistical Analysis**

The thickness of granulation tissue will be examined at the center of each wound and recorded. The data were expressed as means \pm standard errors (SEM). Differences between group means and between days four, nine, and 14 were estimated using a one-way analysis of variance (ANOVA) and a Duncan test was performed for multiple comparisons using the SPSS 12.0 for Windows. Results were considered as statistically significant at $P < 0.001$.

Expected Results

To find out better drug in *Dagdha Vrana* (Burn wound) through Trophorestoration concept of Ayurveda wrt *Twacha Sharir*.

DISCUSSION

The healthy regeneration of tissues is based on the fundamental concepts of Ayurveda which encourages tissue regeneration *Santarpan* (nourishing), *Jivaniya* (life promoting), *Bruhan* (Bulk promoting), *Ropan* (Healing), *Sandhan* (Unifying), *Tarpan* (Nutrient Provider), *Preenan* (Nutrient Provider) [15-17]. *Amalaki* acts as a both *Vayasthapan* and *Rasayan* Herb which having restoration property [18]. The concept of Trophorestoration which is the path to repair and regeneration is well established in Ayurveda through herbal medicine through herbal medicine [19]. Modern medicine is yet to explore conceptual aspects of the regenerative medicine. Hence it is need to explore Trophorestoration concept of Ayurveda based on fundamental modalities in case of *Dagdha Vrana* compare with modern medicine [20]. **4.**

CONCLUSION

Conclusion will be made on the basis of result of Statistical Analysis and histopathology reports.

CONSENT

It's not applicable.

ETHICAL APPROVAL

Protocol is approved by institutional animal ethics committee.

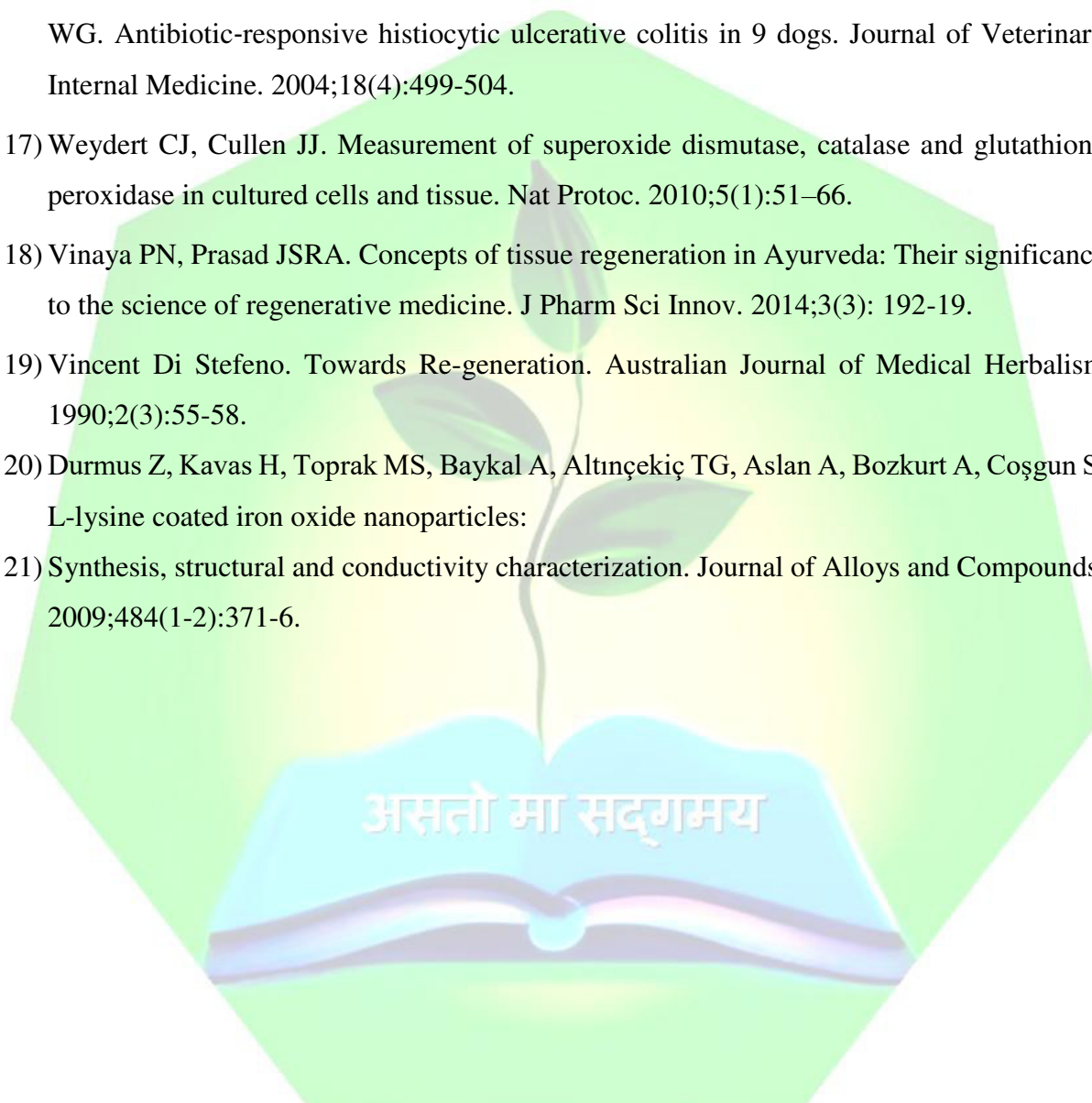
COMPETING INTERESTS

Authors have declared that no competing interests exist.

