



Research Article

A COMPARATIVE STUDY TO EVALUATE THE EFFECT OF JALAUKAVACHARANA AND SHALMALI KANTAKA LEPA IN THE MANAGEMENT OF MUKHADUSHIKA W.S.R. TO ACNE VULGARIS

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Article info

Article History:

Received: 11-03-2025

Accepted: 19-04-2025

Published: 20-05-2025

KEYWORDS:

Mukhadushika, Jalaukavacharana, Shalmali Kantak Lepa, Acne Vulgaris, Ayurveda.

ABSTRACT

Mukhadushika (acne vulgaris) is a common skin condition in adolescents, caused by inflammation, excess sebum and bacterial growth. In Ayurveda, *Mukhadushika* is linked to imbalances in *Vata*, *Kapha* and *Rakta doshas*. It can cause significant psychological distress, affecting self-esteem and social interactions. While modern treatments focus on topical and systemic medications, Ayurvedic therapies like *Jalaukavacharana* (leech therapy) and *Shalmali Kantaka Lepa* offer alternative approaches for managing the condition. **Objective:** A comparative study to evaluate the effect of *Jalaukavacharana* and *Shalmali Kantaka Lepa* in the management of *Mukhadushika* w.s.r. Acne Vulgaris. **Methodology:** A randomized clinical trial was conducted at RGGPG Ayurvedic College, Paprola, with 40 *Mukhadushika* (acne) patients divided into two groups. Group A received *Jalaukavacharana* with *Shalmali Kantak Lepa*, while Group B treated with *Lepa*. **Result:** The study showed that the results in the *Jalaukavacharana* along with *Lepa* group were significantly better than in the *Lepa*-only group, highlighting the beneficial synergistic effects of combining *Jalaukavacharana* with *Shalmali Kantak Lepa* alone. **Conclusion:** The study shows that combining *Jalaukavacharana* with *Shalmali Kantak Lepa* offers superior therapeutic benefits for treating chronic *Mukhadushika*. This integrative approach enhances treatment efficacy, providing a promising alternative to conventional acne management.

INTRODUCTION

People today are highly conscious of both their health and appearance, recognizing that the two are closely intertwined. As a result, health and beauty have become inseparable, like two sides of the same coin. However, industrialization, environmental pollution and the pressures of modern life have taken a toll on both physical and mental health. Factors such as stress, anxiety, anger and depression have become increasingly common, further exacerbating the negative impact on overall well-being. These challenges contribute to a range of skin issues, including acne, eczema and premature aging. The combination of unhealthy lifestyle choices, poor diet

and exposure to environmental pollutants has made it more difficult for many to maintain healthy, radiant skin. Addressing these underlying causes is essential for achieving both physical health and beauty. *Mukhadushika*, also known as *Yuvanapidika*, is a skin condition that was first described by Acharya Sushruta as a *Kshudra Roga*^[1] and by Acharya Charaka as a *Raktapradoshaja Vikara*^[2]. This condition is primarily caused by the vitiation of *Vata*, *Kapha* and *Rakta*^[3], which leads to symptoms such as *Ruja*, *Shotha*, *Medogarbhata*, *Ghana Pidika* and lesions resembling *Salamalikantakaprakhyā*^[4]. In Ayurveda, the management of *Mukhadushika* involves both *Shodhana* and *Shamana* therapies. Recommended treatments include *Vamana*, *Virechana*, *Raktamokshana*^[5] as well as external therapies like *Lepa*, *Upnaha* and Ayurvedic oral medications. Among these, *Raktamokshana*, particularly through *Jalaukavacharana* (leech therapy), is considered highly effective for *Raktapradoshaja Vikara* (blood disorders). *Mukhadushika* can be correlated with acne vulgaris on the basis of sign of

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<https://doi.org/10.47070/ayushdhara.v12i2.1986>

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symptoms in modern medical science. Acne is a chronic inflammatory disease of the pilosebaceous units characterized by seborrhoea, the formation of open and closed comedones, erythematous papules and pustules and in more severe cases nodules, deep pustules and pseudocysts. Often, there will be some degree of scarring.^[6] It develops when these follicles become clogged due to the overproduction of sebum, accumulation of dead skin cells and bacterial growth, particularly *Cutibacterium acnes*. Environmental factors such as pollution, along with hormonal changes and genetic predisposition, can further exacerbate the condition. Acne typically manifests as lesions like papules, pustules, nodules and cysts, primarily occurring on the face, chest and back.^[7] While it is not a life-threatening condition, untreated or severe acne can lead to permanent scarring and negatively affect an individual's confidence and self-esteem. Proper skincare, lifestyle modifications and timely treatment are essential to manage acne effectively and reduce the risk of long-term complications.

AIMS AND OBJECTIVES

To compare the efficacy of *Jalaukavacharana* (leech therapy) along with *Shalmali Kantaka Lepa* and *Shalmali Kantaka Lepa* alone in the management of *Mukhadushika* (acne vulgaris).

MATERIAL AND METHODS

Selection of patients: Patients of *Mukhadushika* fulfilling the diagnostic criteria were registered from the OPD/IPD of Rajiv Gandhi Govt. Ayurvedic Hospital, Paprola, Dist. Kangra (H.P.). Total no. of 40 patients were enrolled for this study.

Intervention

Total 40 patients having cardinal symptoms of *Mukhadushika* were selected and randomly divided into two groups. In Group A, patients were treated with *Jalaukavacharana* as a *Shodhana Chikitsa* along

with *Shalmali Kantaka Lepa* for local application on affected area, twice in a day. Here milk was used as base. Whereas Group B patients were given only *Shalmali Kantaka Lepa* as local application on affected area, twice in a day.

Duration of trial: 30 days

Follow up: Follow up had been done twice in a month.

Diagnostic Criteria

The diagnostic criteria were based on the signs and symptoms of *Mukhadushika* as described in Ayurvedic texts and the clinical features of acne vulgaris outlined in modern literature, including *Shalmali Kantaka Prakhya Pidika*, *Ruja* (pain), *Shotha* (inflammation) and *Ghana Yuvanapidika* (nodular acne).

Inclusion Criteria

- Patient between the age group of 16-40yrs.
- Patient presenting with cardinal features like *Shalmali Kantakakara*, *Toda*, *Ghana Yuvanapidika*.
- Patient fit for *Raktamokshana*.

Exclusion Criteria

- Patients below age of 16 years and above 40 years of age.
- Patients suffering from diabetes mellitus, hepatitis, immune deficiency syndrome and infectious disease etc.
- Bleeding tendency disorders, Anaemic patients and Staphylococcal boils.
- Pregnant and lactating women.

Investigations

- **Haematological:** CBC, BT, CT
- **Biochemistry:** Lipid profile, FBS
- **Serological:** HBsAg, immune status

Criteria for Assessment

The patients were assessed in grading pattern prepared as per the sign and symptoms of the disease.

Signs and Symptoms	Grade	BT	AT
Srava (Discharge)			
No discharge	0		
Discharge in few lesions	1		
Discharge in half of the lesions	2		
All the lesions full of discharge	3		
Pidika			
No <i>Pidika</i>	0		
<i>Pidika</i> resembling comedones	1		
<i>Pidika</i> resembling papules	2		
<i>Pidika</i> resembling pustules	3		
<i>Pidika</i> resembling nodules(cyst)	4		

Shotha (Inflammation)			
None	0		
Mild (erythema)	1		
Moderate (erythematous papules)	2		
Severe (widespread erythema and pustules)	3		
Toda (Pain)			
No pain	0		
Mild pain not disturbing normal activity	1		
Occasional pain disturbing normal activity	2		
Continuous pain disturbing normal activity	3		
Kandu (Pruritis)			
No pruritus	0		
Mild pruritus not disturbing normal activity	1		
Occasional pruritus disturbing normal activity	2		
Continuous pruritus disturbing normal activity	3		
Stabddhata (Hardness)			
Absence of hardness; soft lesions	0		
Firmness felt on palpation	1		
Very hard in consistency	2		
Sparsh Ashayata (Tenderness)			
No tenderness	0		
Mild tenderness	1		
Wince of his/her face	2		
Not allow to touch the face	3		
Snigdhata (Unctuousness)			
No Snigdhata	0		
Mild Snigdhata	1		
Moderate Snigdhata	2		
Severe Snigdhata	3		
Daha (Burning)			
No Daha			
Mild Daha (bearable)			
Moderate Daha (irregular)			
Severe Daha (Continuous)			
Paka			
No Paka	0		
Mild Paka	1		
Moderate Paka	2		
Severe Paka	3		
Vaivarnya (Discolouration)			
No Vaivarnya	0		
Mild	1		
Moderate	2		
Severe	3		
Number of Pidika			
<10 in number	0		

10-20 in number	1		
>20 in number	2		
Size of Pidika			
<2mm	0		
2-5mm	1		
>5mm	2		

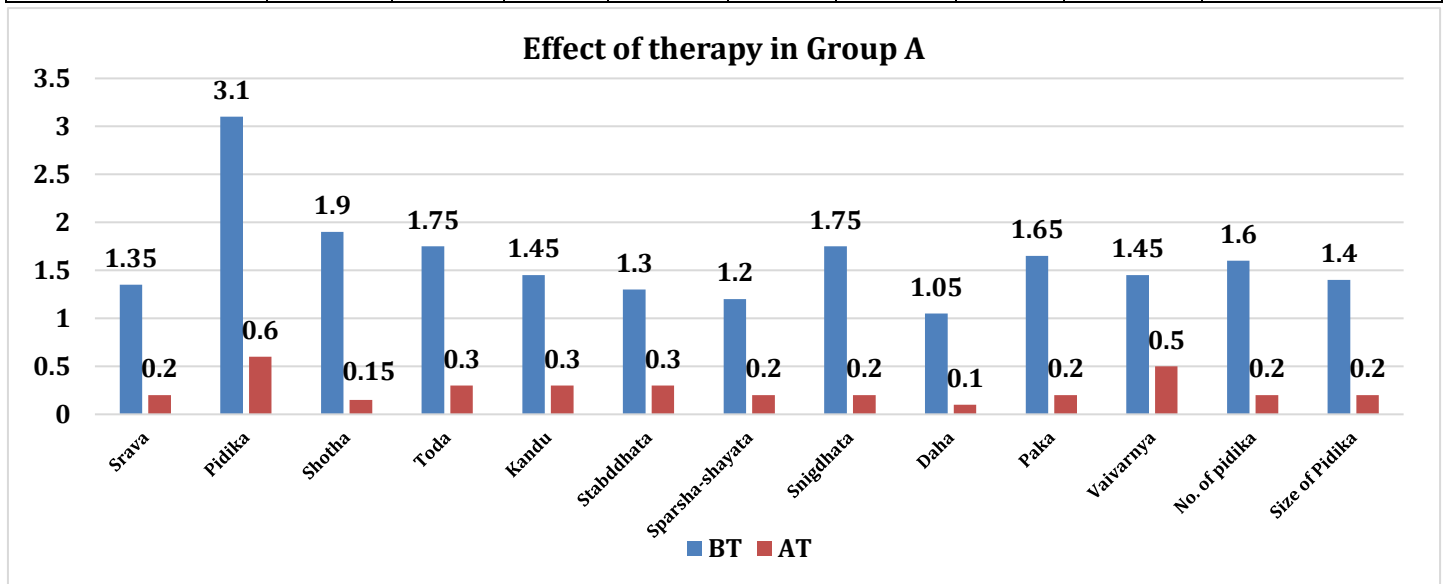
Statistical Analysis

The data were statistically analysed using appropriate tests. For parametric data, the "Student's paired t-test" was applied for within-group comparisons, while the "unpaired t-test" was used for intergroup comparisons. For non-parametric data, the "Wilcoxon Signed Rank Test" was used for within-group analysis and the "Mann Whitney U test" was used for intergroup comparison

RESULTS

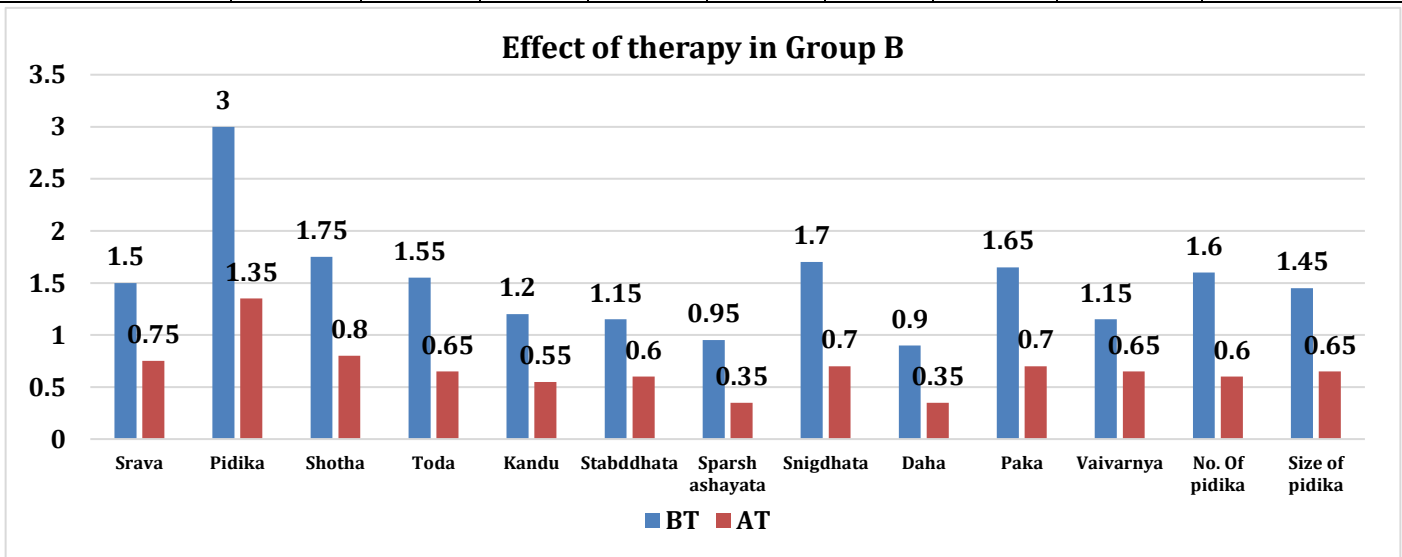
Statistical Analysis of Overall effect of Jalaukavacharana along with Shalmali Kantaka Lepa in Group -A (Wilcoxon Signed Rank Test)

Symptoms	Mean Score		\bar{x}	%	SD ±	SE ±	z	p	Significance
	BT	AT							
Srava	1.5	0.75	0.75	50.00	0.55	0.12	3.13	<0.05	S
Pidika	3.0	1.35	1.65	55	0.49	0.11	4.07	<0.001	H.S.
Shotha	1.75	0.80	0.95	54.3	0.69	0.15	3.58	<0.001	H.S.
Toda	1.55	0.65	0.90	58.1	0.64	0.14	3.63	<0.001	H.S.
Kandu	1.2	0.55	0.65	54.2	0.49	0.11	3.61	<0.001	H.S.
Stabddhata	1.15	0.60	0.55	47.8	0.51	0.11	3.31	<0.001	H.S.
Sparshash-ayata	0.95	0.35	0.60	63.15	0.68	0.15	2.97	<0.05	S
Snigdhata	1.7	0.7	1.00	58.82	0.72	0.16	3.54	<0.001	H.S.
Daha	0.9	0.35	0.55	61.11	0.60	0.13	3.05	<0.05	S
Paka	1.65	0.7	0.95	57.57	0.68	0.15	3.57	<0.001	H.S.
Vaivaranya	1.15	0.65	0.5	43.47	0.60	0.13	2.88	<0.05	S
No. of Pidika	1.6	0.6	1.00	62.50	0.64	0.14	3.70	<0.001	H.S.
Size of Pidika	1.45	0.65	0.8	55.17	0.52	0.11	3.77	<0.001	H.S.



Statistical Analysis of Overall effect of *Shalmali Kantaka Lepa* in Group B (Wilcoxon Signed Rank Test)

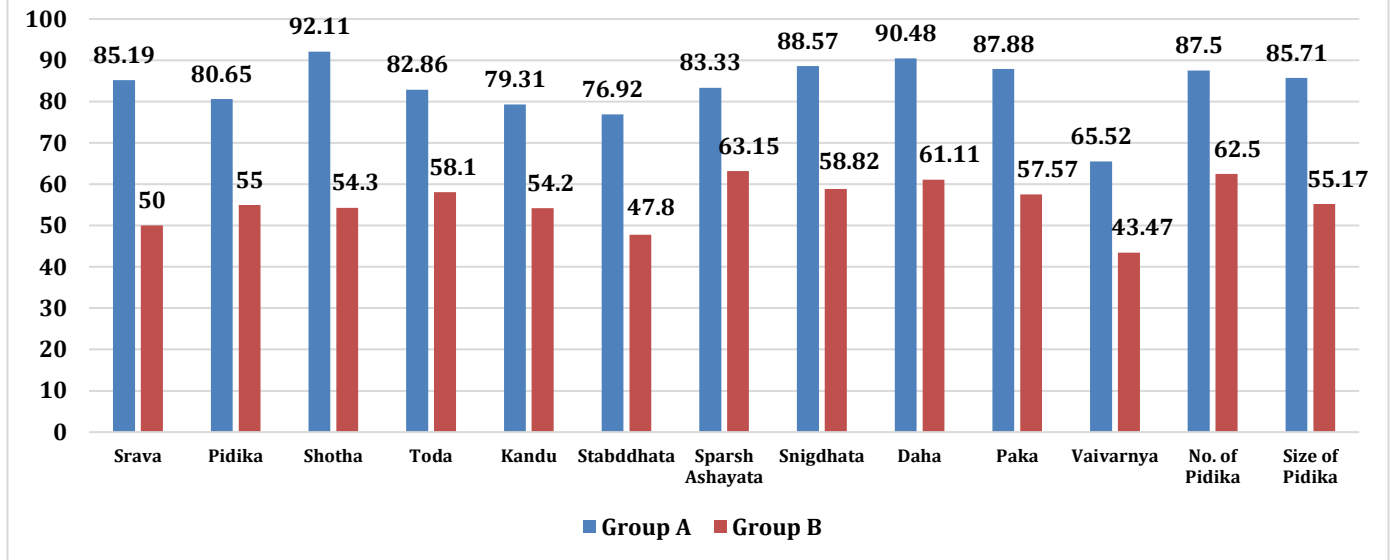
Symptoms	Mean Score		\bar{x}	%	SD ±	SE ±	z	p	Significance
	BT	AT							
<i>Srava</i>	1.5	0.75	0.75	50.00	0.55	0.12	3.13	<0.05	S
<i>Pidika</i>	3.0	1.35	1.65	55	0.49	0.11	4.07	<0.001	H.S.
<i>Shotha</i>	1.75	0.80	0.95	54.3	0.69	0.15	3.58	<0.001	H.S.
<i>Toda</i>	1.55	0.65	0.90	58.1	0.64	0.14	3.63	<0.001	H.S.
<i>Kandu</i>	1.2	0.55	0.65	54.2	0.49	0.11	3.61	<0.001	H.S.
<i>Stabddhata</i>	1.15	0.60	0.55	47.8	0.51	0.11	3.31	<0.001	H.S.
<i>Sparshash-ayata</i>	0.95	0.35	0.60	63.15	0.68	0.15	2.97	<0.05	S
<i>Snigdghata</i>	1.7	0.7	1.00	58.82	0.72	0.16	3.54	<0.001	H.S.
<i>Daha</i>	0.9	0.35	0.55	61.11	0.60	0.13	3.05	<0.05	S
<i>Paka</i>	1.65	0.7	0.95	57.57	0.68	0.15	3.57	<0.001	H.S.
<i>Vaivarnya</i>	1.15	0.65	0.5	43.47	0.60	0.13	2.88	<0.05	S
No. of <i>Pidika</i>	1.6	0.6	1.00	62.50	0.64	0.14	3.70	<0.001	H.S.
Size of <i>Pidika</i>	1.45	0.65	0.8	55.17	0.52	0.11	3.77	<0.001	H.S.



Statistical Analysis of inter group comparison (Mann Whitney U Test)

Symptoms	% Relief in Group A	% Relief in Group B	% Diff.	z value	p value	Significance
<i>Srava</i>	85.19	50.00	35.19	1.66	>0.05	N.S.
<i>Pidika</i>	80.65	55	25.65	1.66	>0.05	N.S.
<i>Shotha</i>	92.11	54.3	37.81	3.22	<0.05	S
<i>Toda</i>	82.86	58.1	24.76	2.26	<0.05	S
<i>Kandu</i>	79.31	54.2	25.11	2.10	>0.05	N.S.
<i>Stabddhata</i>	76.92	47.8	29.12	2.242	<0.05	S
<i>Sparsh-Ashayata</i>	83.33	63.15	20.18	1.76	>0.05	N.S.
<i>Snigdghata</i>	88.57	58.82	29.75	2.10	<0.05	S
<i>Daha</i>	90.48	61.11	29.37	1.18	>0.05	N.S.
<i>Paka</i>	87.88	57.57	30.31	2.34	<0.05	S
<i>Vaivarnya</i>	65.52	43.47	22.05	1.93	>0.05	N.S.
No. of <i>Pidika</i>	87.5	62.50	25	1.99	>0.05	N.S.
Size of <i>Pidika</i>	85.71	55.17	30.54	2.28	>0.05	N.S.

Comparison in inter Group



DISCUSSION

Jalaukavacharana

Mukhadushika is a skin disorder. It has been considered as *Raktapradoshaja Vikara* in our classical text and *Jalaukavacharana* has been recommended as a therapy for *Raktapradoshaja Vikaras* and *Chirkari Vyadhis*.

If there is an excess of *Dosha*, *Shodhana* might be needed (Ch.Vi.3/44). Particularly when *Rakta* is vitiated, *Raktamokshana* among the *Shodhana* may provide more relief than other *Shodhana* (A.H.Su.14/5). According to Acharya Shushruta, *Raktamokshana* acts more quickly than other *Shamana* treatments and not only clears the channels in the affected area but also eliminates disease from other parts of the body. Vitiating *Rakta* is eliminated by the application of leech in the disease *Mukhadushika*. Thus, based on classical reference, it is proven that *Jalauka* gives more impact in *Raktaja Vyadhi* or *Mukhadushika*. *Jalauka* sucks only the impure blood with ideal example of Swan by Acharya Vagbhata (A.S.Su.35/5).

When leeches applied topically, leeches suck blood from the skin's surface, maybe from capillaries or extracellular compartments. By experiment, PO_2 of leech expelled blood and PO_2 of arterial were measured. According to the remarkable findings, PO_2 of leech expelled blood comparatively less than human arterial blood. Leeches suck the blood locally when applied over the pathogenic area because the leeches suck the vitiated pathogenic substances. Hence, leeches are most effective in *Mukhadushika* to eliminate morbid, vitiated *Dosha* and *Dhatus*. But the effect of the therapy is attained not only due to expelling out but at the same time the leeches release

some of the enzymes such as hirudin hyaluronidase, collagenase etc, into the superficial layer of the skin.

According to modern science, during application of leech, hirudin is secreted by the salivary gland of leeches which prevents the coagulation of blood and spread locally. The collateral circulation will improve and any residual blood will clean off from the area as the leech sucks the blood.

Hirudin also possesses mild analgesic, anaesthetic and anti-inflammatory effects. Therefore, patient can not feel pain during blood sucking by leech. It implies tissue regeneration by increasing amount of collagen and elastin fibre in the connective tissue matrix. Because it contains hyaluronic acid, it enhances the skin's ability to retain moisture. Therefore, the itchy skin may be normal because of its moisturising characteristics. *Jalaukavacharana* gives Immunostimulation and immuno-modulating effect as well.

Lepa

According to Acharya Sushruta, application of *Lepa* in *Pratiloma Disha* (opposite direction) of the *Romakupa* (hairs) on the lesions help the active principle in *Lepa* blended with milk base to enter *Romakupa* and get absorbed through *Shiramukha* and *Swedavahi Srotasa*. *Romakupa* is connected to the openings of the *Dhamanis*. Therefore, the active principle of *Lepa* is absorbed and passed to the deeper layer.

The epidermis consist of two types of cells are keratinocytes and melanocytes. Depending on the concentration gradient, the outermost layers perform as a passive membrane that allows certain substances to diffuse across the skin. *Lepa* most likely works through this phenomenon. The absorbed substance is

then catabolically degraded by the viable epidermis with the help of essential enzymes, acting to stop the pathological process and relieve symptoms. As per Ayurveda, *Bhrajakagni* or *Bhrajaka Pitta* may have attributed *Pachana* with this process.

Shalmali is *Madhura* and *Kashaya Rasa Pradhana Dravya*. *Madhura Rasa* has property of *Kshina-kshata-sandhankara*. Thus, it promotes wound healing and reduces the burning sensation and scar (*Vranavastu*). *Kashaya Rasa* has property of *Shoshana* so it reduces *Shotha* and *Medogarbhatva*.

Shalmali Kantaka Lepa has *Kapha Pitta Shamaka* property so it relives *Daha* (burning) and *Kapha* dominancy symptoms such as *Kandu*, *Shotha* and *Medogarbhatva* etc, so eliminating the pathology and improving health.

Laghu Guna has property of *Lekhana* and *Vrana Ropana*. As a result, excess sebum that has accumulated is expelled along with dead cell debris. *Ruksha Guna* has property of *Kharata*. It is expected to relieve symptoms of *Medogarbhatva*, as *Medogarbhatva* is a form of *Kleda* that is collected inside the sac and *Kharata* reduces *Kleda*.

CONCLUSION

- The study shows that the results in the *Jalaukavacharana* along with *Lepa* group were significantly better than only *Lepa* group, highlighting the beneficial synergistic effects of *Jalaukavacharana* along with *Lepa*.
- The significant impact of *Jalaukavacharana* could be attributed to its ability to modify sebaceous gland secretion and address hormonal imbalances. Additionally, *Jalaukavacharana* helps to clear *Srotorodha* and clear deep-seated pathologies.
- It was observed during the study that proper following of the *Pathya-apathya* during and after the treatment leads to improved outcomes.

- After completing the treatment in both groups, some patients developed new lesions. This could be due to continuing the *Nidana Sevana* again.

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Cite this article as:

Shivaji Bhadauria, Charu Supriya. A Comparative Study to Evaluate the Effect of Jalaukavacharana and Shalmali Kantaka Lepa in the Management of Mukhadushika w.s.r. to Acne Vulgaris. AYUSHDHARA, 2025;12(2):1-7.

<https://doi.org/10.47070/ayushdhara.v12i2.1986>

Source of support: Nil, Conflict of interest: None Declared

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A Clinical Study to Evaluate the Antihypertensive Effect of Herbal Formulation (*Cap Punarnavadi Mishran*) in Management of Primary Hypertension

Research Article

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Abstract

The present clinical study aimed to evaluate the antihypertensive efficacy of a polyherbal formulation, *Capsule Punarnavadi Mishran*, in the therapeutic management of primary hypertension. A total number of 30 patients diagnosed with primary hypertension were enrolled from both outpatient and inpatient departments of Dr. D. Y. Patil Ayurved College and Hospital, Pimpri, Pune (Maharashtra). All participants received *Capsule Punarnavadi Mishran* as a part of their treatment regimen over a defined study period. The effectiveness of the intervention was assessed using both objective parameters primarily changes in systolic and diastolic blood pressure and subjective clinical symptoms. Blood pressure measurements were recorded at baseline and at regular intervals during the course of treatment. The results demonstrated a statistically significant reduction in both systolic and diastolic blood pressure among all 30 participants. Based on clinical assessment, 6 patients (20%) exhibited excellent improvement, 14 patients (46.7%) showed moderate improvement, while 10 patients (33.3%) demonstrated mild to moderate symptomatic relief. The formulation was well-tolerated, and no adverse events were reported during the trial. These findings suggest that *Capsule Punarnavadi Mishran* may offer a promising adjunct or alternative in the management of primary hypertension. Further large-scale, randomized controlled studies are recommended to validate these preliminary results and elucidate the underlying pharmacological mechanisms.

Keywords: *Punarnavadi Mishran*, Primary hypertension, Herbal formulation, Blood pressure, Ayurvedic medicine, Antihypertensive.

Introduction

The World Health Organization has identified India as one of the nations expected to experience the highest burden of lifestyle-related disorders in the coming decades. Prominent among these are cardiovascular diseases, hypertension, obesity, diabetes mellitus, and cancer (1). Hypertension, in particular, is a multifactorial disorder with aetiological contributors including psychological stress, sedentary lifestyle, obesity, and excessive dietary salt intake (2). Globally, hypertension affects approximately 15–20% of the adult population and significantly increases the risk of cardiovascular events such as coronary artery disease, cardiac hypertrophy, aortic dissection, renal failure, and cerebrovascular complications (3,4). It is also a key risk factor for ischemic stroke, atherosclerosis, myocardial infarction, and end-stage renal disease (5). Nearly 50%

of the estimated 17 million annual deaths from cardiovascular disease are attributed to complications arising from hypertension (6). In highly populated countries such as China and India, the absolute number of individuals affected by hypertension is alarmingly high. Current estimates suggest that 26% of the global adult population is hypertensive, with this figure projected to rise to 29% by the year 2025 (7). Despite the availability of several classes of conventional antihypertensive agents, their long-term use is often limited by adverse effects, poor tolerability, and reduced patient compliance, leading to frequent treatment switching or discontinuation (8). Therefore, the search for safe, well-tolerated, and cost-effective alternatives particularly from traditional and complementary medicine systems has become an urgent priority in the global health landscape.

Aims and Objectives: Primary Objectives -To evaluate the effectiveness of *herbal* formulation (*Cap Punarnavaadi Mishran*) in Primary Hypertension. Secondary Objectives - To study the effectiveness of *herbal* formulation (*Cap Punarnavadi Mishran*) in symptoms like *Shirshool* (headache), *Bhrama* (dizziness), *Klama* (fatigue), *Anidra* (insomnia), *Swedadhikya* (perspiration), *Hridspandan* (palpitation), *Shotha* (oedema).

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Materials and Methods

Study Design: Open-label, single-arm clinical study

Study Setting: Study was conducted at the outpatient and inpatient departments of Dr. D. Y. Patil Ayurved College and Hospital, Pimpri, Pune (Maharashtra), irrespective of the participants' caste, gender, color, or religion.

Study Sample: 30 patients diagnosed with primary hypertension were selected based on predefined inclusion and exclusion criteria. Each participant underwent a thorough clinical evaluation, including physical examination and detailed medical history, at baseline and at the end of the study period.

Ethical Considerations

Prior to initiation, the study protocol was reviewed and approved by the Institutional Ethics Committee (IEC) and Research Review Committee. Ethical clearance was obtained under letter number DYPCARC/IEC/539/2022.

Written informed consent was obtained from all participants before their inclusion in the study, in accordance with the ethical guidelines for biomedical research on human participants.

Clinical Trial Registration: CTRI registration number was- CTRI/2023/01/048927, dated 11 January 2023.

Case History and Documentation

A structured case record form (CRF) was developed specifically for this study. The proforma included demographic data, baseline and follow-up blood pressure measurements, and documentation of all clinical signs and symptoms before and after the intervention period. This facilitated systematic tracking of the therapeutic response and adverse effects, if any.

Inclusion Criteria

Participants eligible for inclusion in the study were adults aged 18 years and above, of either gender, who had been recently or newly diagnosed with primary hypertension of unknown origin. Eligible patients were required to have a systolic blood pressure between 140 mmHg and less than 170 mmHg, and a diastolic pressure up to 110 mmHg. These thresholds were selected to represent early-stage hypertensive patients suitable for non-invasive herbal intervention.

Exclusion Criteria

Patients were excluded from the study if they were diagnosed with secondary hypertension, were known alcohol or substance abusers, or were suffering from accelerated or malignant hypertension. Additional exclusion criteria included pregnancy or lactation, ongoing estrogen replacement therapy, symptomatic presentation of early heart failure, and a documented history of cardiac diseases.

Withdrawal Criteria

Participants were withdrawn from the study under certain circumstances. These included voluntary withdrawal of consent at any stage of the trial, an increase in blood pressure beyond 170/110 mmHg following treatment initiation, or a lack of therapeutic response accompanied by symptom aggravation. In such cases, patients were discontinued from the trial and referred for standard allopathic intervention or specialist consultation as clinically indicated.

Intervention and Follow-up:

The treatment duration was Fourteen days, with two follow-ups on Day 7 and Day 14.

Blood pressure and clinical symptoms were assessed at each follow-up visit. Patients were monitored for any adverse events, and compliance was ensured by collecting and counting the remaining medicines at the end of the study.

Outcome Measures:

Primary Outcome: Reduction in both systolic and diastolic blood pressure.

Secondary Outcomes: Improvement in subjective symptoms (headache, dizziness, palpitations, fatigue) and overall tolerability of the intervention

Assessment Criteria

Objective Parameters

The primary diagnostic tool employed for the assessment of blood pressure was a sphygmomanometer. Blood pressure measurements were obtained in accordance with standardized procedures to ensure consistency and accuracy. Each subject underwent three consecutive blood pressure recordings on both arms, while in sitting and supine postures, to minimize variability and confirm reliability of readings. The trial population was restricted to newly diagnosed cases of Stage I hypertension, as per the guidelines set by the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. The classification of blood pressure readings followed JNC 7 criteria, defining Stage I hypertension as systolic blood pressure (SBP) between 140–159 mmHg and/or diastolic blood pressure (DBP) between 90–99 mmHg. Korotkoff sounds I and V were utilized for determining the systolic and diastolic pressures, respectively. This method ensured accurate auscultatory assessment of arterial blood pressure in accordance with established clinical norms.

Subjective Parameters

Subjective clinical parameters related to hypertensive symptoms such as headache, dizziness, fatigue, palpitations, and sleep disturbances were assessed and graded on a 5-point ordinal scale ranging from 0 to 4, reflecting the severity of each symptom: 0 – Absent, 1 – Mild, 2 – Moderate, 3 – Severe, 4 – Very Severe

Table 1:-Subjective parameters

Sr. No.	Parameters	Findings	Points
1	Shirashoola (Headache)	No <i>Shirashoola</i>	0
		Once/twice per week	1
		More than twice a week	2
		Continue <i>shirashoola</i> affecting partially	3
		Continue troubling <i>shirashoola</i> covering complete <i>shira</i>	4
2	Bhrama (Giddiness)	No <i>Bhrama</i>	0
		<i>Bhrama</i> once/twice per week	1
		<i>Bhrama</i> more than twice a week	2
		<i>Bhrama</i> daily	3
3	Klama (Fatigue)	No <i>Klama</i>	0
		Once a while during walking	1
		<i>Klama</i> during walking twice a week	2
		<i>Klama</i> at rest once a week	3
4	Anidra (Insomnia)	Sound sleep	0
		Occasionally disturbed	1
		Disturbed for 2-3 hours	2
		Disturbed for 3-4 hours	3
		<i>Anidra</i> for whole night	4
5	Swedadhikya (Perspiration)	No <i>Swedadhikya</i>	0
		Excessive while climbing upstairs	1
		Profuse while speedily walking	2
		Profuse even during walking	3
		Profuse even at rest	4
6	Hridspandan (Palpitation)	No <i>Hridspandan</i>	0
		<i>Hridspandan</i> Occasionally	1
		<i>Hridspandan</i> on exercise	2
		<i>Hridspandan</i> on vigorous activity	3
		<i>Hridspandan</i> daily even at rest	4
7	Shotha (Swelling)	No <i>Shotha</i>	0
		<i>Shotha</i> occasionally	1
		<i>Shotha</i> partially	2
		<i>Shotha</i> on lower extremities	3
		<i>Shotha</i> completely (all over body)	4

Treatment Protocol

Interventional products were prepared and standardised at *Sudhatatava Ayurvedic Pharmacy*, Pimpri, Pune (Maharashtra).

Table 2: Treatment protocol

No.of Patients	Drug	Dosage	Duration
30	Herbal formulation (Cap Punarnavadi Mishran)	500 mg/TDS.	14 days.