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35.

CLINICAL IMPORTANCE OF VYADHIKSHAMTVA IN PATHOGENESIS OF DISEASE¹Vd. Sumant M Pande, ²Vd. Maheshwari D Joshi,¹Associate Professor, Department of Rognidan, Mahatma Gandhi Ayurved College, Hospital & Research Center Wardha.²Assistant Professor, Department of Swasthavritta and Yoga, Dr. Rajendra Gode Ayurved College, Hospital & Research Center, Amravati.**Abstract:****Introduction:**

For prevention and cure of diseases, *Ayurveda* had advocated the adherence to concepts like dinacharya, ritucharya, sadvritta, vega dharan etc. These measures are useful in preventing the lifestyle disorders and to maintain health. For prevention of the *Aupsargik roga* (communicable diseases), *Janapadodhwansa roga* (epidemic diseases), *Krumij Roga* (Infectious diseases), *Asatmyaj roga* (allergic disorders), the concept of *Vyadhikshamtva* (Immunity) is propagated by the Ayurvedic science. According to the concept of *Ojas* or *Vyadhikshamatva* or *Bala* (immunity), the body's resistance is of tremendous importance in the daily welfare of living beings not only for disease prevention but also for rapid recovery after disease affliction. *Ayurveda* propounds that prevention is an equally important aspect of disease management as cure and thus, strengthening the immune system, is a natural way to help the body fight against the disease-causing pathogens. Acharyas promoted the use of *Rasayana* (Rejuvenation) to enhance *ojas* and *vyadhikshamatva* (immunity). Aim: To critically analyze the core ayurvedic concept of *vyadhikshamatva* in prevention and cure of disease Objectives: 1.To study the concept of *vyadhikshamatva* in ayurvedic perspective 2.To study the correlation between *Bala* and *vyadhikshamatva*.3.To study the role of *vyadhikshamatva* in prevention and cure of disease. Material and method: This is a pure literary study, done only from the original ayurvedic classical texts. Result: Results are drawn on the basis of all references Discussion: Discussion is done on every aspect of *vyadhikshamatva*.

Keywords: *Vyadhikshamatva*, Immunity, *Rasayana*, *Janapadodhwansa Roga*, Pathogenesis Of Disease.

Introduction:

व्याधीक्षमत्वं नाम व्याधीबलविरोधित्वं व्याध्युत्पादप्रतिबन्धकत्वमिति यावत्!

Vyadhikshamatva is one of the fundamental concepts of ayurved. The ability of a body to prevent and resist the development of disease is called as vyadhikshamatva. The word vyadhi means to harm, to injure or to damage and the word kshamatva means to compose, to suppress or to resist. The term vyadhikshamatva was first coined by chakrapani in a very scientific manner, as Vyadhibalavirodhitva (व्याधीबलविरोधित्वं) an ability of body to fight against the manifested disease. Vyadhyutpadpratibandhakatva (व्याध्युत्पादप्रतिबन्धक) an ability of the body to prevent the disease to develop in the body. [1]

The term *vyadhikshamatva* is not a frequently used term in *ayurvedic* literature but it is well explained in terms of *bala* and *Oja*. Certain factors in the body such as *Agni*, *Sarata*, *Prakriti*, *Ahar*, *Vihar*, etc. influence the *vyadhikshamatva* more or less. Disturbances in the normal course of *vyadhi ghataka* i.e. *Dosha*, *Dushya*, *Aam*, *Srotorodh* and *agnimandya* are considered as the major factors in the invasion and development of disease in the body. In today's era awareness about *ayurveda* is increasing day by day within general population. People are excited to receive *ayurvedic* treatment for well being and also for the diseases. Hence it becomes mandatory for all *ayurvedic* physicians to think upon fundamental principles of *ayurveda* once more. This chapter is an attempt of critical analysis of the concept *Vyadhikshamatva*. It is more highlighted in COVID 19 period. **Aim:** To critically analyze the core *ayurvedic* concept of *vyadhikshamatva* in prevention and cure of disease.

Aim: To critically analyze the core *ayurvedic* concept of *vyadhikshamatva* in prevention and cure of disease.

Objectives:

1. To study the concept of *vyadhikshamatva* in *ayurvedic* perspective
2. To study the correlation between *Bala* and *vyadhikshamatva*
3. To study the role of *vyadhikshamatva* in prevention and cure of disease.

Material and method:

This is a pure literary study, done only from the original *ayurvedic* classical texts; hence the material used is only classical texts of *ayurved*. All the references of *Vyadhikshamatva* are gathered together and light is focused on each and every angle of *vyadhikshamatva*. Discussion is done on every aspect of *vyadhikshamatva*.