Table 3: Ingredients of Herbal formulation (Cap Punarnavadi Mishran)

Sr. No.	Drug Name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
1	Punarnava	<i>Boerhaavia diffusa</i>	Madhur, Tikta, Kashaya	Laghu, rukshsha	Sheeta	Madhura	Tridosahar, Mutrajanna, Rasayan, Shothghni, Raktavikarsamak.
2	Guduchi	<i>Tinospora cordifolia</i>	Tikta, Katu, Kashaya	Guru, Snigdha	Ushna	Madhura	Dridhoshasamaka, Rashaya, Mutravikarhar
3	Shankhapushpi	<i>Convolvulus pluricaulis</i>	Tikta, Kasaya	Snigdha, Pichhil	Ushna	Madhura	Medhya, Manas Rogahar, Rasayana
4	Brahmi	<i>Bacopa monnieri</i>	Tikta, Kasaya	Laghu	Sheeta	Madhura	Medhya, Manas Rogahar, Rasayana, Raktavikarhar, Shothahar
5	Jatamansi	<i>Nardostachys jatamansi</i>	Tikta, Kashaya, Madhur	Ladhu, Snigdha	sheet	Madhur	Guru, snigdha, mrudu
6	Vacha	<i>Acorus calamus</i>	Tikta, Kattu	Laghu, Rukhsh, Tikshan	Ushna	katu	Mutravishodhni, Medhya
7	Praval	<i>Corallium rubrum</i>	Madhur	Laghu, Rukhsa	sheet	Madhur	Mutrakrichha Har, Swedahar, Rakta & Pitta Vikara Samaka

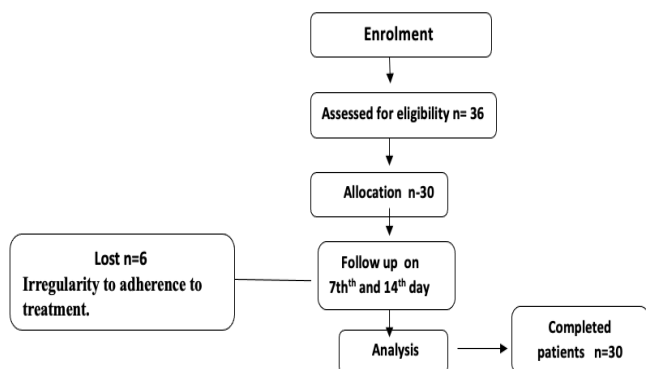
Statistical Assessment

A paired "t" test and Friedman test were used where it was considered necessary, and the improvement in the patient's condition was evaluated based on the grades of different variables compared between pre-trial and post-trial values in terms of percentage (based on mathematical mean and its difference). The findings were evaluated as very significant at the $p < 0.001$ level, significant at the $p < 0.05$ level, and inconsequential at the $p > 0.05$ level.

Observations and Results:

Data analysis

Image 1: Flow chart



Demographic data: Following data was observed during clinical trial

Table 4: Demographic Data

Parameter	Category	Number	Percentage
Marital Status	Married	29	96.6
	Unmarried	1	3.3
Gender	Male	19	63.3
	Female	11	36.7
Age Group (years)	31–40	7	23.3
	41–50	10	33.3
	51–60	9	30.0
	>60	4	13.3
Residence	Urban	24	80.0
	Rural	6	20.0
Religion	Hindu	25	83.3
	Muslim	5	16.7
Education Level	Metric (10th)	18	60.0
	Above Metric	7	23.3
	Below Metric	5	16.7
Occupation	Homemaker	8	26.7
	Service	7	23.3
	Business	5	16.7
	Laborer	4	13.3
	Others	6	20.0
Dietary Habit	Mixed Diet	25	83.3
	Vegetarian	5	16.7
Addiction	None	19	63.3
	Tobacco	6	20.0
	Alcohol	5	16.7
Deha Prakriti	Vata-Pittaja	15	50.0
	Pitta-Kaphaja	9	30.0
	Vata-Kaphaja	6	20.0

Table 5: Effect of Therapy on Objective Criteria

Paired Sample Statistics and Test Results for Blood Pressure Measurements (n = 30)

Position	Time point	Parameter	Mean ± SD	Mean ± SD	Mean Difference	t	df	p-value
Supine	0 vs 7 Days	Systolic BP	154.33 ± 6.79	136.00 ± 8.55	18.33 ± 9.13	11.000	29	< 0.001
	0 vs 14 Days	Systolic BP	154.33 ± 6.79	130.67 ± 6.40	23.67 ± 8.90	14.566	29	< 0.001
	0 vs 7 Days	Diastolic BP	98.67 ± 5.07	85.67 ± 7.28	13.00 ± 9.88	7.208	29	< 0.001
	0 vs 14 Days	Diastolic BP	98.67 ± 5.07	86.33 ± 5.56	12.33 ± 7.74	8.729	29	< 0.001
Sitting	0 vs 7 Days	Systolic BP	154.33 ± 7.28	135.33 ± 8.60	19.00 ± 10.29	10.114	29	< 0.001
	0 vs 14 Days	Systolic BP	154.33 ± 7.28	131.00 ± 7.59	23.33 ± 9.94	12.854	29	< 0.001
	0 vs 7 Days	Diastolic BP	99.00 ± 4.81	86.67 ± 7.58	12.33 ± 9.35	7.223	29	< 0.001
	0 vs 14 Days	Diastolic BP	99.00 ± 4.81	87.67 ± 5.04	11.33 ± 6.81	9.109	29	< 0.001

Table 6: Effects of therapy on Subjective Criteria

Parameter	0th Day	7th Day	14th Day	N	Chi-Square	df	P value
<i>Shirashoola</i>	2.70	1.87	1.43	30	39.263	2	0.000
<i>Bhrama</i>	2.57	1.85	1.58	30	31.559	2	0.000
<i>Klama</i>	2.92	1.88	1.20	30	52.214	2	0.000
<i>Hridyaspandan</i>	2.65	1.95	1.40	30	37.680	2	0.000
<i>Anidra</i>	2.62	1.92	1.47	30	35.043	2	0.000
<i>Swedadhikya</i>	2.73	1.93	1.33	30	42.286	2	0.000
<i>Shotha</i>	2.13	2.00	1.87	30	6.737	2	0.034

Assessment of Overall Effect

The overall therapeutic effect was evaluated by comparing the severity of clinical symptoms before and after the intervention using a predefined scoring system. Based on the percentage reduction in total symptom scores from baseline to the end of the treatment, patients were categorized into the following outcome groups:

- Excellent effect: $\geq 75\%$ improvement in symptoms
- Moderate effect: 51–74% improvement
- Mild effect: 25–50% improvement
- No change: $< 25\%$ improvement or no measurable improvement

Each patient's symptom scores (based on parameters such as *Shirashoola*, *Bhrama*, *Klama*,

Hridyaspanan, *Anidra*, *Swedadhikya*, and *Shotha*) were totaled and compared across visits (Day 0, Day 7, Day 14). The percentage improvement was calculated, and patients were accordingly classified.

Discussion

Hypertension is a chronic, multifactorial disorder and a major global public health concern, significantly contributing to the burden of cardiovascular morbidity and mortality (9). While contemporary medicine defines it primarily as a hemodynamic imbalance, Ayurveda interprets hypertension as a *Tridoshaja Vyadhi* with *Vata predominance*, due to the erraticity and instability of blood flow and vascular tone (10). Vitiating *Vata Dosha* affects the functioning of *Raktavaha Srotas* the internal channels responsible for blood transport leading to elevated arterial pressure. Clinical manifestations may also involve *Pitta and Kapha Dosha*, depending on symptomatology and patient constitution (11). The present clinical investigation evaluated the efficacy of *Capsule Punarnavadi Mishran*, a classical polyherbal formulation, in managing essential hypertension. Analysis of clinical parameters revealed statistically significant reductions in *Shirashoola* (headache), *Bhrama* (giddiness), *Klama* (fatigue), *Hridyaspanan* (palpitation), *Anidra* (insomnia), *Swedadhikya* (excessive sweating), and *Shotha* (edema) over a 14-day period. Friedman test results supported the robustness of this effect ($P < 0.05$ for all symptoms), indicating holistic patient benefit. Overall Effectiveness -Out of 30 patients enrolled in the study: 6 patients (20%) showed excellent improvement ($\geq 75\%$ symptom reduction), 14 patients (46.7%) had moderate improvement (51–74%), 10 patients (33.3%) experienced mild improvement (25–50%), and none showed no response ($< 25\%$). This therapeutic distribution underscores the potential of *Capsule Punarnavadi Mishran* as a promising intervention in mild to moderate stages of hypertension.

Mode of Action - Ayurvedic and Pharmacological Perspective

Capsule Punarnavadi Mishran contains well-documented herbs including *Punarnava* (*Boerhavia diffusa*), *Gokshura* (*Tribulus terrestris*), *Daruharidra* (*Berberis aristata*), *Devadaru* (*Cedrus deodara*), and *Mustaka* (*Cyperus rotundus*) (11,12). These constituents offer multiple pharmacological effects: **Diuretic action (*Mutravirechana*)**: Facilitates reduction of extracellular fluid and plasma volume, thereby decreasing preload and arterial pressure (13). **Anti-inflammatory and antioxidant effects**: Help reduce vascular inflammation, oxidative stress, and endothelial dysfunction—factors implicated in the pathophysiology of hypertension (14). **Cardioprotective properties**: Maintain myocardial function, stabilize heart rate, and improve perfusion (15). In Ayurvedic pharmacodynamics: *Vata Shamana* is achieved through *Snigdha Guna*, *Madhura Rasa*, and *Madhura Vipaka*, which stabilize and nourish the nervous system and vascular channels. *Pitta Shamana* is conferred by *Madhura Vipaka* and *Sheeta Veerya*, countering

irritability and hypermetabolic states associated with stress-related hypertension. *Kapha Shamana* is mediated through *Kashaya Rasa*, facilitating the resolution of congestion, sluggish circulation, and water retention. The *Tridoshahara* (tridosha-pacifying) nature of the formulation treats not just symptomatic elevations in blood pressure but addresses its root pathology, in line with Ayurvedic principles such as *Nidana Parivarjana* (removal of cause) and *Rogamula Chikitsa* (treatment at the root cause level) (16). The formulation's action on *Raktavaha Srotas*, the primary seat of the disorder, restores channel integrity, improves hemodynamic stability, and ensures appropriate tissue perfusion. These Ayurvedic interpretations are paralleled in modern physiology by mechanisms such as reduction in systemic vascular resistance, improved endothelial function, and regulated fluid balance—all central to effective antihypertensive therapy (18).

Conclusion

The findings of this clinical study validate the traditional utility of *Capsule Punarnavadi Mishran* in managing essential hypertension. The formulation's Tridosha Shamaka, diuretic, anti-inflammatory, and cardioprotective actions contributed to significant symptomatic improvement and blood pressure regulation. The absence of non-responders and the favorable safety profile further reinforce its therapeutic potential. Given the increasing global interest in integrative and personalized medicine, *Capsule Punarnavadi Mishran* presents a compelling case for inclusion in lifestyle disorder management. Further multicentric, randomized controlled trials with biochemical markers and long-term follow-up are warranted to confirm and expand on these findings.

Patient perspective

I am very much satisfied as my ulcer and bad foisted wound were cured completely. My daily routine had been disrupted by the ailment before treatment.

Declaration of patient consent

The patient has provided informed consent for the publication of this case report, including the use of photographs and imaging associated with their treatment. The patient understands that their identity will remain confidential and that all personal information will be anonymized to protect their privacy. This consent was obtained voluntarily, and the patient acknowledges their agreement to share their medical information for educational and research purposes.

Conflict of Interest: None

Source of Funding: None declared.

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A Case Study on Ayurvedic Approach for Management of Erectile Dysfunction

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Abstract

Erectile Dysfunction (ED), a condition characterized by the inability to achieve or maintain an erection sufficient for satisfactory sexual performance, is a growing concern among males, significantly impacting their quality of life and relationships. The condition is multifactorial in origin, with contributing factors ranging from psychological stress and lifestyle habits to systemic diseases and hormonal imbalances. Conventional treatments for ED, such as phosphodiesterase inhibitors, often provide temporary relief but fail to address the underlying causes, and long-term use can lead to adverse effects. Ayurveda, an ancient system of medicine, offers a holistic approach to the management of ED by focusing on detoxification, rejuvenation, dietary corrections, and psychological well-being. This case study explores the *Ayurvedic* approach for managing ED in a 34-year-old male patient who presented with symptoms of lack of rigidity and erection during intercourse for the past year. The patient had a history of mental stress and had previously undergone various modern medical treatments with limited success. After 45 days of *Ayurvedic Shodhana* (purification) and *Shamana* (palliative) therapies, combined with proper mental health counseling, the patient experienced remarkable improvement in his sexual health and overall well-being. This study also draws comparisons between the clinical features of ED and "*Klaibya*," as described in *Ayurvedic* texts, showcasing the efficacy of holistic treatment in addressing this condition.

Keywords: Ayurveda, Erectile Dysfunction, Klaibya, Shodhana, Shamana, Sexual Health, Case Study.

Introduction

“Sexual desire could be considered one of the strongest desires persisting in the universe”. Because it can persist throughout an individual’s life as a fundamental biological need. It is also the base of evolutionary imperative. Erectile Dysfunction (ED) is one of the most prevalent male sexual disorders, affecting millions

of men worldwide. It is defined as the persistent inability to achieve or maintain an erection adequate for satisfactory sexual performance. Although ED is not life-threatening, it has a profound impact on the psychological and emotional well-being of affected individuals and their partners. The global prevalence of ED increases with age and is often associated with co-morbid conditions such as diabetes, hypertension, obesity, and cardiovascular diseases.

The etiology of ED is multifactorial, involving a complex interplay of physiological, psychological, and environmental factors. Common causes include reduced blood flow to the penile tissues, hormonal imbalances, nerve damage, and psychological conditions such as anxiety and depression. Lifestyle factors such as smoking, alcohol consumption, and lack of physical activity further exacerbate the condition. While modern medicine offers pharmacological interventions like phosphodiesterase type 5 inhibitors (e.g., sildenafil), these treatments primarily focus on symptomatic relief rather than addressing the root cause. Moreover, they may lead to side effects such as headaches, flushing, and gastrointestinal discomfort.

In *Ayurveda*, ED can be correlated with "*Klaibya*," a condition mentioned in classical texts. *Klaibya* is attributed to the vitiation of *Tridosha* (*Vata*, *Pitta*, and *Kapha*), along with disturbed *Agni* (digestive fire) and impaired function of the *Shukra dhatu* (reproductive tissue). Psychological factors such as *Chinta* (stress), *Bhaya* (fear), and *Krodha* (anger) are also emphasized as contributing factors. The Ayurvedic approach to managing *Klaibya* is holistic and involves a combination of *Shodhana* (detoxification), *Shamana* (palliative treatment), *Rasayana* (rejuvenation), and *Pathya-Apathya* (dietary and lifestyle modifications). Mental counseling plays an important role in the management of *klaibya*. This case study highlights the effectiveness of *Ayurvedic* therapies in addressing ED and improving the patient's quality of life.

Case Study

Patient Profile

- **O.P.D. No.-** 34475
- **Age:** 34 years
- **Gender:** Male
- **Marital Status:** Married with one child (2 years old)
- **Chief Complaints:** Persistent lack of rigidity and erection during intercourse with his wife for the past year.
- **Associated Complaints-** Constipated Bowel habits, burning sensation in chest region and
- **Medical History:** The patient had been experiencing work-related mental stress for several years. He had sought treatment from modern medicine practitioners and was prescribed phosphodiesterase inhibitors, which provided temporary relief but did not result in sustained improvement. So he came

to consult Ayurveda treatment in the O.P.D. of Govt. Dhanwantari Ayurveda Medical College, Ujjain, (M.P.)

- **Lifestyle:** Sedentary work routine, irregular eating habits, and insufficient physical activity
- **Prakriti Analysis:** Predominantly *Vata-Pitta Prakriti*, characterized by high levels of stress, sensitivity to heat, and a tendency for dryness and irritability.
- **On examination-** Well developed Secondary Sexual Characters, Normal Shape and Size of Penis, Negative Nocturnal Tumescence, Result of the Questionnaire (IIEF-5) indicates Moderate Erectile dysfunction having score 11.
- **Laboratory Investigation-** CBC, Random blood sugar level, Serum Testosterone, Serum Cholesterol, Serum Prolactin, Semen analysis, ECG. All the findings and values were normal.
- **Diagnosis:** Moderate Erectile Dysfunction most probably due to Psychogenic cause (correlated with *Klaibya* in *Ayurveda*)

Ayurvedic Treatment Protocol

1. **Shodhana Chikitsa:** *Shodhana* therapies aim to eliminate toxins (*Ama*) from the body and restore the balance of *Doshas*, creating a strong foundation for subsequent treatments. The following therapies were administered:
 - **Snehapana (Internal Oleation):** The patient was given medicated *ghee* (*Trifala ghrita*) orally for five days in increasing doses. This preparation lubricates the Channels associated with *Shukravaha Strotas*, enhances the movement of vitiated *Doshas* from *Shakha* or site of manifestation of disease to the *Koshtha*, and prepares the body for purification.
 - **Abhyanga (Oil Massage):** Daily full-body massage with *Bala Taila* was performed to improve blood circulation, relax the muscles, and calm the nervous system.
 - **Swedana (Fomentation Therapy):** After *Abhyanga*, steam therapy was administered to induce sweating and open the body's channels for free movement of vitiated *Doshas*.
 - **Virechana (Therapeutic Purgation):** To eliminate vitiated *Pitta dosha*, the patient underwent therapeutic purgation using *Trivrutta Avaleha*. This therapy also helps cleanse the liver and gastrointestinal tract, improving overall vitality. Patient has responded with the 26 Vega of *Virechana* considered as *Madhyam Shuddhi*.
2. **Shamana Chikitsa (Palliative Therapy):**

Shamana therapies were used to pacify the aggravated *Doshas* and rejuvenate the *Shukra dhatu* as well as the concerned entities related with *Shukravaha Strotas*. The following medications and treatments were prescribed:

Internal Medications:

- **Tab. Shila Pravang vati-** It contains ingredients like *Shilajit*, *Ashwagandha*, *Safed Musli*, and *Gokshura*, which enhance blood flow, boost testosterone, reduce stress, and improve stamina. **Dosage** - 1-2 tablets twice daily after meals.
- **Cap. Erozen Plus-** It contains natural ingredients like *Safed Musli*, *Ashwagandha*, *Kaunch Beej*, and *Shilajit*, which boost testosterone levels, improve blood circulation, enhance stamina, and reduce stress. **Dosage** - is usually 1-2 capsules daily with water or milk
- **Aushadhiya Yog-** *Kraunch Beeja Choorna* (1gm), *Supushti Choorna* (1 gm), *Shatavari choorna*, *Bramhi Choorna* (1 gm), *Kukkutand Twak bhasm* (500 mg), *Mukta Pishti* (500 mg). It boosts testosterone, reduces stress, enhances stamina, and strengthens reproductive health. **Dosage** - 1-2 grams twice daily with warm milk or water.
- **Ashwagandharishta-** It boosts testosterone, improves stamina, and reduces anxiety. It is especially beneficial for stress-induced ED. **Dosage** - 15-20 ml twice daily.
- **Saraswatarishta-** It helps manage erectile dysfunction (ED), particularly when linked to stress, anxiety, or mental fatigue. With ingredients like *Brahmi* and *Ashwagandha*, it enhances mental clarity, reduces stress, and supports hormonal balance. **Dosage** - 15-20 ml twice daily
- **Tab. Nindo-** It contains key ingredients like *Ashwagandha*, *Jatamansi*, *Brahmi*, and *Tagar*, which promote relaxation and improve sleep quality. **Dosage** – 1 tablet at night before sleep daily.

External Applications:

Patient is advised for Local application of *Shree Gopal Taila* for penile massage to improve circulation and tissue strength every night before sleep.

3. Mental Health Counseling Framework:

The psychological aspect of ED was addressed through regular counseling sessions. The patient was educated about the interplay between stress and sexual health, and techniques such as mindfulness, *yoga*, and *Pranayama* were introduced to reduce anxiety and promote mental relaxation.

Cognitive Behavioral Therapy (CBT)

- **Goal:** Address performance anxiety and negative thought patterns.

Techniques Implemented:

- Cognitive restructuring to challenge catastrophic thoughts related to sexual failure.

- Behavioral activation to engage the patient in pleasurable, non-sexual activities to rebuild confidence.

Stress and Anxiety Reduction

- Introduced Mindfulness-Based Stress Reduction (MBSR):
- Daily 10-minute mindfulness meditation sessions.
- Progressive muscle relaxation exercises to reduce autonomic hyperactivity.
- Recommended *Pranayama* (breathing exercises), including *Anulom Vilom* and *Bhramari*, twice daily for calming the nervous system.

Sex Therapy and Sensate Focus

- Educated the patient on the sexual response cycle to reduce performance pressure.
- Introduced sensate focus exercises with the patient's partner to promote intimacy without focusing on intercourse.

Lifestyle and Behavioral Interventions

Suggested a daily routine (*Dinacharya*) aligned with *Ayurvedic* principles, including:

- Regular sleep schedule (7-8 hours).
- Morning *Abhyanga* (self-massage) with oil to reduce *Vata* imbalance.

Recommended dietary changes to enhance energy and vitality:

- Inclusion of aphrodisiac foods like milk, *ghee*, almonds, and dates.
- Avoidance of alcohol, caffeine, and processed foods.

Couples Counseling

- Addressed relationship dynamics contributing to ED.
- Fostered open communication between the patient and his partner to rebuild emotional and physical intimacy.

4. Pathya-Apathya (Dietary and Lifestyle Guidelines):

- **Pathya (Recommended):**
- A diet rich in fresh fruits, vegetables, whole grains, and dairy products
- Regular consumption of aphrodisiac foods such as Milk, *Ghee*, *Urad Dal*
- Inclusion of warm, easily digestible foods to balance *Vata dosha*

- Regular physical activity, including *Yoga* and kegel exercise
- **Apathya (Avoided):**
 - Spicy, oily, and processed foods
 - Excessive consumption of alcohol, caffeine, and smoking
 - Late-night activities and irregular sleep patterns

Outcome

After 45 days of treatment, the patient reported significant improvement in his sexual health. He experienced increased rigidity and the ability to achieve and maintain erections during intercourse. His stress levels also decreased, and his overall quality of life improved. The patient's confidence in his sexual performance was restored, and no adverse effects were reported during the treatment.

Discussion

Erectile Dysfunction (ED) poses a significant challenge to male sexual health, impacting quality of life and relationships. While conventional treatments like phosphodiesterase inhibitors offer symptomatic relief, they often fall short in addressing underlying causes and may lead to adverse effects. In contrast, *Ayurveda* presents a holistic approach that merits analytical exploration, particularly in managing ED through its principles of detoxification, rejuvenation, and lifestyle adjustments.

Multifactorial Etiology and Treatment Challenges

ED's etiology is multifactorial, involving physiological factors (like reduced blood flow and hormonal imbalances) and psychological elements (such as stress and anxiety). Modern medicine primarily addresses these with medications that facilitate erection but do not resolve root causes. *Ayurveda*, on the other hand, identifies ED as "*Klaibya*," linked to vitiated *Doshas* (body energies), impaired *Agni* (digestive fire), and mental disturbances like stress and fear.

Ayurvedic Therapeutic Approaches

1. Shodhana (Detoxification): *Ayurvedic* treatments commence with *Shodhana* therapies to eliminate toxins and rebalance *Doshas*. This includes internal oleation (*Snehapana*), oil massages (*Abhyanga*), and therapeutic purgation (*Virechana*), aimed at preparing the body for deeper healing.

2. Shamana (Palliative Treatment): Following detoxification, *Shamana* therapies focus on pacifying aggravated doshas and rejuvenating the reproductive tissues (*Shukra dhatu*). Herbal formulations like *Shila Pravang vati* and *Erozen Plus* are used to enhance blood circulation, reduce stress, and improve hormonal

balance. Local applications such as penile massage with *Shree Gopal Taila* further aid tissue strength and circulation.

3. Mental Health Counseling: Recognizing the intricate link between psychological stress and ED, *Ayurveda* integrates mental health counseling. Techniques like Cognitive Behavioral Therapy (CBT), mindfulness practices, and sex therapy are employed to address performance anxiety, reduce stress, and restore confidence.

4. Pathya-Apathya (Dietary and Lifestyle Modifications): *Ayurvedic* recommendations emphasize a balanced diet rich in aphrodisiac foods and regular physical activity, aligned with *Dinacharya* (daily routines). Avoidance of stimulants like alcohol and caffeine complements these lifestyle changes to support holistic healing.

Clinical Effectiveness and Comparative Analysis

The presented case study underscores *Ayurveda's* efficacy in managing ED, highlighting significant improvements in erectile function, reduced stress levels, and enhanced overall well-being within a relatively short treatment period of 45 days. This contrasts with conventional treatments that often require long-term medication use and may not address the root causes comprehensively.

Klaibya, as described in *Ayurvedic* texts, shares similarities with the clinical features of ED. The vitiation of *Vata*, *Pitta*, and *Kapha Doshas* disrupts the function of the *Shukra dhatu*, leading to symptoms such as loss of libido, difficulty in maintaining erections, and mental distress. By focusing on restoring balance at the physical, mental, and emotional levels, *Ayurveda* provides a comprehensive solution to this condition.

Conclusion

In conclusion, while modern medicine offers effective pharmacological interventions for ED, *Ayurveda* provides a compelling alternative with its holistic approach. By addressing both physical and psychological dimensions of ED through detoxification, rejuvenation, and lifestyle modifications, *Ayurveda* aims not only to alleviate symptoms but also to promote long-term sexual health and emotional well-being. Further research and comparative studies could enhance our understanding and integration of *Ayurvedic* principles into mainstream ED management strategies.

This article highlights *Ayurveda* as a valuable complementary approach in the comprehensive treatment of ED, underscoring its potential to offer personalized care and address the diverse needs of individuals affected by this condition.

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A Case Study of Treatment of Fungal Alopecia through Leech Therapy: Exploring Efficacy of Ayurved Protocol

Type of Manuscript – Case study

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KEY WORDS: Jalaukavcharn,raktmokshan, krimijanya khalitya,Pradhana karma,

Introduction: Fungal alopecia, also known as tinea capitis or ringworm of the scalp, is a common fungal infection that can lead to hair loss and discomfort. It can lead to hair loss, itching, inflammation, and other discomforting symptoms. Managing fungal alopecia requires a multifaceted approach that targets both the underlying fungal infection and the associated hair loss. In Ayurveda text the term Alopecia is considered as Khalitya. And Fungal Alopecia as krimijanya Khalitya. In this article, we will explore the various treatment options available as leech therapy for fungal alopecia/ krimijanya Khalitya., including medications, topical treatments, and lifestyle modifications as well as exploring its effectiveness, safety, and clinical considerations through Ayurveda protocol.

Case Presentation: The patient, a 17-year-old female, registered herself as OPD No. 11842 during her first visit in Skin care unit at Govt. Dhanwantari Ayurveda Medical College & Hospital Ujjain (M.P.) presented with symptoms of fungal alopecia, including red, scaly patches on the scalp, itching, and hair loss in bulk. She was chiefly complaining about her blank patch without hair and she had previously tried antifungal shampoos and topical treatments, internal medication as well without significant improvement. Upon examination, KOH test resulted positive and fungal culture confirmed the presence of Trichophyton species, indicating a fungal infection.

Treatment Approach: Along with topical ayurvedic treatment, antifungal medication and leech therapy was proposed as a treatment option. After obtaining informed consent, the patient underwent leech therapy sessions conducted by a qualified Ayurvedic practitioner experienced in the technique.

The leeches were applied to the affected areas of the scalp, where they attached themselves and began to feed. The therapy sessions were performed weekly for a total of four weeks. During each session, the leeches were left in scalp on affected area for approximately 15 to 30 minutes, allowing them to extract blood and deliver their saliva containing bioactive compounds with potential therapeutic effects as mentioned in Ayurveda Texts.

Outcome: Following the completion of four leech therapy sessions, the patient reported significant improvement in symptoms. The itching and redness on the scalp had subsided, and there was a noticeable reduction in hair loss. The patient also reported growth of new hairs as feeling a sense of relief and relaxation during the therapy sessions.



Follow-Up and Monitoring: The patient was advised to continue scalp hygiene practices and to monitor for any recurrence of symptoms. Follow-up appointments were scheduled to assess long-term outcomes and to address any concerns or questions the patient may have.

Discussion: This case study highlights the potential efficacy of leech therapy as a treatment option for fungal alopecia. Because fungus is type of Krimi resulting the Pittaj dushti lakshan on the localised area like irritation and burning sensation also causing loss of hair. Leech or Jalauka is used to treat pittaj dominant tridoshaj conditions like alopecia as mentioned in Ayurveda text.

Jalaukavacharana is an Ayurvedic para surgical procedure mentioned in Susruta samhita practiced since 2 BC10. In Susruta samhita, a whole chapter has been dedicated to Jalaukavacharana. It is a painless minimal invasive technique of Raktamokshan (controlled bloodletting). Jalauka is mainly collected during Sharad Ritu and it has divided into two groups of each 6 in number on the basis of the nature i.e. Savisha (poisonous) and Nirvisha (Non – poisonous)¹². Jalauka is mostly pittaghna and madhura¹³ in nature. Globally, Jalaukavacharan gained popularity due to its therapeutic benefits.

Saliva of Leech contains various biologically active compounds such as analgesic, antiinflammatory, anaesthetic and antioxidative properties. It is estimated that approximately 100 therapeutic substances are present in leech saliva¹⁴. Components of Leech saliva and their action Saliva of Leech contains various bioactive components¹⁵ such as

Hirudin – Prevents blood clotting by binding with thrombin.

Calin – Inhibits blood clotting by blocking the binding of Von Willebrand factor to collagen and also inhibits collagen –mediated platelet aggregation.

Apyrase – Prevent platelet aggregation by inhibition of adenosine triphosphate. Tryptase inhibitor – Inhibits Proteolytic Enzymes of Host Mass Cells.

Destabilizase – Dissolves the fibrin.

CarboxypeptidaseA Inhibitors: Increases At the bite site, the inflow of blood. Hirustasin – Responsible for normal level of blood pressure by inhibiting the kallikrein. Eglins – Anti- inflammatory substance, inhibits the activity of subtilisin, chymotrypsin, cathepsin, elastase, chymase.

Bdellins – Anti- inflammatory and inhibit acrosin, trypsin, plasmin.

Histamine-like substance – Vasodilator, increase the inflow of blood at the bite site.

Hyaluronidase – Increase Interstitial Viscosity, Antibiotic.

Collagenase – Smooth the way for tissue penetration.

Acetylcholine–Vasodilator. Factor

Xa inhibitor – Inhibit the activity of Coagulation factor

Xa – conversion of prothrombin to thrombin.

Method of Jalaukavacharan:Every Panchakarma treatment including Raktamokshan involves three stages:

Purva Karma (pretreatment), Pradhana Karma (main-treatment) and Paschat Karma (post-treatment).

Purva Karma (Pre-Procedure Protocols) — 1) Snehana (oleation) and Swedana (sudation) to the patient prior to Jalaukavacharan.

2) To clean the leech with mixture of mustard and turmeric paste in water.

3) Patient preparation- Cleaning of the body part on which the leech is to be applied.

Pradhana Karma (Main Procedure Protocols) – After cleaning the body parts, apply some ghrita or milk on the site to stick the jalauka, if they do not stick then blood may be applied or scratching may be done. The Leech is applied through its front end and wet white fine cloth covers the leech except for their mouth. Observation of leech during blood sucking - Middle portion of the body in leech appears elevated assuming the shape of a horseshoe¹⁶ indicating that its sucks well. The sense of burning and tingling sensation at the bite spot. Pulsation can be noticeable on the body of the leech. Leech should be removed after 15-20 minutes, the leech may be removed by sprinkling common salt or by

Paschata Karma (Post Procedure Protocols) - Treatment of the wound, there is a triangular shaped wound caused by the mouth of the leech. Bleeding from the wound is checked with the help of Yastimadhu churna or turmeric powder by applying tight bandaging or Satadhauta ghrita can be applied to prevent bleeding and scarring.

After raktamokshan keshya an anti-krimi drugs likeGandhak druti for local application,combination of Giloy satva ,talkeshwar ras, gandhak Rasayan for internal use.Panchtikt ghrit is given with milk at a dose of 15gram together every morning before breakfast. Pathya apathya is advised to the patients for complete nutritional supports to hairs.

Pathya- apathy for Khalitya-There is no clear cut description of Pathyapathy of Khalitya in Samhitas, but on the basis that the disease Khalitya is related to Rakta Vikara and predominance of pitta dosha, Pathya advised which are as follows : -

Pathya Ahara : Dhanya: Godhuma, Yava, Shali, Mudga

Shaka Varga: Jivanti, Kushmanda, Patol, Karavellaka, Tomato, onion, and Lauki etc.

Taila Varga: Tila Taila and coconut oil for external and internal use.

Fruits: Amlaki, Dadima, Narikel, Kadaliphala, Draksha etc.

Others: Milk, sugar, honey etc. are advised. Pathya Vihara: Shirasnana, Sarvangasana and Shirobhyanga are good care for hair

Apathya Ahara: Excess intake of Lavana, Amla and Katu Rasa and Ksharasevana. Continuous use of fry diet, junk food, packed foods and beverages like tea, coffee and cold drinks. Smoking and alcohol to be avoided.

Apathya Vihara: Exposure to excessive sun light. Night awakesness. Day sleep. Altered sleep pattern. Avoid tap water for hair wash.

Mode of action of Jalaukavacharana-Khalitya or Alopecia is mainly caused by vitiated pitta dosha and Jalaukavacharana is done for removal of vitiated pitta dosha and impurities, toxins from the body through blood. It increases blood circulation around the area result in growth of new hairs. Because saliva of leech contains number of biologically active component like Hirudine, inhibitors of kallikrein, hyaluronidase, histamins like vasodilators, anti-inflammatory and anaesthetic agent. Leech sucks the blood by piercing into the skin and invade their biologically active components into the deep tissue. For tissue penetration Enzyme collagenase helps by smoothen the pathway. Hyaluronidase helps the penetration as well as diffusion of these pharmacologically active components into the tissues. So anti-inflammatory component like Bdelins, Eglins can easily penetrate to give significant effect on intra-articular and periarticular myofascial structures also on inflammatory condition of skin. Vasodilators increases in flow of blood .

Conclusion: Jalaukavacharana is more convenient and easy para surgical procedure which eliminates the toxins from the blood stream. It is the best alternative therapy which can be apply for the treatment of Khalitya. It is relatively easy to learn and reduce the complication arising from the excessive use of synthetic drugs. Jalaukavacharan along with keshya drugs and proper diets showing promising results in hair loss. It is economical and cost effective therapy with no any side effects if done under supervision. It has the potential to stop hair fall significantly. So we can say that it is great boon for patients of Khaliya (alopecia).

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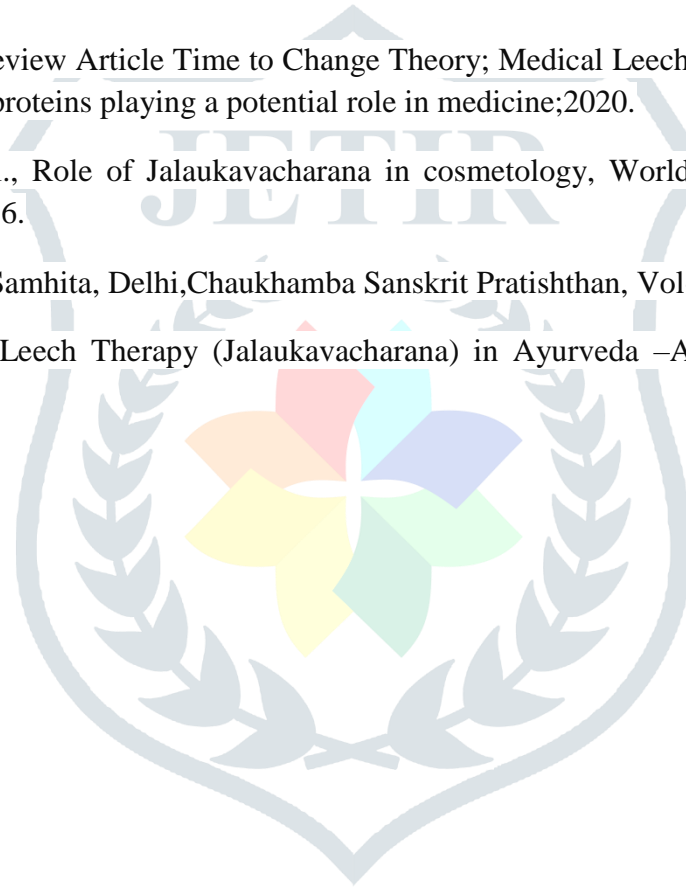
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Title Name – “Ayurveda approach in management of Twak Vaivarnya W.S.R. to Hyperpigmentation”- A Case Study

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ABSTRACT-

Beauty is not only a source of joy but also gives confidence to some extent." Ayurvedic cosmetology acknowledges this truth, tracing its roots back to the very beginning - from the mother's womb and extending through life's daily routines (*Dinacharya*), nightly habits (*Ratricharya*), seasonal adjustments (*Ritucharya*), and beyond. This symbiotic relationship between cosmetology and *Ayurveda* represents one of the most ancient and profound connections, emphasizing not only external beauty but also inner well-being and vitality. In *Ayurveda*, the skin, known as "*Twak*," serves as the outermost protective barrier enveloping the entire body. It is endowed with the sense of touch, making it highly sensitive among the five senses. Every individual cherishes beauty, often resorting to topical applications that may, unfortunately, trigger allergic reactions or skin ailments. An 18-year-old female patient presented to our hospital with complain of *Twak Vaivarnya* a brownish pigmentation on face. In addressing her condition, we adhered to *Ayurvedic principles*, focusing on restoring the affected skin to its normal texture. Following the guidance outlined in *Charaka Samhita Sutra Sthana Trishothiya Adhyaya*, where the naming of diseases is not deemed mandatory, our approach centred on assessing the *doshapradhanatva* and recognizing specific symptoms (*Lakshanas*) without assigning a formal diagnosis. By embracing *Ayurveda's* holistic principles and tailoring treatments to individual constitutions and symptoms

rather than conventional disease labels, we strive to provide comprehensive and enduring relief to patients suffering from skin ailments.