Review and Literature search:**Immune reaction in *ayurvedic* perspective:**

देहधातु प्रत्यनिकभूतानि द्रव्याणि देहधातुभिर्विरोधमापद्यन्ते II
परस्परगुण विरुद्धानि कानिचित् कानिचित् संयोगात् संस्कारादपराणि
देश काल मात्रादिभिश्चापराणि तथा स्वभावादपराणिII

च. सु. 26/81

Charakacharya has explained the exact phenomenon of immune reaction in ayurvedic view. *Dehadhatu pratyanyik dravyas* (Antigens) face resistance from the *dehadhatus* (Antibodies from cells) because of *Paraspar Gunavirodha* (factors like antagonistic properties of each other), *sanyoga* (Unexpected and sensitive contact), *sanskara* (improper processing), *deshavirodha* (unsuitability to geographical distribution), *Matravirodha* (Abnormal dose), *Swabhavat* (as a natural defensive reaction against antigens)

The *asatmya dravyas* (Incompatible substances) constitute to the antigens to the body as its contact leads to the allergic manifestation in the body. These *asatmya dravyas* may be food items or microbes. This leads to the manifestation of disease and hence *vyadhikshamatva* comes into its role.^[2]

Bala and *oja* are the major components of *vyadhikshamtva*.

Bala: *Bala* is classified into three types; *sahaj*, *kalaja* and *yuktikrit*.

त्रिविधं बलमिति सहजं कालजं युक्तिकृतं चI

सहजं सच्छरीरसत्त्वयोः प्राकृतं I

कालकृतमृतुविभागजं वयःकृतं च I

युक्तिकृतं पुनस्तद्यदाहारचेष्टायोगजम्I

च. सु. 11/36

Sahaj: It means *Bala* (the physical and mental strength) which is present by birth. It is an inherent Characteristic property of an individual present since birth. *Sahaj Bala* is a result of equilibrium state of *Sharir* and *manas doshas*.

Kalakrit Bala: It is also called as *kalaja Bala*. This type of *bala* depends upon Seasonal and age related changes. *Visarga kala* offers more strength to entire population and hence this is a season In which there are less chances to have disease.

Yuktikrit Bala:

This is acquired type of strength. Strength can be acquired from healthy diet and Activities. Chakrapani says that performing exercise with appropriate methods by giving rest in Between can increase strength. Also rasayan therapy is useful to increase strength. There are certain factors which are described by charakacharya; these things Directly favor the promotion of strength (Bala enhancing factors).^[3]

बलवृद्धिकरास्त्वमे भावा भवन्ति!
तद्यथा बलवत्पुरुषे देशे जन्म, बलवत्पुरुषे काले च,
सुखश्च कालयोगः बीजक्षेत्रगुणसंपन्न आहरसंपन्न
शरीरसंपन्न सात्म्यसंपन्न सत्वसंपन्न स्वभावसंसिद्धिश्च
यौवनं च कर्म च संहर्षश्चेति !

च. शा. 06/13

1. Birth of a person in a country where people are strong by means of their natural configuration for e.g. in Punjab and sindha region, people are naturally strong.
2. Time factor which helps and promotes *dhatu poshan* for example a person born in *visarga kala*, is stronger than one in *aadan kala*.
3. Good quality of sperm, Ovum (*beeja*) and healthy uterus (*Kshetra*) Promote strength of the offspring.
4. Good quality and timely diet with appropriate nutritional values.
5. Excellency in physique
6. Wholesomeness and suitability of diet and environment.
7. Superior mental status, stress free life
8. Natural mechanism, good going daily routine.
9. Younger age
10. Physical activities and time bound exercise

Combination of all these factors exerts positive cumulative effect on *bala* and ultimately on *vyadhikshamatva*.

Birth place is a factor which one can achieve by virtue of one's destiny only; but the other factors are definitely in the patients hand to improve the strength.^[4]

शरीराणि चातिस्थूलान्यतिकृशान्यनिविष्टमांस शोणितास्थिनि
दुर्बलान्यसात्म्याहारोपचितान्यल्पाहाराण्यल्पसत्वानि च

भवन्त्यव्याधिसहानि, विपरितानि पुनर्व्याधिसहानि!

च. सु. 28/07

In above quotation, *Charakacharya* has explained which person is *vyadhiksham* and which is not. That means who can resist the disease well and who cannot.

1. Obese individual
2. Over emaciated individual
3. Whose *rakta* (Blood) and *mamsa* (Muscles) are deprived or deteriorated.
4. Very weak and debilitated person
5. Who consumes unwholesome food
6. Who consumes less amount of food
7. Whose mental status is weak, or weak moral

All these individuals are very prone to have disease on the other hand opposite to this type physical and mental constitution is capable of resisting diseases.^[5]

एषां खल्वपरेषां च वैरोधिकनिमित्तानां व्याधीनां इमे भावाः प्रतिकारा भवन्ति ।

तद्यथा विधैः च द्रव्यैः पूर्वमभिसंस्काराः शरीरस्य इति ।

च. सू. 26/104

Body should be preconditioned for fighting against the *asatmya dravyas* (allergic or incompatible) like food or microbes by slow sensitization of body with low dose of allergens or antigens at regular intervals.^[6]

Hemadri in his commentary on *Ashtang Hriday* classifies *vyadhhikshamatva* as *Krutrim* (Artificial) and *Akrutrim* (Natural)

Oja:

ओजः सोमत्मकं स्निग्धं शुक्लं शीतं स्थिरं सरम्

विविक्तं मृदू मृत्स्नं च प्राणायतनमुत्तमं ।

सु.सू.15/21

Oja plays pivot role in expressing *vyadhikshamatva* against *vyadhi*. Oja is considered as the essence of all the *dhatu*s in the body. Its, ununctus, whitish, cold, soft fluid. The body complexion and lusture depends upon the Oja.^[7] Oja is classified into *Para* and *apara Oja*.