Keywords- *Dinacharya, Ratricharya, Ritucharya, Twak Vaivarnya*, hyperpigmentation, *Dosha Pradhanatwa*

INTRODUCTION-

Achieving a smooth and radiant complexion is a timeless pursuit, not only for enhancing one's beauty but also for instilling a sense of self-confidence. The quest for beauty and the application of natural substances such as herbs, minerals, and animal products have been integral to human existence throughout history. *Ayurveda*, an ancient system of medicine, assesses beauty through the lenses of *Prakriti* (body constitution), *Sara* (structural predominance), *Samhanana* (compactness of body), *Twak* (skin), *Pramana* (measurement), and *Dirghayu Lakshana* (symptom of long life) [1]. The term "*Twak*" specifically denotes the skin, while "*Vaivarnya*" signifies its colour or complexion. According to commentators *Aruna Datta* and *Hemadri*, the meaning of *Vaivarnya* is "diversity from normal colour or complexion which is not like the normal colour of *Tvacha* (skin). [2,3] *Twak Vaivarnya* is considered one of the indicators of a person's *prakriti* (constitution) according to *Ayurvedic* principles. The skin colour is believed to be influenced by various factors, including genetics, lifestyle, diet, and environmental influences, all of which play a crucial role in determining an individual's overall health status. *Ayurveda* categorizes skin types and colours based on the predominance of doshas, namely *Vata*, *Pitta*, and *Kapha*, each of which manifests unique characteristics. According to *Ayurvedic* texts, a balanced state of the *doshas* results in a radiant and glowing complexion, known as "*Prasanna Twak*," indicating good health and vitality. Conversely, an imbalance in the doshas can lead to various skin disorders and alterations in complexion, known as "*Vaivarnya Dosha*," indicating underlying health issues or imbalances within the body. The *Ayurvedic* approach to achieving and maintaining *Twak Vaivarnya* involves a holistic regimen encompassing dietary modifications, lifestyle practices, herbal remedies.

Hyperpigmentation is a common dermatological concern characterized by the darkening of patches or areas of the skin, resulting from the overproduction of melanin, the pigment responsible for skin coloration. This condition can affect individuals of all ages, genders, and ethnicities, and may manifest in various forms, including sunspots, age spots, melasma, and post-inflammatory hyperpigmentation. The aetiology of hyperpigmentation is multifactorial, involving genetic predisposition, hormonal changes, sun exposure, inflammation, and certain medical conditions or medications. Ultraviolet (UV) radiation from sunlight is a significant contributor to hyperpigmentation, as it stimulates melanocyte activity and leads to the accumulation of melanin in the skin. Hormonal fluctuations, such as those occurring during pregnancy or as a result of hormonal therapy, can also trigger the development of hyperpigmentation, particularly in women. The psychological impact of hyperpigmentation can be significant, affecting self-esteem, body image, and overall quality of life. Individuals with hyperpigmentation may experience distress and seek various treatment modalities to alleviate pigmentation concerns and restore an even skin tone. In *Ayurveda*, all skin disorders are categorized under *Kushtha*, with certain conditions specified under *Kshudra Rogas*. The *Ashtanga Hridaya Nidana Sthana* chapter 14 elaborates on the conditions responsible for skin abnormalities. This holistic perspective aligns with *Ayurveda's* comprehensive understanding of skin health and *Twak Vaivarnya*, providing valuable insights for addressing pigmentation disorders from a traditional standpoint.

Twak Vaivarnya, identified as hyperpigmentation, is categorized as a *Kushtha* in *Ayurveda*, a chronic condition often deemed challenging to cure with a propensity for relapses. Despite the availability and accessibility of modern medical treatments, complete cure remains elusive, and surgical interventions are hindered by cost and skill requirements. This study endeavours to explore *Ayurvedic* approaches for managing *Twak Vaivarnya*, seeking potent remedies that can restore the original beauty of the face and enhance aesthetic appeal. The focus of this research is to manage the condition with *Samshamana Chikitsa* and particularly its ability to bring out the clarity of *Varna* (colour), and its applicability in *Twak Vaivarnya* (hyper pigmentation). This holistic approach aligns with *Ayurveda's* emphasis on balancing and restoring harmony to promote overall well-being, including skin health.

CASE STUDY-

An 18-year-old female patient with OPD NO. 28560 belonging to Ujjain comes at *Charma Roga Nivaran* units OPD in govt. *Dhanwantari Ayurved College*, Ujjain (M.P.) The patient was suffering from skin disease (hyperpigmentation) and complaining: • brown minute scattered discoloration (*Twak Vaivarnya*) on the left side of face with mild itching. The patient was treated on OPD basis. Based on clinical presentation, examination, the case was diagnosed as *Vata- Pitta Pradhana Tridosha Twak Vikar* (skin allergy).

HISTORY OF PRESENT ILLNESS –

2 years before, the patient was perfectly fine. Gradually, she acquired certain discolorations, such as black scattered spots on the left side of face, as well as complaints of constipation, acidity, and slight scratching in those areas. The patient had already been taken medications by a number of physicians, but there was little substantial relief. Then She comes to our *Charma Roga Nivaran* unit OPD in govt. *Dhanwantari Ayurved College*, Ujjain (M.P.).

- O/E- Dark Brown Coloured patches on face with mild itching over it.
- H/O constipation.
- Work load- stressful,
- Sleeping habits- usually after 12am.

PERSONAL HISTORY-

Dietary habits showed that there was a lot of Lavana, Amla Dravya, mixed dietary habits, a lot of curd, fatty and spicy rice, Virudhha Ahara Vihara, and unusual bowel habits.

ASHTAVIDHA PARIKSHA-

NADI (pulse) - 76/min MALA (stool) - Malbadhhata MUTRA (urine) – Normal

JIVHA (tongue) - Saam. SHABDA (speech)- Normal SPARSH (skin) - Khara, Anushna DRUK (eyes) – Normal AKRITI - Madhyam.

GENERAL EXAMINATION -

Pulse: 78/ min CVS: Normal BP: 122/80 mmHg CNS: Conscious, Oriented

Temp: Normal RS: Normal RR: 20/min P/A: Normal Weight: 52kg

Height: 162cm Cyanosis- absent Clubbing- absent

INVESTIGATIONS-

Hb%: 14.3 g/dl ESR: 32mm RBS: 120mg/dl

TREATMENT PROTOCOL-

1. Shatdhaut ghrít cream- locally apply 3 times a day.
2. *Kumkumadi tail*- locally apply and massage at night.
3. *Arogyavardhini Vati*- 2-tab bis a day after food with water
4. *Avipattikar Churna* – 1gm after food with lukewarm milk at night.

Yoga of-

- *Sitopaladi churna*-1gm
- *Mulethi Churna*-1gm
- *Shankh Bhashma*-1gm

- *Mukta Shukti* – 500mg
- *Kamdudha Ras*-500mg

Mixing this yoga and made 20 packets and take orally with lukewarm water twice a day after food.

Follow up period: Every 15 days

Recommendations to patient -

Following lifestyle practices were suggested to the patient for acquiring maximum benefits from therapy:

- Patient was advised to perform *Kapalbhati & Anulom- Vilom* for 10-15 minutes on daily basis.
- Advised to cover whole face while treading outside during day time to protect face from sun exposure.
- Advised to take Ghee (01 teaspoonful) with lukewarm milk orally.
- Advised to avoid *Lavana, Amla rasa, and Tikshna Dravya*, curd, spicy food, *Pittaja Ahara Vihara, Adhyasan, Diva Svapna, Ratrijagarana*, Angry behaviour, tension, and anxiety.

OBSERVATION AND RESULT-

After two months, former symptoms such as constipation and itching have subsided, and brown macular spots have turned light slowly.

Table 3: Relief in characteristics symptoms of *Twak Vaivarnya* after treatment.

S.No.	SIGN AND SYMPTOMS	BEFORE TREATMENT	AFTER TREATMENT		
			1 ST Follow up	2 nd Follow up	3 rd Follow up
1	<i>Rookshatwa</i>	Present	Absent	Absent	Absent
2	<i>Kandu</i>	present	Slightly present	Absent	Absent
3	<i>Shyawa-varnta</i> of <i>Twak</i>	Present (dark Brown colour)	No changes in colour	Mild changes	Very Light in colour

IMAGES OF PATIENT-





DISCUSSION-

As mentioned by *Acharya Charaka* in *Sutrasthana Trishothiya Adhyaya* naming the *Vikar* is not important or mandatory one can treat the patient by knowing or accessing the factors such as *Prakopita Dosha*, *Adhithana*, *Samuthana*, and *Lakshanas* [5]. *Ranjaka Pitta* is responsible for the conversion of *Rasa Dhatu* into *Rakta Dhatu* which results in the formation of normal skin colour. So, here keeping this view the patient was examined and assessed the *Prakopita Dosha* as *Vata-Pitta*, with *Rakta* as *Dushya*, *Adhithana* as *Twak*, and the treatment was planned under *Shamana* format, starting with-

Shatdhaut Ghrith Cream-

Shatdhaut Ghrith is a renowned *Ayurvedic* formulation extensively utilized in skincare treatments. Its name derives from Sanskrit, where "*Shata*" signifies one hundred, "*Dhauta*" means washed with water, and "*Ghrith*" refers to clarified butter or ghee. *Shatdhaut Ghrith* is prepared by subjecting purified ghee to a hundred rounds of washing with water. Traditionally, this process was manually performed, but it can also be mechanized.

Shatdhaut Ghrith offers instant relief from burning sensations and helps soothe burnt wounds. It aids in the regeneration of dermal tissues and supports skin healing processes. It is an excellent astringent, anti-wrinkle, and cleansing cream, suitable for all skin types. Regular application of *Shatdhaut Ghrith* can effectively diminish scars, spots, and dark circles, promoting clearer skin. Overall *Shatdhaut Ghrith* stands out as a versatile *Ayurvedic* skincare remedy, offering a wide range of benefits including cooling relief, tissue regeneration, cleansing, scar removal, and moisturization. Its natural properties make it suitable for addressing various skin concerns, contributing to healthier and rejuvenated skin.

Kumkumadi Tail-

Kumkumadi tailam, also known as *Kumkumadi oil*, is an exceptional *Ayurvedic* formulation renowned for its transformative effects on skin health. This oil serves as a potent remedy for addressing various skin issues, offering a multitude of benefits. It is not only a moisturizer but also a versatile beauty product suitable for almost all skin types, particularly sensitive or dry flaky skin. It works towards lightening the skin complexion, imparting a radiant and luminous glow and restoring an even tone to the skin. Overall, *Kumkumadi tailam* stands as a holistic beauty elixir, addressing a wide array of skin concerns and promoting overall skin health. Its natural formulation makes it a safe and effective choice for anyone seeking to enhance their skin's vitality and beauty through the principles of *Ayurveda*.

Arogyavardhini Vati-

Arogyavardhini Vati is believed to be beneficial for various skin conditions, including improving complexion. Its ingredients typically include herbs like *Haritaki* (*Terminalia chebula*), *Bibhitaki* (*Terminalia Billerica*), *Amla* (*Emblica officinalis*), *Shuddha Shilajit* (purified asphaltum), *Shuddha Gandhaka* (purified sulphur), *Neem* (*Azadirachta indica*), and *Kutki* (*Picrorhiza kurroa*), among others. It works as *Raktadushthihara* (blood purifier), *Kushthahara* (alleviates skin diseases), *Srotovishodhana* (cleansing body channels), and *Pitta Doshahara* (alleviates *Pitta*) [6]. *Rasratnasamucchay* mentions *Arogyavardhini Vati* for the care of *Kushtha*. [7]

Arogyavardhini Vati is a classical Ayurvedic formulation known for its ability to balance the *Vata* and *Pitta* doshas, two of the three fundamental energies or principles in *Ayurveda*. By pacifying these *doshas*, it helps to maintain harmony within the body and prevent imbalances that can lead to various health issues. One of the key benefits of *Arogyavardhini Vati* is its detoxifying action. It helps to eliminate toxins (*ama*) that accumulate in the body, particularly in the skin (*Tvacha*) and blood (*Rakta*). This detoxification process is facilitated through the intestines, aiding in the removal of waste materials and promoting overall digestive health. By clearing the body of *ama* and toxins, *Arogyavardhini Vati* helps to cleanse the minute channels (*srotas*) of the body. This clearing action enhances the normal circulatory process and promotes the proper functioning of both the blood (*Rakta*) and the body tissues (*Dhatus*). Improved circulation and tissue function contribute to overall health and vitality. Furthermore, *Arogyavardhini Vati* is said to improve the quality of *Mansa dhātu*, which refers to the tissues responsible for providing structural support and nourishment to the body. By enhancing the quality of these tissues, it helps to prevent the consequences of *Kushtha Roga*, a term that encompasses various skin diseases in *Ayurved* has anti pruritic and antioxidant properties. The combined effects of balancing *doshas*, detoxification, clearing channels, and improving tissue quality contribute to the prevention of pathological progression of skin diseases. Additionally, *Arogyavardhini Vati* may help alleviate symptoms associated with skin issues, such as scars and lesions.

CONCLUSION-

It's not obligatory for Vaidya's to label every specific disease (*Vikar*). Instead, effectively treat patients by assessing the imbalances in *Doshas*, the affected sites (*Adhithana*), and the observed symptoms (*Lakshanas*). *Kumkumadi Taila*, an *Ayurvedic* herbal oil formulation, can be considered as an *Anubhuta Yoga* (experiential remedy) for managing certain skin conditions. Skin diseases pose significant challenges for modern medical science. However, studies suggest that *Ayurvedic* medicine offers promising prospects in treating such cases. While this study is based on a single case, it provides a platform for further research involving a larger patient cohort. The case report highlights the efficacy of *Ayurvedic* medicinal interventions in treating the condition comprehensively. *Pathya Sevan* (appropriate dietary and lifestyle guidelines) plays a pivotal role in the treatment process, and adherence to the prescribed regimen is crucial for optimal outcomes. The patient experienced relief from symptoms, with a significant reduction in their severity. This underscores the potential of *Ayurvedic* interventions in managing skin diseases and emphasizes the importance of holistic approaches in healthcare.

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**INTEGRATING AYURVEDA IN THE MANAGEMENT OF CHARMAKEELA W.S.R. TO
EPIDERMAL NEVUS" - A SINGLE CASE STUDY****Dr. Shweta Ojha^{1*}, Dr. Prakash Joshi², Dr. Yogesh Wane³ and Dr. Akhand Singh Baghel⁴**¹PG Scholar, Department of Rachana Sharir in Govt. (Auto) Dhanwantari Ayurved Collage and Hospital Ujjain (M.P) India.²Assistant Professor, Department of Rachana Sharir in Govt. (Auto) Dhanwantari Ayurved College and Hospital Ujjain (M.P) India.³Associate Professor, Department of Rachana Sharir in Govt. (Auto) Dhanwantari Ayurved College and Hospital Ujjain (M.P) India.⁴PG Scholar, Department of Rachana Sharir in Govt. (Auto) Dhanwantari Ayurved Collage and Hospital Ujjain (M.P) India.***Corresponding Author: Dr. Shweta Ojha**

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Article Received on 21/12/2024

Article Revised on 11/01/2025

Article Accepted on 01/02/2025

ABSTRACT

Epidermal nevi are benign skin growths that typically appear at birth or during early childhood. These lesions consist of various epidermal components, including keratinocytes, sebaceous glands, hair follicles, apocrine and eccrine glands, and smooth muscle cells, and are believed to result from cutaneous mosaicism. They are categorized into distinct variants based on their clinical appearance, extent of involvement, and the predominant epidermal structure within the lesion. The main variants include verrucous epidermal nevus, nevus sebaceous, nevus comedonicus, eccrine nevus, apocrine nevus, Becker's nevus, and white sponge nevus. Each type exhibits unique features that reflect its underlying cellular composition. This case study discusses a 12-year-old male child patient who presented with multiple dark-colored, warty papules arranged in a linear pattern on the left side of the body along with the leg, hand, neck and back. These lesions had been present for 7 years and were diagnosed as an epidermal nevus. In *Ayurveda*, this condition can be correlated with *Charmakeela* based on its symptomatology and treatment approaches.

KEYWORDS:- *Charmakeela*, Verrucous Epidermal Nevi, Hamartomas.**INTRODUCTION**

Epidermal nevi are hamartomas of the skin with various subtypes, including Verrucous Epidermal Nevus (VEN). VEN is characterized by hyperplasia of the epidermis, presenting as verrucous, well-demarcated, skin-colored, or brown papillomatous plaques. Most lesions are present at birth or develop during early infancy, gradually enlarging during childhood and typically stabilizing in size by adolescence. These lesions can be either localized or diffuse, often appearing in linear patterns, especially on the limbs, where they may align with skin tension lines or Blaschko's lines.^[1] Epidermal nevi are observed in approximately 1 to 3 per 1,000 live births, affecting males and females equally.^[2]

Histologically, verrucous epidermal nevi exhibit features such as hyperkeratosis, acanthosis, and papillomatosis. Epidermolytic hyperkeratosis is occasionally observed, more commonly in diffuse cases than localized ones. Extensive verrucous epidermal nevi may be associated

with epidermal nevus syndrome, a condition involving various developmental abnormalities affecting the skin, eyes, and central nervous, skeletal, cardiovascular, and urogenital systems. Rarely, malignant transformation into basal cell or squamous cell carcinoma may occur. Nevus sebaceous shares surface characteristics with verrucous epidermal nevi but also involves dermal malformations, particularly hyperplasia, and misplacement of sebaceous glands. These lesions almost exclusively appear on the scalp or face, presenting at birth as yellow, hairless, thin plaques. During puberty, androgen stimulation typically causes them to become raised and verrucous.