Para Oja: *Para Oja* is a prime ojas where prana –the life resides. It's only 8 drops in quantity;

white and yellowish red in colour and partial destruction or little decrease in its quantity lead to death.

Apara Oja: *Apara Oja* is half *anjali* in quantity. Its less important than *para oja*.

ओजोविवृद्धौ देहस्य तुष्टिं पुष्टिं बलोदयः ! अ ह सू 11/37

Ojovridhhi means quantitative increase in *Oja* causes strengthening of body. It is so much intimately responsible for *bala* (Strength) of the body that the two terms *Ojas* and *Bala* can be used as synonyms. There is no *bala* without adequate quantity of *Ojas*.^[8]

Oja also undergoes *Vridhhi* (Increase) and *Dushti* (Vitiation) by indulgence of food and activities which are similar opposite to its qualities respectively. Increase of *Ojas* bestows *tushti* (contentment or satisfaction), *Pushti* (Good nourishment) and *Balodaya* (Improvement-physical and mental capacity to resist diseases) hence *Oja vridhhi* improves health and prolongs life. So it considered as ideal to health and to be cherished.

Ojakshaya on other hand weakens the body allows deases to develop, shortens the lifespans and even kills the patient hence this is considered as serious abnormality and should be prevented from taking place.

Causes of Ojakshaya:

Important causes which bring about decrease of *ojas* are *ativyayam* (excessive physical activities), *Anashana* (excessive of starvation), *Alpashana* (Very little food intake), *Ruksha anna* (intake of Dry food), *madyapaan* (Excessive alcohol consumption), *Atichinta* (Excessive thinking or Worry), *shoka* (Grief), *Krodha* (Anger), *Bhaya* (Fear), and such other mental emotions. *Prajagara* (loss of sleep), *Abhighata* (Injury), *Abhishanga* (Assault by evil spirit, microorganism), *Dhatukshaya* (Depletion of dhatus), Excessive excretion of *kapha*, *shonita* (Blood), *shukra* (semen), and *malas* (waste products), Ingestion of *visha*, (poisons) etc.

The pathological condition of *oja* reduce *vyadhikshamatva*, There are three types of vitiation of ***Oja***-

1. *Ojovyapat*
2. *Ojovisramsas*
3. *Ojakshaya*

स्तब्ध गुरुगात्रता वातशोफो वर्णभेदो ग्लानिस्तन्द्रा निद्रा च व्यापन्ने I

सन्धि विक्षेपो गात्राणां सदनं दोषच्यवनं क्रियासन्निरोधश्च I

मुच्छ्रा मांसक्षयो मोहः प्रलापो मरणमिति च क्षयेI

सु. सू.15/24

Ojovyapat: When vitiated doshas contaminate Oja, symptoms like stabdhata (Stiffness), Gurugatrata (Heaviness in body), Vata Shopha (Oedema due to vata origin), Varnabhed (Discolouration), Glani (Exhaustion), Tandra (Stupor) are produced; This condition is called as Ojovyapat.

Ojovisransa: Dislodgement of Oja from its original site is called as ojovisransa. This is a mild stage characterized by sandhivishlesha (Looseness of joints), gatrashan (General debility), Doshachyavan (Dislodgement of doshas from their normal sites), Kriya sannirodha (Obstruction to physical and mental activities).

Ojakshaya: This is third type of ojudushti which is characterized by serious manifestations like Murcchha (Fainting or loss of consciousness), Moha (Delusion), Pralapa (Irrelevant talks), Mamsakshaya (Wasting of muscles), Atidourbalya (Severe debility), Bhaya (Fear of death), Atichinta, Dikha (Excessive worry), Indriya vyatha (Disorders of sense organs), Durmana (Bad mental state), Duschaya (Bad discolouration) and even Marana (Death).^[9]

Discussion:

Immunity is a parallel concept to *vyadhikshamatva* in contemporary sciences. But immunity concerns about only communicable diseases or allergic reaction. Concept of *vyadhikshamatva* includes both communicable and non-communicable or life style disorders. Ayurveda offers healthy life style along with lot many procedures and medicines to develop *vyadhikshamatva*, *bala* or *Oja*.

There are certain concepts which *vyadhikshamatva* depends upon such as *Ahara*; Good, potent food give proper nourishment to *dhatu*, *Agni*; if the digestive power is low, it causes formation of *Aam*; which further leads to disease hence good quality of *agni* offers good *vyadhikshamatva*. *Aharavidhi*; the protocol of consuming food is also given by *ayurveda*, following this protocol avoids formation of *Aam* and maintain proper digestion. Following Daily and seasonal routine (*Dinacharya* and *Ritucharya*), Seasonal detoxification (*Ritu shodhan-Panchakarma*), *Nitya rasayana*, *Rasayana Therapy* these are some of the concept which can improve *vyadhikshamatva* very effectively.

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असतो मा सद्गमय

36.

MANAGEMENT OF LUMBAR RADICULOPATHY THROUGH PANCHAKARMA & SHAMANA CHIKITSA -A CASE REPORT¹Shweta Parwe, ²Milind Nisargandha, ³Anita Wanjari, ⁴Sheetal Asutkar¹Department of Panchakarma, ²Associate professor, Saveetha Medical College, and Hospital, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai, India³Department of R.S.B.KK. ⁴Department of Shalya. Mahatma Gandhi Ayurved College Hospital & Research Centre, Salod (H), Wardha, Datta Meghe Institute of Higher Education & Research (D.M.I.H.E.R.) (D.U.), Wardha, Maharashtra, India.**Abstract**

Background: The most productive population on earth is greatly impacted by lumbar radiculopathy. It has properties similar *Gridhrasi*, which is referenced in ancient Ayurvedic texts. It can be identified by pain that travels from the lower back down one or both legs. One of the most frequent issues examined by a spine surgeon is lumbar radiculopathy. It is thought to afflict between 3 and 5 percent of the population and affects both men and women. The main risk factor is ageing, which is made worse by the spinal column's degenerative process. Men frequently experience symptoms in their 40s, whereas women typically experience them in their 50s and 60s. **Aim and Objectives:** The purpose of this study was to evaluate the efficacy of Ayurvedic therapy for Lumbar Radiculopathy, including *Shodhana* and *Shamana Chikitsa*. **Material and Methods:** A single case study of a 42-year-old man who had Lumbar Radiculopathy in L4-L5 was examined. He reported right leg tingling and numbness as well as lumbar pain that had migrated to the right leg. He received panchakarma therapy, which includes *Siravedhana*, *Kati Vasti*, *Patrapinda Sweda*, and *Sarwanga Snehana* and *Swedana*. A total of 14 days were added to the course of treatment. **Observation & Results:** The patient's symptoms were assessed after 14 days. The successful outcome resulted in a significant improvement in the patient's overall quality of life. **Conclusion:** The regime mentioned above significantly relieves the management of lumbar Radiculopathy.

Keywords: *Gridhrasi*, Lumbar Radiculopathy, *Panchakarma*, *Shamana*, *chikitsa*, *Vedanasthapana*, *Shothahara*, *Bruhana*.

INTRODUCTION

Radicular pain frequently results from the irritation or compression of a spinal nerve. Sciatica is the common name for the pain that travels down the back of the leg to the calf or foot. This sort of pain is frequently deep and constant and can typically be triggered by particular behaviors or situations, such as sitting or walking [1]. At some point in their lives, 3% to 5% of

people are thought to develop lumbar Radiculopathy, a highly prevalent condition [2].

Men are more likely than women to experience symptoms in their 40s, while women are more frequently afflicted between 50 and 60[3]. The leading cause of lumbar Radiculopathy is degenerative spondyloarthropathies.

Without contrast, M.R.I. of the lumbar spine is the best imaging technique for assessing Radiculopathy because it can detect nerve root compression. (see Figure 2). When a tumor, infection, or previous surgery has occurred, contrast-enhanced M.R.I. may be beneficial or necessary [4].

The main course of treatment includes NSAID, physiotherapy, and steroids, all of which have serious adverse effects on the hepatic and renal systems. However, the apparent negative effects of these procedures prevent their prolonged use [5]. As symptoms increase over time, lumbar canal stenosis may develop, necessitating surgical treatment such as hemifacetectomy, microdiscectomy, laminectomy, nucleoplasty, or disc excision, among other procedures [6].

As a result, many researchers are seeking for alternative preventative and curative approaches in *Ayurveda*, i.e., holistic science.

In *Ayurveda*, the world's most productive population is harmed by lumbar Radiculopathy, a severe health issue. It has closets resembling *Gridhrasi*, mentioned in *Ayurvedic* classics. It is characterized by pain that radiates along the sciatic nerve, which travels from the lower back down one or both legs. *Gridhrasi* comes under *Nanatamja Vata Vyadhi*. Several ancient scriptures mention *Katigraha* and *Gridhrasi*; according to the ancient *Acharyas*, *Panchakarma*, particularly *Vasti (Niruha & Anuvasana)*, which *Charaka* regarded as excellent treatment, can be pretty effective in managing *Katigata Vata*. This technique, given in *Pakvashaya*, can effectively manage vitiated *Vata* as it develops in the lumbar region [7]. The current case study demonstrates how effective it is to manage Lumbar Radiculopathy employing a collaborative therapy method based on *Shodhana & Shaman Chikitsa*.

PATIENT INFORMATION:

It is a single Case study having Demographic details mentioned in **Table No.1**

CLINICAL PRESENTATION OF THE PATIENT:

The chief & associated complaints of patients are mentioned in **Table No. 2**

PROGRESSION OF DISEASE:

The patient was well before 4-5 months but had a history of falls, and the above symptoms developed. He adopted allopathic treatment for the same and got temporary relief. Therefore,

he approached the outpatient department of *Panchkarma*, Mahatma Gandhi Ayurveda College, Hospital & Research Center Salod (H) Wardha, Maharashtra, for further treatment.