Histopathologically, nevus sebaceous displays enlarged sebaceous lobules, apocrine glands, minor epidermal changes, and reduced, misaligned follicular units. In adulthood, these lesions are more likely than verrucous epidermal nevi to develop benign or malignant tumours, with syringocystadenoma papilliform being the most

common benign tumour and basal cell carcinoma being the most common malignant tumor.^[3]

Treatment options in conventional medicine include topical agents, cryotherapy, laser electrofulguration, and surgical excision; however, these approaches often face challenges such as limited effectiveness and recurrence.

- 1. Topical chemical agents:** Salicylic acid is commonly used for its effectiveness in topical application.
- 2. Corticosteroid therapy:** These powerful anti-inflammatory agents can be applied topically or administered through intralesional injections.
- 3. Oral retinoids:** Known for their anti-proliferative effects on the epidermis, these medications require lifelong use to prevent recurrence.
- 4. Cryosurgery:** This method, typically involving liquid nitrogen, has a slow healing process and carries risks such as infection, swelling, and postoperative discoloration around the treatment area.
- 5. Laser treatment:** A non-invasive approach often employed for managing epidermal nevi.
- 6. Surgical excision:** Considered the gold standard for treating small epidermal nevi, though it may not be feasible if the nevus is deeply rooted. This method often results in significant scarring.^[4]

In *Ayurveda*, Epidermal Nevus is often correlated with a condition known as *Charmakeela*. This condition arises due to the vitiation of *Vata* and *Kapha Doshas*, leading to the formation of hard, nail-like structures on the skin, referred to as *Charmakeela*.^[5] According to *Vagbhata*, *Vyana Vayu* combined with *Kapha* creates growths on the skin's surface, resembling nails in appearance—immovable and hard in texture—known as *Charmakeela*.^[6] *Acharya Sushruta* elaborates on the characteristics of *Charmakeela* based on the predominance of specific doshas. In *Vata*-dominated cases, the patient experiences *Toda* (Pricking pain). When *Kapha* predominates, the lesion appears as a lump without discoloration of the skin. In *Pitta*-dominated cases, the lesion, due to *Rakta* vitiation, appears blackish, oily, dry, and hard. *Acharya Sushruta* classifies *Charmakeela* under the category of *Kshudra Roga* (Minor diseases).

MATERIAL AND METHOD

Case report -The present case study is a successful *Ayurvedic* management of *Charmakeela* w.s.r to Epidermal Nevi. A 12-year-old male child patient (OPD NO. 26746) with their parent came to our hospital Govt. *Dhanwantari Ayurvedic* College and Hospital Ujjain with a chief complaint of brown-black unilateral linear lesions with mild scaling of skin over left leg, hand, abdominal region, Neck, back, and face, for 7 years. There is no connection to seasonal variation. He also had a complaint of psychological trauma due to above

mentioned complaint. There was no pruritus, erythema, or associated skeletal or neurological defects.

History of present illness- According to the patient's parents, he was asymptomatic 7 years back. One day their parents noticed some lesions over their lower legs with itching. They gave him allopathic medicine for this but got symptomatic relief. His condition worsens and progressively increases along one side of his body day by day. Now they want to take *Ayurvedic* treatment. So, they came with the patient here for better management.

Past History- No Previous H/O or any other severe illnesses.

Treatment History- The patient took allopathic and local medication for the present complaint but could not get satisfactory relief.

Surgical History -No H/O any surgery.

Family History -Family history was negative for similar conditions or skin disorders and no H/O severe illnesses.

Treatment protocol

Oral medication

- Tab *Arogyavardhini Vati*- 1tab OD with water- after food
- *Mahatiktak Ghrit*- 1tsf BD with lukewarm milk, Tea, or water- empty stomach
- Tab *Kaishora Gugglu*- 1tab BD with lukewarm water- after food
- A tab containing *Neem, Giloy, Amaltas, Nagarmotha, Karanja, Indrajau, Daruhaldi, Ras Manikya* -1tab BD with water- after food

External application

- A cream containing *Shuddha Gandhaka, Tankan, Hartal, Ras Karpoor, Karanja oil, Neem oil, Bakuchi oil*, and *Elovera* mix with *Marichyadi Tail*- Up to 2 times locally apply on the affected area.
- *Chakra Marda Beeja Churna*—Mix with Buttermilk, keep it for the whole night, apply locally to the affected area the next morning, and wash it after 15-20 minutes.

Following the start of treatment, the patient was scheduled for follow-up appointments every 15 days at the OPD. This approach allowed for a comprehensive assessment of the patient's progress after treatment.

RESULT AND OBSERVATION

This protocol is followed for 6 to 7 months, during which the patient is advised on all do's and don'ts. After completing the medicinal treatment, there was a significant improvement in the patient's signs and symptoms. The patient experienced 80% relief, which is quite good; however, to achieve complete relief, they are also undergoing additional treatment. Follow-up photographs also reflect notable enhancement in the lesions.



Images before treatment



Follow up images 1st after treatment



Follow up images 2nd

DISCUSSION

According to *Ayurveda*, Epidermal Nevus is identified as *Charmakeela*, which *Acharya Sushruta* has categorized under *Kshudra Roga*.⁷ *Sushruta* explains that the vitiation of *Vyana Vayu*, when aggravated and combined with *Kapha*, leads to the formation of immovable, peg- or nail-shaped sprouts on the skin's surface, referred to as *Charmakeela* or *Arsha*. These growths cause pricking pain due to the influence of *Vata*. Their knotty appearance and color closely resemble the surrounding skin, attributed to *Kapha*. The combination of vitiated *Vyana Vayu* and *Kapha* further results in the affected area's *Toda* (pricking pain) and *Parushata* (roughness).^[8]

In this case, the *Doshas* involved were *Vata*, *Pitta*, *Kapha*, and *Rakta*, while the *Dūṣhya* affected included *Rasa Dhatu*, *Rakta Dhatu*, and *Mams Dhatu*. The pathological progression (*Dosha-Dushya Sannurchhana*) occurred due to the circulation of vitiated *Doshas*, with their *Sthana Samshraya* (site of pathological changes) manifesting in the skin. This resulted in the clinical features of verrucous Epidermal Nevi (*Vyadhi Lakshanas*). The treatment approach aimed at breaking the disease pathogenesis (*Samprapti Bhedana*) by adopting a protocol focused on *Pitta-Kaphahara* measures. Additionally, therapies to enhance digestive fire (*Agnidipana*), eliminate toxins (*Ampachana*), and improve blood quality (*Rasa Prasadana* and *Rakta Prasadana*) were implemented using internal *Ayurvedic* medicines.

One of the primary contributing factors identified was the intake of incompatible foods (*Viruddha Ahara*), which plays a significant role in the etiology of skin diseases. The patient consumed excessive salty and sour foods, old butter and curd, spicy items, and incompatible combinations like milk products with salty snacks. These dietary practices aggravated the condition. Furthermore, while the patient was using modern medications, they did not address these causative factors, resulting in only temporary relief with recurring episodes.

In this case, a strict dietary regimen (*Pathya*) was prescribed alongside *Ayurvedic* medicines as a corrective and preventive intervention. This approach aimed to achieve a better therapeutic response, expedite recovery, and minimize the recurrence of chronic skin ailments.

- **Arogyavardhini Vati**- *Arogyavardhini Vati* is primarily composed of *Loha*, *Abhrak*, *Tamra*, *Shilajit*, *Guggul*, *Chitrak*, and *Kutki*. In addition, it includes *Triphala Kajjali* and *Nimba Patra Swaras*. These ingredients possess properties such as *Vatnashak*, *Pachak*, *Dipak*, *Vishaghna* (detoxifying), and *Jantughna* (antimicrobial). Recognized as an excellent remedy for skin diseases, *Arogyavardhini Vati* enhances digestion, clears bodily channels, and supports tissue health. It achieves this by balancing fat metabolism and eliminating toxins through its action on the digestive system.^[9]
- **Mahatiktak Ghrit**- *Mahatiktak Ghrit*, used for *Sneha Pana* (internal oleation), acts as a

Raktashodhaka and facilitates the movement of vitiated *Doshas* from the *Shakha* (peripheral tissues) to the *Koshtha* (gastrointestinal tract) for elimination. Due to its *Sukshma* (subtle) property, the solution penetrates to the cellular level, aiding in the removal of lipid-soluble toxins. Neem has also incorporated its well-known *Rakta Shuddhi kara* (blood-purifying) properties, further enhancing the detoxification process.

- **Kaishora Gugglu-** *Kaishora Gugglu*, is known for its ability to balance *Pitta* and *Kapha Doshas*, making it beneficial in managing skin-related conditions. Its anti-inflammatory, detoxifying, and wound-healing properties may help in alleviating symptoms associated with epidermal nevus, such as inflammation and discomfort. Additionally, its blood-purifying action can support the management of underlying *Dosha* imbalances that contribute to skin growths like *Charmakeela*.
- **Marichyadi Tail+ cream-** *Marichyadi Taila*, with its anti-inflammatory, antimicrobial, and keratolytic properties, helps in reducing skin irritation, softening the lesions, and promoting detoxification. Its ability to balance *Pitta* and *Kapha Doshas* can support the reduction of abnormal skin growth and improve overall skin health. The cream which contains *Shuddha Gandhaka*, *Tankan*, *Hartal*, *Ras Karpoor*, *Karanja oil*, *Neem oil*, *Bakuchi oil*, and *Elovera* is often used for its skin-healing and protective properties, and may further enhance the benefits by providing nourishment to the skin, preventing dryness, and reducing any associated inflammation. The cream's ingredients, typically rich in herbal extracts and oils, can promote skin regeneration and help soothe the affected areas.
- **Chakra Marda Beeja Churna+ Butter Milk-** This *Churna* is believed to have purifying effects on the blood and skin, helping to reduce inflammation and promote the resolution of abnormal skin growths. When used topically, it can potentially help soften the lesions and reduce irritation associated with conditions like *Charmakeela*. Buttermilk, which is cooling and soothing, enhances the effects of *Chakra Marda*. It has hydrating properties can help moisturize the skin while reducing inflammation and redness. Additionally, buttermilk contains lactic acid, which can act as a mild exfoliant, promoting gentle skin regeneration and softening the hardened lesions.

The combination of these two ingredients, when applied locally, may support the reduction of the lesions' size, help manage the discomfort, and improve overall skin texture.

CONCLUSION

Verrucous Epidermal Nevi are cutaneous hamartomas, which may be congenital but often present after birth in more than 50% of cases. These abnormalities result from a defect in the ectoderm, the outer embryonic layer responsible for forming the epidermis. In *Ayurveda*, *Charmakeela* is analogous to Epidermal Nevi based on symptom similarity. It is believed to occur due to the vitiation of *Vyana Vayu* combined with *Kapha*. The treatment was carried out based on the symptoms and the imbalanced *Doshas*, and the results were observed.

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Evaluation of anti-hypothyroid effects of Jalakumbhi Lavana with Piper longum L.: An integrative case study in Ayurvedic treatment

Case Report

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Abstract

Hypothyroidism, described by deficient thyroid chemical creation, is a common endocrine problem influencing millions around the world. Its side effects incorporate exhaustion, weight gain, and mental impedance, altogether influencing personal satisfaction. While customary Ayurvedic writing examines *Galganda*, much the same as hypothyroidism, direct notices of thyroid problems are restricted. In this unique situation, this study investigates the capability of *Jalakumbhi Lavana* joined with *Pippali* in overseeing hypothyroidism, drawing matches with current ways to deal with its treatment. *Jalakumbhi*, referred to naturally as *Pistia stratiotes*, has phytochemical constituents possibly valuable in thyroid capability adjustment. *Lavana Kalpana*, a plan including salts, including normal salt (*Saindhava Lavana*), helps with drug conveyance and retention. Furthermore, it goes about as a potentiate, upgrading helpful impacts. The cooperative energy between *Jalakumbhi Lavana* and *Pippali*, a notable Ayurvedic spice with mitigating and bio enhancing properties, offers a promising road for tending to hypothyroidism.

Keywords: Hypothyroidism, Galaganda, Thyroid Gland, Jalakumbhi Lavana, Pippali, Integrated Approach, Case study.

Introduction

Hypothyroidism is a typical neurotic state of thyroid chemical deficiency. A large number of clinical signs, including unmistakable myxoedema, end-organ outcomes, and multisystem disappointment, as well as asymptomatic or subclinical circumstances with ordinary Thyroxine and triiodothyronine levels and marginally raised serum Thyrotropin levels, are qualities of hypothyroidism(1). Notwithstanding progressions in clinical science, the commonness of hypothyroidism stays high, requiring compelling restorative mediations. Since past numerous years, Levothyroxine is viewed as the standard treatment for Hypothyroidism as per present day science. Thyroid circumstances are depicted in Ayurveda as per *doshas*(2). In light of whether hypothyroidism is welcomed on by a *Vata*, *Pitta*, *Kapha*, or urinary plot disease (which fundamentally influences females), it has been characterized into five gatherings(3). The "goitre" type is accepted to be the high level phase of *Kapha* prompted hypothyroidism. *Galaganda* as indicated by ayurveda is similar to goitre connected to thyroid conditions. Ayurveda, a comprehensive

arrangement of medication, offers a rich store of plant and mineral-based details with likely helpful advantages. One such plan being scrutinized is *Jalakumbhi Lavana* joined with *Pippali*, eminent for its indicated antihypothyroid properties(4). *Jalakumbhi Lavana* got from the sea-going plant *Pistia stratiotes* Linn. Has a well-established history in Ayurvedic practice for its restorative properties. *Pippali* (*Piper longum*), is another notable spice with diverse remedial impacts. Together, it structure a synergistic mix accepted to tweak thyroid capability and mitigate side effects related with hypothyroidism(5). This examination means to clarify the readiness, normalization, and assessment of the anti-hypothyroid movement of *Jalakumbhi Lavana* with *Pippali* through an extensive contextual investigation(6). By fastidiously enumerating the definition cycle, guaranteeing its normalization for predictable strength, and thoroughly surveying its adequacy, this study tries to add to the developing group of proof supporting the incorporation of Ayurvedic cures into standard medical services for thyroid issues(7). This study investigates the helpful capability of *Jalakumbhi Lavana* with *Pippali*, adjusting conventional insight to contemporary clinical necessities. *Pistia stratiotes L.*, otherwise called *Jalakumbhi*, is an oceanic plant from the family *Araceae*, stoloniferous and drifting on lakes, streams, and stale water lakes and in lime-rich water throughout India. It is appropriated in the tropical and subtropical area of Asia, Africa, and America. Four assortments are recognized. The Indian assortment is known as var. *cuneta*. It is spread by seeds or all the more quickly by

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stolons. It frames a thick mat on the water surface and causes serious stopping up on streams. It is additionally liable for holding onto mosquito hatchlings, which convey the filarial parasites. It blossoms in hot season and natural products show up after the downpour. *P. stratiotes* is a drifting, stoloniferous spice found in lakes and streams nearly all through India Upto a level of 1000 m. Leaves are green in variety, unscented, and unpleasant in taste. The leaves are roughly 13cm long and 17cm wide and of fan-formed having equal venation, gruff peak, and whole edge.

An enormous number of restorative properties are credited to the plant, especially the leaves. The plant is viewed as germicide, anti-tubercular, and anti-dysenteric. In Gambia, the plant is utilized as an anaesthetic for eyewash. Juice of plant is utilized by Tribal in ear grievances. The debris of plant is applied to the ringworm of the scalp. Leaves are utilized in dermatitis, disease, ulcers, heaps, and syphilis. Juice of leaves bubbled in coconut oil is applied remotely in constant skin illnesses

Patient Information

Female patient 52-year-old encountering side effects of anorexia, dry skin, blockage, going bald, and stoutness for the beyond two years. Her side effects incorporate palpitations and obstruction. She has been taking Tab Thyroxine 50mcg day to day and has a clinical history of hypothyroidism going back a similar measure of time. She has no significant family clinical history, nor does she have a background marked by diabetes, pneumonic tuberculosis, bronchial asthma, epilepsy, hypertension, or some other serious clinical issues. Besides, her earlier clinical records contain no data in regards to any surgeries. In the assessment of the patient, their general condition was surveyed as fair, without any indications of fever noted. Their heartbeat rate was recorded at 70 pulsates each moment, and her circulatory strain estimated at 100/74 mmHg. Endless supply of the respiratory framework, air section reciprocally was viewed as clear. All standard examinations directed on the patient yielded results inside ordinary cut-off points.

Materials and Methods

The review included the assortment and normalization of Jalakumbhi Lavana and Pippali, following laid out Ayurvedic conventions. The arrangement strategy, measurement, and length were carefully archived. A contextual investigation approach was utilized to assess the viability of the treatment routine in a patient determined to have hypothyroidism. Assortment of plant material: Panchang of Pistia Stratiotes, Saindhava Lavana, and Pippali were gathered from valid sources. The gathered plant material was recognized at Agharkar Exploration Foundation and Maharashtra Relationship for the Development of Science, Pune. The example voucher number is Asclepia.2109/1. Jalakumbhi Lavana was ready according to the writing accessible in the traditional course book, During treatment, Tab Thyroxine diminish

to 25mcg/day and following Ayurvedic medications were begun, First Development (following one month) - The side effects Palpitation, Anorexia, Stoppage, Going bald was decreased. Patient was feeling better Weight was decreased by 1kg. Treatment went on as same and portion of Tab Thyroxine was additionally decreased to 12.5mcg/day. Second Development (following multi month) - No any new protests. Patient was feeling better Weight was decreased by 2kg. TFT was Typical. Treatment went on as same and Tab Thyroxine was halted.