HISTORY OF THE PATIENT:

The detailed account of the patient is given as follows:

- ❖ **Family history:** No significant family history was found.
- ❖ **Past History:** History of fall five months back. No other surgical history related to the Disease was obtained.
- ❖ **Personal history:**
 - **Ahar:** Vegetarian, Daily intake of oily, sweet, and fermented food
 - **Vihara:** *Jagrana* (Night awakening), *Atishrama* (excessive exertion)
 - **Nidra:** Interrupted sleep at night due to aggravation of the pain
 - **Vyasana:** Nil
 - **Vyayam:** No

CLINICAL EXAMINATION

❖ Ayurvedic examination

Ayurvedic examination of the patient is narrated in table no. 3

❖ **SAMPRAPTI GHATAKA**

Dosha - *Vata* and *Kapha*

- **Dushya** - *Majjadhatu*, *Asthidhatu*, *Mamsadhatu*
- **Strotas** - *Majjavaha*, *Asthivaha*, *Mamsavaha*
- **Udbhavsthan** - *Pakvashaya*
- **Adhishthan** - *Sandhi*, *Asthi*
- **Vyaktisthan** - *Katisthana*

❖ Modern Examination

✓ **Inspection:**

- No kyphosis or scoliosis, but there was flattening lordosis as well

- No additional anomalies, such as spina bifida or scars that may indicate spinal surgery
- ✓ The functional overlay was present, i.e., there was discomfort when the patient was requested to sit up on the couch and flex their knees or recline on the couch.
- ✓ **Auscultation:** No abnormality seen
- ✓ **Percussion:** No abnormality observed
- ✓ **Palpation:**
 - Leaning forward caused mild sensitivity between the lumbar vertebrae, the lumbosacral junction, and the lumbar muscles.
 - There was no sacroiliac joint tenderness.
 - There was axial loading since the back pain worsened when pressure was applied to the head.

The Local examinations (i.e., Disease specific examination) is given in Table 4.

INVESTIGATIONS: (Clinical findings of M.R.I. lumbosacral spine dated 25-10-2022(Image no.1)

L4-L5 DISC LEVEL: There are episodes of diffuse disc bulge indenting over the anterior thecal sac at this level with narrowing of bilateral lateral recess and severe narrowing of right-sided neural foramina and obliteration of left-sided neural foramina causing compression of bilateral traversing and exiting nerve roots. There are episodes of canal stenosis at this level

IMPRESSION: MRI LS Spine reveals LUMBAR RADICULOPATHY at L4-L5 the disc level

DIAGNOSIS: Lumbar Radiculopathy

THERAPEUTIC INTERVENTIONS:

The line of treatment (*Panchakarma & Shamana Chikitsa*) is given in tables 5 & 6, separately.

THERAPEUTIC OUTCOME:

Observations: On the basis of tables 7 and 8 this indicate the symptoms that were observed and how they improved. After 14 days of *Ayurvedic* treatment, the patient reported total remission from all indications and symptoms of lumbar Radiculopathy, including pain in the lumbar area radiating to the right leg, tingling, and numbness in the right leg.

DISCUSSION: A very serious issue is lumbar radiculopathy. It has clinical characteristics include discomfort that spreads to both legs, tingling, and numbness in both legs. It resembles *Gridhrasi* the most among the classical Ayurvedic remedies. The *Samprapti*, or Ayurvedic idea of pathogenesis, is as follows: The degeneration of *Asthi*, *Mamsa*, and *Majja Dhatu* is

what leads to the symptoms of *gridhrasi*, which are brought on by vitiated *Vata* and reduced *Shleshak Kapha*. The intended therapy strategy for this patient's likely mode of action is as follows:

Mode of action of Panchakarma Chikitsa

Abhyanga strengthens muscles by acting directly on them. *Mamsavaha Srotas*'s root is comprised of *Snayu* (ligaments), *Tvacha* (skin), and *Raktavahini* (blood vessels). *Abhyanga* is performed over *Tvacha* and *Snayu* in this instance and involves *Raktavahini*. Therefore, *Mamsavaha Srotas* receives a direct benefit in this case. Additionally, *Abhyanga* nourishes deeper *Dhatus*. Here, we may state that *Abhyanga* strengthens muscles, which results in stable joint joints[8].

Through transdermal absorption into the *Ushna Veerya* and *Snigha Guna*, *Dashmool* oil in *Kati Vasti* affects the surrounding musculature. As a result, it serves as a school for *Prashamana*, *Pushtikara*, *Shramahara*, and *Bala Vardhaka*. In the impacted area, it results in *Snigdghata* and *Mardawata*. Additionally, it stimulates local blood flow, which aids in the drainage of inflamed exudates[9].

Patra Pinda Sweda reduced *Stambha* when applied to the damaged parts part of body—*Sandhichestakara*, *Srotosuddhikara*, *Agnideepaka*, and *Kapha-Vatanirodhana*. It reduced pain, relaxed muscles, activated the local metabolic process, increased regional blood flow, and so promoted *Sneha* absorption through the skin. *Swedana* may have a hypoalgesic effect after consumption by deflecting stimuli. [10]

An essential *Sneha Kalpana* (oil formulation) called *Ksheerabala Taila* is made from *Go-Ksheera* (cow milk), *Bala* (*Sida cordifolia*), and *Tila Taila* and is referenced in *Ayurvedic* writings (sesame oil). All the nutrients needed for bone, nerve, muscle, and other bodily tissue growth and sustenance are in cow's milk. One of the three most used raw medications in *Ayurveda*, *Bala* is a precious drug. It is frequently mentioned in *Ayurveda* and used extensively in treating neurological and cardiovascular conditions. It is also said to have hepatoprotective, anti-inflammatory, and analgesic properties. All *Dhatus* are nourished and strengthened by *Tila Taila*, which regulates *Dhatukshaya* and calms *Vata*. *Go-Ksheera*, *Bala*, and *Tila Taila*'s presence enable *Ksheerabala Taila* to appease all eighty [11].