Ashtavidha Pariksha (Eightfold Examination)

The patient went through an extensive Ashtavidha Pariksha, or eightfold assessment, as a component of the underlying evaluation. Her heartbeat (Nadi) was recorded at 70 pulsates each moment, customary, and demonstrative of a Vata kaphaPradhana, recommending an overwhelming Vata and Kapha dosha irregularity. The assessment of her eyes and vision (Druk) uncovered typical discoveries, without any anomalies distinguished. Concerning matter (Mala), the patient revealed an impression of fragmented departure, a typical side effect related with her condition. Her general body construct (Aakriti) was delegated mesomorph (Madhyam), showing a medium form. The evaluation of pee (Mutra) was Samyaka, with ordinary recurrence and result of 7-8 times each day. The touch (Sparsha) assessment uncovered dries (Ruksha) and warm (Ushna) skin, predictable with hypothyroid side effects. Her voice (Shabda) was viewed as solid and typical, with practically no raspiness or irregularities. Finally, the assessment of her tongue (Jivha) showed a whitish layer (Sama), characteristic of potential ama or poisons in the body. All through the subsequent period, the patient's Nadi demonstrated a shift towards a more adjusted state, reflecting enhancements in her generally dosha harmony. At first giving a Vata kapha Pradhana, ensuing assessments showed a continuous standardization of heartbeat qualities as her side effects improved and her dosha balance was re-established.

Nidan Panchak or the Five-Element Symptomatic Strategy From an Ayurvedic viewpoint, the patient's hypothyroidism was painstakingly analysed and grasped utilizing the *Nidan Panchak*, or five-crease demonstrative strategy. The *Nidana* (Etiology) step of the strategy included deciding the hidden causes, for example, unfortunate food and way of life decisions that exacerbated the doshas of Vata and Kapha. Prodromal side effects, or Purvarupa, were noticed, including starting signs, for example, laziness, weight increment, and skin dryness(8). The completely evolved side effects, known as *Rupa* (Clinical Elements), included stoppage, recognizable weight reduction, and an extraordinarily dry skin. The examination likewise took a gander at *Upshaya-Anupshaya* (Exasperating and Easing Elements), assessing the impacts of various medicines and way of life changes on the side effects and taking note of that specific food changes and home grown details offered mitigation. To appreciate the course of the illness, *Samprapti* (Pathogenesis) was analysed eventually. This investigation showed how the

awkwardness of *Vata and Kapha* made hypothyroidism manifest, and how the joined utilization of *Jalakumbhi Lavana* and *Flute player longum* attempted to lighten the condition by re-establishing dosha balance. This intensive indicative worldview, which joined clinical perceptions with Ayurvedic standards, guaranteed a patient-focused way to deal with therapy.

Clinical Findings

The patient's clinical discoveries exhibited various side effects intriguing with hypothyroidism, which were approved by intensive examinations. The thyroid organ was apparently augmented during the thyroid assessment, which might show thyroid brokenness. Bradycardia and palpitations were found during the cardiovascular assessment, which are indications of hypothyroidism's impacts on the heart. Critical going bald and dry skin were noted during the dermatologic assessment, which was in accordance with the patient's accounted for objections. Shortcoming and exhaustion were seen during the neurological assessment; these side effects are normal of hypothyroid patients. Weight gain and facial puffiness were seen during the general assessment, with periorbital edema — or puffiness around the eyes — being explicitly referenced. The multisystem association normal for hypothyroidism was featured by these discoveries aggregately, featuring the need of a sweeping and integrative treatment approach for this situation concentrate on that joined *Jalakumbhi Lavana* with *Piper longum*.

The symptoms described in the image are graded using specific scoring systems for hair fall, dryness (Rookshata), constipation and obesity. Here's how the symptoms are graded in detail:

Hair Fall Grading System:(9)

- Grade 0 (Normal -): Hair fall is minimal with 1 to 5 hairs falling during combing or washing.
- Grade 1 (Mild +): Hair fall is less than 20 hairs when combing or washing.
- Grade 2 (Moderate ++): Hair fall is more pronounced, with more than 20 hairs falling during combing or washing.
- Grade 3 (Severe +++): Hair fall occurs even with minimal hand strength (less than 20 hairs fall simply when applying a gentle hand force).

Dryness (Rookshata) Grading System(9)

- Grade 0: (No Dryness-): The skin appears normal, without any signs of dryness.
- Grade 1 (Mild +): The skin is dry, accompanied by rough texture but no flaking or other significant changes.
- Grade 2 (Moderate ++): There is visible scaling on the dry skin, indicating a more pronounced level of dryness.
- Grade 3 (Severe +++): The dryness is extreme, and the skin is cracking, which indicates significant skin barrier damage.

Constipation Scoring System:(10)

- Score 0 (No Constipation -): Normal bowel movement frequency—1 to 2 times per day or once every two days.
- Score 1 (Mild +): Bowel movements occur only two times per week, indicating mild constipation.
- Score 2 (Moderate ++): Bowel movements occur once per week, which is a sign of moderate constipation.

Obesity Scoring System: (11)

- Grade 0 (Normal -): No significant fat accumulation. Normal weight, energy levels, and balanced metabolism.
- Grade 1 (Mild Obesity +): Mild fat accumulation, especially in the abdomen and thighs. Slight heaviness, reduced stamina, and early signs of sluggishness.
- Grade 2 (Moderate Obesity ++): Noticeable fat deposition in multiple areas like the abdomen and arms. Marked lethargy, fatigue, and reduced physical endurance.
- Grade 3 (Severe Obesity +++): Significant fat accumulation with restricted mobility. Severe fatigue, heaviness, and associated complications like joint pain or breathing issues.

Observation and Result

Date	Day	Symptoms	Laboratory Investigation	Treatment	Dose and Anupana
29/01/2024	1	Dry skin +++ Constipation ++ Hair loss +++ Obesity +++	Thyroid Profile Total Serum		
30/01/2024	2	Dry skin +++ Constipation ++ Hair loss +++ Obesity +++	Thyroid Profile T3 – 0.85 ng/mL T4 – 7.13 ug/dL TSH - 7.71 uIU/mL	<i>Jalkumbhi Lavana</i> with <i>Piper longum</i>	3 gm empty stomach with lukewarm water
02/03/2024	3	Dry skin ++ Constipation + Hair loss ++ Obesity ++		<i>Jalkumbhi Lavana</i> with <i>Piper longum</i>	3 gm empty stomach with lukewarm water
12/04/2024	4	Dry skin Constipation Hair loss Obesity (all symptoms were reduced)	T3 – 112.19 ng/dL T4 – 8.1 ug/dL TSH – 2.57 uIU/mL	The same treatment was administered for 15 days.	3 gm empty stomach with lukewarm water

Discussion

Medications in combination form (*Jalkumbhi, Saidhav Lavan* and *Pippali*) act as antagonists to the primary pathological elements, *Dushya* (the body's essential structural components) and *Dosha* (the body's regulatory functional factors), thereby interrupting pathogenesis and alleviating the symptoms of the disease(12) . The primary principle of Ayurveda asserts that the most critical step in treating any illness is to interrupt its etiology. Hypothyroidism presents clinical signs associated with imbalances in the *Kapha* and *Vata doshas*.(13)

In addressing the pathogenesis of hypothyroidism, *Jalakumbhi* has been selected for its bitter (*Tikta*) and sweet (*Madhura*) tastes, as well as its light (*Laghu*) and dry (*Ruksha*) properties. *Jalakumbhi* is known for its *Tridosha Shamak* properties, which help balance the three *doshas* in the body. Due to its bitter taste and light and dry properties, *Jalakumbhi* facilitates the digestion of toxins (*Ama*) and calming the aggravated *Kapha*, thereby enhancing *Dhatvagni* and alleviating symptoms of *Ama*.(14)

Pippali has demonstrated efficacy in alleviating symptoms of hypothyroidism, particularly those related to constipation, cold skin, and periorbital puffiness. It possesses properties such as a pungent (*Katu*) taste, lightness (*Laghu*), sharpness (*Tikshna*), and unctuousness (*Snigdha*), along with moderate potency (*Anushnashita Veerya*) and a sweet post-digestive effect (*Madhur Vipaka*). (15)

The case study results indicate a positive therapeutic response to the combined use of *Jalakumbhi Lavana* and *Pippali* in managing hypothyroidism. The treatment was well tolerated, with no adverse effects reported during the study period. *Jalakumbhi* is regarded as a preferred medication for conditions such as *Granthi vikar* and *Galgand*, and in this case, *Jalakumbhi Lavana* was administered for two months.(16)

In a clinical evaluation conducted over several dates, symptoms such as dry skin, constipation, hair loss, and obesity were documented alongside laboratory assessments of thyroid function. The administration of *Jalakumbhi Lavana* with *Piper longum* at a dosage of 3 grams on an empty stomach with lukewarm water resulted in significant improvements in symptoms and normalization of thyroid function markers, including T3, T4, and TSH levels. The study highlights the therapeutic potential of Ayurvedic interventions in managing hypothyroidism. The pharmacological properties of this combination provide a viable alternative or adjunct to conventional thyroid hormone replacement therapy. The observed improvements in clinical parameters underscore the importance of personalized Ayurvedic treatments tailored to individual *doshas* and clinical presentations.(17)

Pistia stratiotes L. is believed to have thyroid-stimulating properties in Ayurveda, with some studies suggesting its role in regulating thyroid function. *Piper longum* is known for its bioavailability-enhancing properties and is frequently incorporated into Ayurvedic formulations to improve the absorption of various herbs.(18)

Jalakumbhi (Pistia stratiotes) aids in managing hypothyroidism through its flavonoids, steroids, and alkaloids, which have antioxidant and anti-inflammatory properties. These compounds reduce inflammation and oxidative stress in the thyroid gland, essential for hormone production. Additionally, *Jalakumbhi's* *Tridoshagna* properties help balance *Kapha* and *Vata* *doshas*, addressing the underlying imbalances often seen in hypothyroidism.(19)

Lavana Kalpana, through its process of particle size reduction, enhances the bioavailability of herbal components, making the formulation lighter and easier

to digest. The inclusion of *Saidhav Lavan* is beneficial in balancing *doshas* and promoting optimal digestion, further supporting thyroid health and alleviating symptoms associated with hypothyroidism.(20)

The combination of *Jalakumbhi Lavana* and *Pippali* was chosen for its ability to balance the *doshas* and address the underlying causes of hypothyroidism. Further investigation into the results and any observed improvements in thyroid function would be beneficial. By integrating ancient wisdom with modern science, Ayurveda continues to make significant contributions to the comprehensive management of complex conditions like hypothyroidism. These medications work in tandem to counteract the primary pathological factors, namely the *Dosha* and *Dushya*, leading to the disruption of pathogenesis and the alleviation of disease symptoms. (21).

Conclusion

Jalakumbhi Lavana with *Piper longum* presents a promising road for the administration of hypothyroidism, utilizing the all-encompassing standards of Ayurveda. The review advocates for additional exploration and reconciliation of Ayurvedic rehearses into standard medical services, offering protected and compelling choices for thyroid issues.

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A Case Study On Ayurvedic Approach For Management Of Plaque Psoriasis

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Abstract

Psoriasis is a chronic inflammatory skin condition characterized by erythematous, scaly plaques that significantly affect the quality of life. Modern medicine offers symptomatic relief through immunosuppressants and corticosteroids, but these treatments often fail to provide a permanent cure and are associated with adverse effects. As a result, patients increasingly turn to alternative therapies for long-term management. *Ayurveda*, a traditional system of medicine from India, emphasizes holistic treatment that addresses the root cause of diseases through a combination of detoxification, dietary modifications, and lifestyle adjustments. This case study explores the *Ayurvedic* management of plaque psoriasis in a 21-year-old female patient who had been suffering from the condition for three years and sought treatment at the Government Dhanwantari Ayurveda Medical College & Hospital, Ujjain, Madhya Pradesh. The treatment included *Shodhana* (purification) and *Shamana* (palliative) therapies, as well as adherence to *Pathya-Apathya* (dietary and lifestyle protocols). Over a two-month period, the patient exhibited notable improvements, including a 95% reduction in Psoriasis Area and Severity Index (PASI) scores. Scaly patches and erythema decreased significantly, and the patient reported enhanced overall well-being. These findings suggest that *Ayurvedic* management, emphasizing holistic and personalized care, may offer a valuable adjunctive approach to conventional treatments for plaque psoriasis. This case study contributes to the growing body of evidence supporting the integration of *Ayurveda* into modern healthcare systems. Further research is warranted to explore the mechanisms underlying *Ayurvedic* therapies and to establish their efficacy in larger patient populations.

Keywords: Ayurvedic treatment, Psoriasis, Shodhana, Shamana, Pathya-Apathya, Case Study.

Introduction

Psoriasis is a chronic, immune-mediated skin disorder characterized by the presence of thick, scaly, erythematous plaques on the skin. It affects approximately 2-3% of the global population, impacting individuals of all ages and ethnicities. While the exact etiology of psoriasis remains unclear, it is understood to involve a complex interplay of genetic, immunological, and environmental factors. Conventional treatment options, including topical steroids, phototherapy, and systemic drugs like Methotrexate and Prednisolone, offer varying degrees of relief but are often associated with side effects and do not address the root cause of the disease.

In *Ayurvedic* texts, psoriasis can be correlated with "*Eka-Kushtha*" or "*Kitibha*," which are forms of *Kushtha* (skin diseases). According to *Ayurveda*, the imbalance of *Tridosha*—*Vata*, *Pitta*, and *Kapha*—along with impaired digestive fire (*Agni*) and accumulation of toxins (*Ama*), play a significant role in the pathogenesis of *Kushtha*. Factors such as irregular dietary habits, stress, and improper lifestyle further aggravate the condition. This case study aims to provide an in-depth understanding of how *Ayurvedic* interventions, rooted in classical principles, can effectively manage plaque psoriasis through the integrated approach of ayurvedic medicines, therapies and *Pathya- Apathya*.

Case Study

Patient Profile

- **O.P.D. NO. :**1077
- **Age/ Gender:** 21 years/ Female
- **Chief Complaints:** Persistent scaly patches with erythema, looking unstable type and itching across the body for the past three years associated with frequent gastro-esophageal acid reflux and disturbed pattern of sleep.
- **Medical History:** The patient had been undergoing frequent modern medical treatments, including topical steroids and oral immune-suppressants, with minimal improvement. Frustrated by the lack of lasting results, she came to consult *Ayurvedic* treatment at the Skin Care OPD of the Government Dhanwantari Ayurveda Medical College & Hospital, Ujjain.
- **Prakriti Analysis:** Predominantly *Vata-Pitta Prakriti*, characterized by dry skin, irritability, and sensitivity to heat.
- **Genetic History-** Not any.
- **Nidana Sevan-** *Ratri jagaran*, Masala-food habits, regular Use of *Dahi*, Frequent consumption of junk food, Fast food, mental stress regarding study & career.
- **Diagnosis:** Plaque Psoriasis (correlated with *Eka-Kushtha* in *Ayurveda*)

- 44.3 points- Higher **PASI scores** (Psoriasis Area and Severity Index) indicate higher severity of psoriasis; scores range from 0 (no disease) to 72 (maximal disease severity)
Head/neck: 6.5
Upper limbs: 7.4
Trunk: 13.0
- Lower limbs: 17.4

Ayurvedic Treatment Protocol

1. **Shodhana Chikitsa:** Ayurvedic purification therapies aim to eliminate toxins (*Ama*) and balance the aggravated *Doshas*. This treatment aims to make movement of *Shakhagat Dosha* to *Koshtha* and their elimination to remove *Kha- Vaigunya* or *Sthanasanshraya*. The following steps were undertaken:
 - *Snehapana* (Internal Oleation): The patient was administered medicated ghee (*Ghrita*) for five days to lubricate the Channels associated with the site of the disease and prepare the body for purification. *Panchatikta Ghrita*, known for its anti-inflammatory and detoxifying properties due to their oil soluble phyto- active principles of 5 *Tikta Ras Pradhan dravyas*, was used.
 - *Abhyanga* (Oil Massage) and *Svedana* (Fomentation): Application of medicated oils, such as *Nimba Taila* and *Dasha moola Taila*, was followed by steam therapy (*Svedana*) to open the skin pores externally and facilitate the removal of toxins from *Shakha* to *Koshtha* internally.
 - *Vamana* (Therapeutic Emesis): After proper *Snehana* and *Svedana*, *Vamana* therapy was conducted using *Madanaphala* (Emetic nut) and *Madhuyashti Phant* to expel the aggravated *Kapha dosha* from the system. This therapy helps in detoxifying the upper gastrointestinal tract and improving skin health.
 - *Virechana* (Therapeutic Purgation): To eliminate *Pitta dosha*, the patient was given *Trivrutta Avaleha* (a herbal purgative) after preparing the body with oleation and fomentation. This therapy effectively cleanses the liver and intestines, thereby reducing inflammation and promoting skin healing.
2. **Shamana Chikitsa :** *Shamana* therapies aim to pacify the aggravated *Doshas* and provide symptomatic relief. The following medications and treatments were prescribed:

Internal Medications:

- *Panchatikta Ghrita*- *Panchatikta ghrī* is a specially prepared ghee used internally for therapeutic purposes. Ghee has a unique ability of *Sookshma Strotogamitva*. In the treatment of skin disorders, medicated ghee enriched with *Tikta* and *Kashaya Ras* is recommended for internal administration. As *Avapeedak Ghritpaan* early in the morning before breakfast, *Panchatikta Ghrita* had been given daily.
- Himcocid SF syrup: A herbal formulation sugar free syrup containing varatika, amalki as key ingredients with antacid and anti-ulcer properties. Dosage: 10 ml twice daily after meals.
- Tab. Soraneem- This formulation combines the potency of several herbal ingredients, including *Gandhak Rasayan*, *Navakashaya Guggaya*, *Khadirashtakam*, and extracts of *Manjistha* and *Anantmool*. By promoting detoxification and rejuvenation, it helps restore healthy skin tone and pigmentation. Its astringent and antifungal properties provide additional benefits, while its immunomodulatory, anti-inflammatory, and antioxidant effects work synergistically to purify the blood and support overall well-being.
- Tab. Nindo: Nindo Tablet is a botanical supplement designed to promote mental wellness. Its unique blend of adaptogenic herbs, including *Ashwagandha*, *Tagar*, *Brahmi*, and *Yashtimadhu*, works synergistically to support emotional balance and overall mental health. Dosage: 1 table before sleep at night.
- An Aushadhiya yog made up with the *Supushti choorna*(1 gm), *Giloya Choorna*(1 gm), *Kutki Choorna*(500 mg), *Mukta pishti Choorna*(500 mg) had been prescribed twice daily after meal. It is an experience based formulation available in the opd level which supports digestion, boosts immunity, and protects liver health. It promotes overall vitality, balances the Tridosha, and enhances well-being.