Sahachara Taila, or "*Sarvavatavikarajit*," was utilized for *Basti* [12]. *Ayurvedic* herbal oil called *Sahachar Tail Basti* is used to cure diseases caused by *Vata* imbalance, including tight muscles and joints. Because of its weight and luscious *Guna*, *Vata Dosha* is balanced. It

improves healthy muscle function by nourishing the muscle fibers. Tendons and ligaments are relaxed and soothed by their phytochemical makeup.[13].

Pitta, Rakta, and Kaphaja Vyadhies or situations where *Pitta* and *Kapha* are in *Anubandha* to *Vata Dosha* are where *Siravedhan* is most often recommended. In such cases of *Vata Prakopa* caused by *Kapha* and *Pitta Avarana*, *Siravedhan* can assist in removing the *Avarana* of *Pitta* and *Kapha Dosha*, allowing for *Anuloma Gati* of vitiated *Vata* which in turn indirectly treats the *Vatika* symptoms as well as symptoms brought on by *Kapha Dosha* [14] because the blood that has gathered is released through *Siravedhan*, creating a space that is free for limb movement [15]. Numerous potential mechanisms, including an improvement in local blood supply, a boost in local metabolism, and the production of new, active R.B.C.s, are thought to occur in the body due to bloodletting, according to contemporary theory. Resuming the healing process is made possible by directly stimulating immune-related T-lymphocytes in the bone marrow and releasing hormones and other chemical messengers, such as sympathetic nerve function [16].

Simhanada Guggulu possesses *Ama* and *Kapha's* antagonistic qualities, which are the leading causes of this sickness. They boost digestive power due to their *Agnivridhdhikara* property, which also aids in the digestion of *Amarasa*, lowers excessive *Kapha* production, and relieves *Srotas* blockage. It also soothes vitiated *Vata* because of *Ushna Virya*. When *Katu Rasa* and *Kaphahara Karma* of *Ruksha, Laghu Guna*, and *Ushna Virya Amadosha Pachana* occur, *Katu Rasa* aids in the *Agni Deepana Pachana Karma* of *Ushna Virya*. The *Lekhana Karma* of *Laghu Guna* and *Tikta Rasa* eliminates the attached *Dosha* from the *Dushita Srotas*. *Simhanada Guggulu's Ushna* qualities prevent the *Ama* from remaining at the site of pathogenesis and producing *Srotorodha*. This lowers *Srotorodha*[17].

Ashwagandha is an anabolic herb that gives you strength, a *Bruhaniya* herb that feeds your muscles and bones, and a *Rasayana* herb (immunomodulator)[18].

According to ancient texts, tablet *Shallaki* performs as *Aampachak, Kaphapitta Shamak, Vedanahara, and Shotha Shamaka* [19].

CONCLUSION:

Based on the fundamentals of *Ayurveda*, this case study demonstrated that Lumbar Radiculopathy could be successfully handled with *Shodhana* and *Shamana Chikitsa*. No, this treatment plan is what caused the unintended adverse effect. Future clinical trials should be

planned in a broad population using the same protocol.

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Image no.1: clinical findings of M.R.I. lumbosacral spine

Table No.1: Demographic details of the patient

S.N	Demographic details of patient	Information
1	Name of patient	A.B.C
2	Age	42yrs
3	Sex	Male
4	Residence	Wardha
5	Occupation	Cleark
6	D.O.A	27-01-23
7	D.O.D	10-01-23

Table No.2: Complaints of the patient

S.N	Nature of Complaint	Duration
A	Chief Complaints:	
1	Pain in the lumbar region radiating to the right leg	Since 4-5months
2	Tingling sensation on Right leg	
3	Numbness in Right leg	
B	Associated complaints:	
1	Difficulty while walking & forward bending	Since four months
2	Disturbed sleep due to pain	

Table No.3 Ashtavidh Parikshana

S.N	Head	Observation
1	Nadi	74/min, Niyamit
2	Mala	Asamyak (Once Per day, Unsatisfactory, Irregular, hard and sticky stool)
3	Mutra	Samyak(5-6 times /day , satisfactory)
4	Jivha	Saam
5	Drika	Spashta

6	Shabda	Spashta
7	Sparsha	Anushnasheeta
8	Akruti	Madhyam

Table No.4: Local examination specific to Disease

S.N	Type of Examination	Rt. Leg	Lf. Leg
1	S.L.R.T.	30°	45°
2	Sciatic notch tenderness	+++	Absent

Table No.5: Types of Panchakarma Chikitsa

S. N	Type Panchakarma Chikitsa	Drug	Dose	Time of administration	Duration
1	Sarwanga Snehana	Karpooradi oil	Q.S	Morning	14 days
2	Kativasti	Dashmool oil	100 ml	Morning	14 days
3	Patrapinda Sweda	Nirgundi(100g),Eranda(100g),Chincha(100g), Dhatura(25g),Shigru(25g),Arka(25g),Grated coconut(150g),Lemon(4) , Cotton cloth(45cm 45cm),Tags(20	-	Morning	14 days
4	Matravasti	Sahachar oil (50ml) +Ksheerbala oil (50ml)	100 ml	Morning (after lunch)	14 days
5	Siravedhana		-	-	One day

Table No.6: Shamana Chikitsa

S.N	Medicine	Dose	Frequency	Time of administration	Anupana	Duration
1	Simhanad Guggulu	2tab	T.D.S.	After food	Lukewarm water	14 days
2	Tab.Ashwagandha	2tab	B.D.	After food	Lukewarm water	14 days
3	Aamvartari Ras	2tab	B.D.	After food	Lukewarm water	14 days
4	Cap.Neuron plus	1tab	B.D.	After food	Lukewarm water	14 days
5	Tab.Shallaki XT	1tab	B.D.	After food	Lukewarm water	14 days

6	Tab.Dardnash	1tab	B.D.	After food	Lukewarm water	13 days
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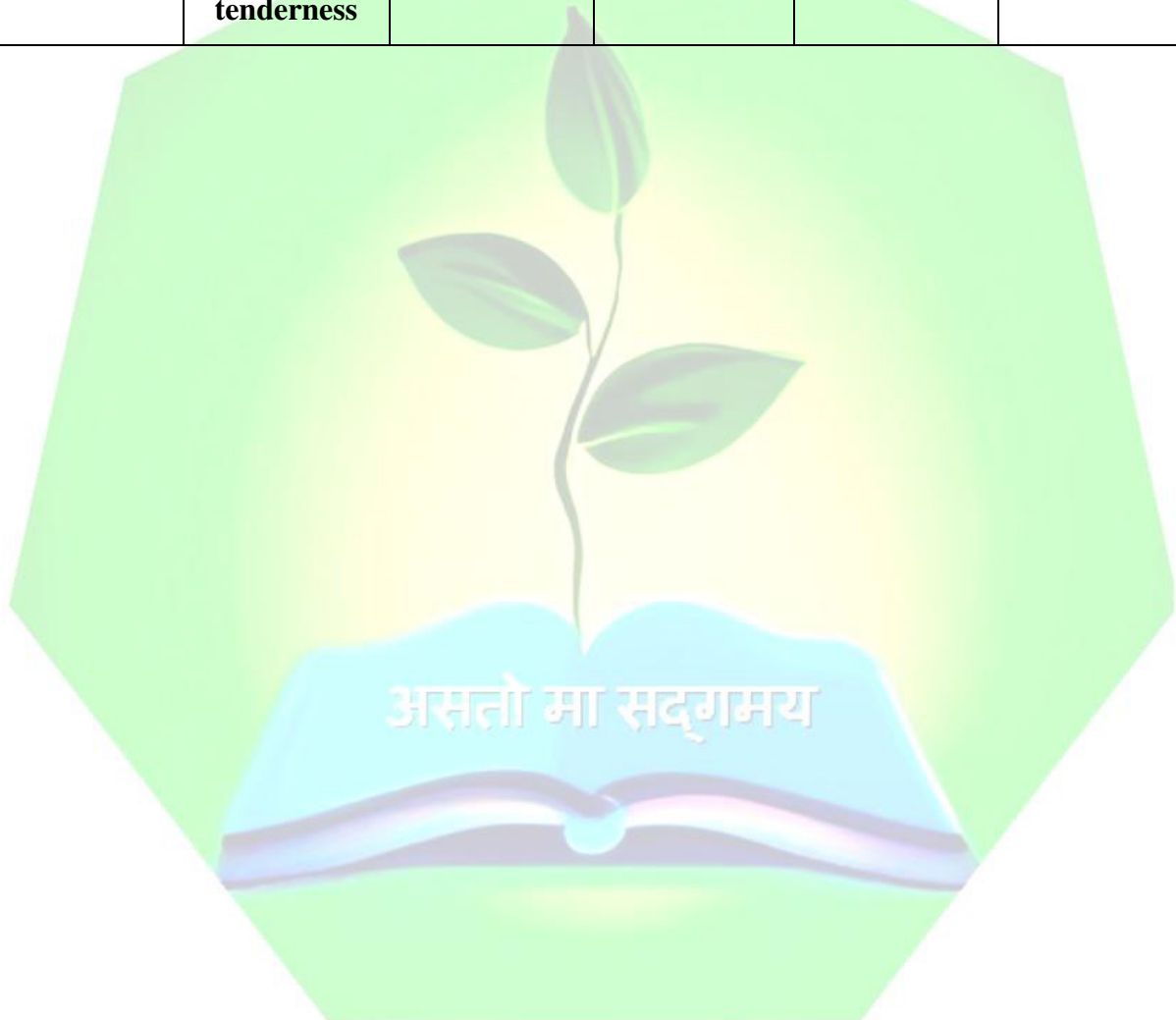
Table No.7: Therapeutic outcome

S.N	Assessment of subjective parameters	Gradation	Before Rx	After Rx (14 days)
1	Pain in the lumbar region (Katishula)		4	0
	No pain	0		
	Bearable pain relieved without medication	1		
	Moderate pain relieved by medication	2		
	Severe pain with disturbed routine work and relieved by strong analgesics	3		
	The patient can not tolerate	4		
2	Numbness in right leg (Suptata)		3	0
	No numbness	0		
	Occasionally once a day for a few minutes	1		
	Daily once a day for a few minutes	2		
	Daily two or more times /30-60 minutes	3		
	Daily more than 1 hour and many times a day	4		
3	Tingling sensation on right leg	-	Present	Absent
4	Difficulty while walking &	-	Present	Absent

	bending			
5	Disturbed sleep due to pain	-	Present	Absent

Table No.8: Assessment of objective variables

S.N	Assessment of objective variables	Before treatment		After treatment	
		Right Leg	Left Leg	Right Leg	Left Leg
1	S.L.R.T.	30°	45°	90°	90°
2	Sciatic notch tenderness	+++	Absent	Absent	Absent



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