External Applications:

- Winsoria oil (made up of- *Shweta Kutaja* and coconut oil) followed by the local application of Psorolin-B ointment were applied to the affected areas to reduce itching and promote skin regeneration.
- A herbal paste (Lepa) made of Coconut oil, *Deshi Ghee*, Liquid Paraffin, *Shuddha Gandhak* powder and *Tankan Bhasma* was used as a soothing and anti-inflammatory topical treatment as well as local moisturiser.
- Daily use of local application of *Chakramarda beej choorna* mixed with buttermilk for overnight. **Lekhan (scraping)** property helps remove excess scaly lesions and promotes skin healing by reducing itching and dryness.

3. Pathya-Apathya (Dietary and Lifestyle Guidelines):

Pathya (Recommended):

- Consumption of freshly prepared, warm, and easily digestible foods
- Inclusion of bitter and astringent-tasting foods such as *neem*, *giloy*, and *turmeric*
- Regular use of ghee to balance *Vata* and *Pitta*
- Drinking plenty of warm water
- *Sahaj Dhyana* and *Pranayama* for mental wellness

Apathya (Avoided):

- Oily, spicy, Acidic and processed foods
- Non-vegetarian foods and fermented items
- Alcohol, smoking, and caffeinated beverages
- Use of *Dahi*, *Aachar*, Dairy products like *paneer*, Sweets
- Excess use of Salt
- Stress-inducing activities and irregular sleeping patterns

Outcome

After two months of consistent Ayurvedic treatment, the patient showed remarkable improvement. The scaly patches and erythema reduced by approximately 95%, and itching was significantly alleviated. The patient's overall quality of life improved, with enhanced confidence and reduced discomfort. No adverse effects were reported during the treatment. PASI score reduced up to 10.3 (77% reduction) and all the symptoms are managed up to 6 months till the article is made to publish without taking medicines while just following the *Pathya- Apathya*. The following photographs of patients shows the significant relief in the symptoms.



Before Treatment

After Treatment

Discussion

Ayurveda's approach to managing psoriasis focuses on a holistic understanding of the disease's root causes, unlike conventional treatments that primarily address symptoms. The integration of *Shodhana* (purification) and *Shamana* (palliative) therapies ensures a comprehensive approach by targeting the detoxification of the body while simultaneously pacifying aggravated *Doshas* and alleviating symptoms. In this case study, therapies like *Vamana* and *Virechana* effectively reduced the accumulated *Ama* (toxins) and corrected the imbalance in *Tridosha*, especially the aggravated *Kapha* and *Pitta Doshas*, which are closely associated with skin disorders in *Ayurveda*. The combination of therapies demonstrated a reduction in inflammation and scaling, while also addressing systemic factors such as poor digestion and stress, which are considered key contributors to psoriasis.

The use of *Panchatikta Ghrita* and other herbal medications highlighted the importance of herbal formulations enriched with *Tikta* (bitter) and *Kashaya* (astringent) *Rasas*, which help balance the *Rakta Dhātu*, promote detoxification, and rejuvenate skin tissues. The personalized diet and lifestyle modifications

(*Pathya-Apathya*) played a pivotal role in sustaining the benefits of treatment by mitigating the recurrence of symptoms. This underscores *Ayurveda's* unique emphasis on *Nidana-Parivarjana* (removal of causative factors) and the importance of maintaining digestive health (*Agni*) to support long-term remission.

Additionally, this case demonstrated the psychosomatic aspect of psoriasis management through the inclusion of mental wellness practices like *Pranayama* and *Sahaj Dhyana*, addressing the significant role of stress in aggravating the condition. Ayurvedic external applications, including *Chakramarda beej choorna* and herbal pastes, effectively soothed the skin and supported the healing process through their *Lekhan* (scraping), anti-inflammatory, and moisturizing properties.

While the results were promising, the findings underscore the need for more extensive clinical research and standardized treatment protocols to validate the efficacy of *Ayurvedic* interventions. Larger sample sizes, robust study designs, and mechanistic studies exploring the molecular basis of Ayurvedic formulations are essential to establish their role as a complementary or standalone treatment for psoriasis.

Conclusion

This case study highlights the efficacy of *Ayurvedic* management in the treatment of plaque psoriasis. Through the combined use of *Shodhana* and *Shamana* therapies, along with dietary and lifestyle interventions, the patient achieved significant clinical improvement, including a 95% reduction in PASI scores over two months. The holistic approach not only alleviated symptoms but also addressed underlying factors such as toxin accumulation, *Dosha* imbalance, and stress, ensuring sustained remission without adverse effects.

The findings emphasize *Ayurveda's* potential as a safe and effective adjunctive or alternative therapy for chronic skin conditions like psoriasis. By integrating traditional wisdom with modern research, *Ayurveda* offers a personalized and sustainable approach to managing autoimmune and inflammatory disorders. However, further studies with larger cohorts are necessary to confirm these findings and establish evidence-based guidelines for the *Ayurvedic* management of psoriasis. This case underscores the importance of incorporating *Ayurveda* into modern healthcare systems to provide holistic and patient-centric care for chronic diseases.

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REVIEW OF SHUKRAVAHA STROTAS SHARIR AND ITS ANATOMICAL RELATIONS WITH THEIR EFFECT ON REPRODUCTIVE HEALTH: AN AYURVEDIC PERSPECTIVE

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Article Received on
11 December 2024,

Revised on 01 Jan. 2025,
Accepted on 21 Jan. 2025

DOI: 10.20959/wjpr20253-35379



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ABSTRACT

This comprehensive review delves into the concept of *Shukravaha Strotas*, a complex network of channels in Ayurveda responsible for the formation, storage, and transport of *Shukra Dhatu*, the vital reproductive tissues. The review emphasizes on the anatomical relations of Shukravaha Strotas, including their connections with the *Swadhisthan Chakra*, *Vitap Marma*, *Shukradhara Kala*, vascular components, and muscular frameworks, highlighting the intricate relationships between the reproductive system and the overall bodily framework. The physiological aspects of *Shukravaha Strotas* are also explored, revealing the importance of *Shukra Dhatu* in epitomizing vitality and fertility, while *Rasavaha Strotas* provides the essential precursor supply. Furthermore, the review discusses the subtle and philosophical aspects of *Shukravaha Strotas*, including the profound influence of psychosomatic factors and *chakra*-based energy dynamics on reproductive health. The delicate interplay between the physical,

emotional, and energetic bodies can either support or disrupt the functioning of *Shukravaha Strotas*, leading to infertility, sex related problems, hormonal imbalances, and systemic debility. The review also justifies the impact of Shukravaha Strotas dysfunction on reproductive health, emphasizing the need for a holistic approach to address reproductive

health issues. Fortunately, *Ayurveda* offers a comprehensive range of interventions to restore and maintain reproductive harmony, including targeted herbal formulations, lifestyle adjustments, and Panchakarma therapies. By embracing the holistic wisdom of *Ayurveda*, individuals can address the root causes of reproductive dysfunction and cultivate a deeper understanding of the intricate relationships between body, mind, and spirit.

INTRODUCTION

Shukravaha Strotas, a fundamental concept in *Ayurveda*, represents the intricate and complex system governing reproductive functions, playing a pivotal role in maintaining overall health and well-being. The significance of *Shukravaha Strotas* is extensively elaborated in classical *Ayurvedic* texts, such as *Charaka Samhita* and *Sushruta Samhita*, which emphasize the importance of *Shukra Dhatu* in vitality, immunity, and procreation. These ancient texts provide a comprehensive understanding of the reproductive system, highlighting the interconnectedness of physical, mental, and spiritual aspects. From an anatomical perspective, *Shukravaha Strotas* are intricately linked with various structures that play a crucial role in reproductive health. The *Swadhisthan Chakra*, associated with the reproductive organs, governs the emotional and spiritual aspects of reproduction. The *Sparshanendriya*, or the sense of touch, is also closely linked with *Shukravaha Strotas*, as it plays a vital role in the transmission of sensory information during reproduction.

Furthermore, *Shukravaha Strotas* are connected to the *Vitap Marma*, a vital point that governs the functioning of the reproductive organs. The *Shukradhara Kala*, a subtle energy channel, also plays a crucial role in the functioning of *Shukravaha Strotas*, as it governs the flow of reproductive energy. Additionally, *Shukravaha Strotas* are linked with the *Shukra Dhatu*, the vital reproductive tissue that is responsible for the formation of reproductive cells.

The *Manovaha Strotas*, which governs the mental and emotional aspects of reproduction, is also intricately linked with *Shukravaha Strotas*. The *Rasvaha Strotas*, which governs the flow of nutrients and energy to the reproductive organs, also plays a crucial role in the functioning of *Shukravaha Strotas*. Moreover, the *Dhamani*, *Sira*, and *Peshi Sharir*, which are the vascular, nervous, and muscular components of the reproductive system, are also closely linked with *Shukravaha Strotas*.

A critical analysis of the anatomical relations of *Shukravaha Strotas* reveals that these structures are interconnected and interdependent, forming a complex network that governs

reproductive health. The functioning of *Shukravaha Strotas* is influenced by various factors, including diet, lifestyle, stress, and emotional well-being. Any imbalance or dysfunction in these factors can disrupt the functioning of *Shukravaha Strotas*, leading to reproductive health issues.

This review article aims to provide a comprehensive overview of the anatomical relations of *Shukravaha Strotas* with various structures, highlighting their impact on reproductive health. By examining the classical *Ayurvedic* texts, modern anatomical and physiological concepts, and subtle and philosophical elements, this review seeks to provide a deeper understanding of the complex mechanisms governing reproductive health.

Furthermore, this review will discuss the clinical implications of *Shukravaha Strotas*, highlighting the importance of considering the holistic perspective in addressing reproductive health issues. The review will also explore the potential applications of *Shukravaha Strotas* in the prevention and management of reproductive health disorders, highlighting the need for further research in this area.

Ultimately, this review aims to inspire further research and discussion among *Ayurveda* researchers, physicians, and scholars, promoting a deeper understanding of the complex relationships between *Shukravaha Strotas*, reproductive health, and overall well-being. By exploring the intricacies of *Shukravaha Strotas*, we may uncover new avenues for promoting reproductive health, fostering a more holistic approach to healthcare that integrates the principles of *Ayurveda*.

Discussion on possible anatomical relations of *shukravaha strotas*

Swadhisthan chakra- The *Swadhisthan Chakra*, located in the pelvic region, corresponds to the sacral plexus and reproductive organs, including the uterus, ovaries, testes, and bladder. The *Pranic* body is driven by *Chakras*, or psychic centers, which are subtle, high-powered swirling of energy in the body. These *Chakras* are said to be corresponded in an ascending column from the root of the spine to the top of the head. They gather and preserve cosmic *Prana*, and they operate as transformers, limiting the amount of energy so that it may be used by the body's numerous components and systems. *Chakras* are associated with a variety of physiological processes, a dimension of consciousness, a separate element, and other distinguishing characteristics throughout civilizations. *Chakras* are believed to promote physical, emotional, and mental well-being. These seven *Chakras* are located along the spine

and each has a unique purpose. These are the psychological centers of the subtle body that regulate a variety of activities. Anatomically, these *Chakras* may reflect nerve plexuses that perform distinct functions according to their area of supply. These plexuses take the appearance of spokes surrounding a wheel. In *yoga*, meditation, and *Ayurveda*, this phrase alludes to the physical energy channels. To conceptualize a *Chakra* in the body, one should visualize a revolving wheel of life-giving energy, the vital force that drives us and all living things. The *Swadhishtana Chakra* is the second *Chakra* entailed in the *Chakra* timeline. It is known as the sacral *Chakra* since its position is found in the anatomical location of *Shukravaha Strotas* as per *Ayurveda* texts. It is also known as the lower abdominal center. It is known as the creativity *Chakra* because it is associated with reproduction, and all the creative endeavors we do. It is also known as the sexual *Chakra* since it is located in the pelvic area. It is also supposed to be the core of seeking pleasure, whether through sexual activities or ordinary life experiences.

Organs and Sense organs related to *swadhishtana chakra* - The *Swadhishtana chakra* is situated above the root *chakra*. The root *chakra* is roughly two finger widths above it. In the front of the body, the sacral *chakra* is located in the area just beneath the belly button. It has a connection to the reproductive organs and tongue. Mostly, it is associated with the ovaries and testes. Accordingly, they either produce estrogen or testosterone. These hormones influence about how people act and engage in sexual activities. Our *Swadhishtana chakra's* energy balance determines our reproductive health and potency. Individuals with low energy frequently exhibit issues with reproduction and sex. Menstrual abnormalities, infertility in female and erectile dysfunction, impotence, premature ejaculation, and loss of libido are some of these issues in male. When there are no documented medical causes or etiological factors for these ailments, it is understood that the *Swadhishtana Chakra* is involved in these issues and that its energy has to be balanced. As previously mentioned, the root *chakra* is associated with the gonads and their function, specifically the testes in males. The root *chakra's* energies are intimately linked to the sacral *chakra* and these glands are likewise near to the root *chakra*. As a result, the root *chakra* also controls the gonads. *Apana Vata* and its functions are linked to the root and sacral *chakra* regions. A balanced *Apana Vata* governs ejaculation and erectile functions of penis in male.

Governing creativity and reproduction, this chakra influences hormonal balance and fluid regulation. Practices like meditation and *Pranayama* enhance its functioning, supporting reproductive vitality.

Vitap marma- *Vitap marma* is one of the sophisticated and delicate vital parts of the human body present in the lower limb. *Acharya Sushruta* indicated in the *Sharir sthana* that injury to *Vitapa marma* leads to *Shandhyata* and *Alpa Shukrata*.

Anatomical structures that can be considered under the *Vitapa Marma* as follows

- Inguinal canal
- Spermatic cord and its content (Components of inguinal canal)

This region, which includes *Vitapa Marma*, contains muscles, blood vessels, and other tissues, but it is also rich in ligaments, tendons, and nerves. Therefore, it is a *Snayu Marma* located in the pelvic region (Area of *Shukravaha Strotas*). When the *Vitapa Marma* is injured, all of the structures involved in the marma, such as *Sira* (Blood vessels), *Asthi* (Bones), *Mamsa* (Muscles), and *Sandhi* (Joints), are likely to be damaged, but the *Snayu* (ligaments or tendons), which make up the majority of the structure of the *Vitapa Marma*, are more severely injured than the other structures. Injury will also have a significant influence because of the effect on the *snayu* component. *Vitapa Marma* is extremely sensitive *Marma*. As previously stated, Injury related to this *marma*, causes impotency and infertility. Any injury or swelling around the inguinal area or testes should not be unnoticed. Hence any damage might impact the fertility and reproductive as well as sexual wellness.

Vitap Marma, a vital point in the inguinal region, aligns with the spermatic cord and testes. Trauma to this marma results in severe reproductive dysfunctions. Ayurvedic therapies such as *abhyanga* strengthen this marma and optimize reproductive health.

Shukradhara kala- The concept of *Shukradhara Kala* is closely related to *Sthanik Shukra*. *Shukradhara Kala* refers to the local membrane system of the genitalia, including the membrane system of reproductive organs in both sexes. In females, the ovaries, along with the fimbrial end of fallopian tubes, uterus, and vagina, can be considered the seat of *Shukradhara Kala*, as it is the passage for *Artava* (Menstrual fluid). Considering *Sarvadaihika Shukra*, *Shukradhara Kala* can be compared to the stem-cell system, androgenesis, or membrane system of endocrine glands related to sex hormones and growth

hormones. According to *Dalhana*, the *Shukradhara Kala* is *Sarvavyapi* because the effects of orgasm are felt throughout the entire body, with special locations in *Vrushana* (Testes) and *Medhra* (Penis). It is the seventh *kala* and pervades the whole body. It is said to perform dual functions:

- a) **Maintain the integrity of pervading *shukra*:** The *Shukradhara kala* holds the pervading the *Shukra dhatu* produced from evolutionary metamorphosis of *Aahar rasa* and helps in maintaining the status of *Shukra*, as well as *Sarvadaihk shukra*.
- b) **Biotransformation of *rupa dravya*:** The part of *Shukradhara kala* situated in the *Vrushana* (One of the *Moola Sthana* of *Shukravaha Strotas*) brings about the transformation of pervading *Shukra dhatu* into the ejaculatory part of *Shukra*.

The *rupa dravya* or the *retas*- The germinal epithelium present in the testes and the accessory sex glands is considered part of *Shukradhara kala*. Hence it can be said that *Sthanik Shukra*, a vital concept in *Ayurveda*, refers to the reproductive essence present in specific locations. In males, *Sthanik Shukra* is present in the testes, where sperms, sex hormones, and seminal secretions are formed. These secretions mix with others from the prostate gland and seminal vesicles to form semen or *Virya*. In females, *Sthanik Shukra* is present in the ovaries.

***Shukravaha Dhamani* and *Sira* (Vascular structures)** - Two *Dhamani* are used to produce *Shukra* and two *Dhamani* eliminate it. *Sushruta* explains the specific position of *Shukravaha dhamni*, stating that two *anguli* are behind and below the opening of the urinary bladder, and that *Shukra* departs through same passage which is designed for micturition. This occurs during the most intense stage or climax of an ongoing sexual interaction with a female. According to *Sushruta*, rushing the *Shukravaha Sira* with blood under the influence of psychological or physical excitation causes tumescence. There are two *Dhamani* for *Shukra Pradurbhava* and two for *Shukra Visarga*. Dr. B.G Ghanekar commented on this by considering blood vessels supplying testes, testicular and spermatic arteries for *Shukra Pradurbhava Dhamani*, and arteries supplying epididymis, ductus deferens, seminal vesical, and prostate for *Shukravisarga Dhamani*. Others believe those two epididymus and two ejaculatory ducts should be considered based on literary interpretation (*Parishadyam sabdartha Shariram*, p. 121). *Charaka* mentions *Shukravaha Nadi*, which is detailed in the *Siddhithana* for ejaculation of semen to the outside of the body and can be interpreted as epididymus, seminal vesical, and ejaculatory duct. These *Sira* and *Dhamani* may represent

neurovascular systems associated with the sexual organs that cause erections and ejaculation. Efficient blood flow through the pampiniform plexus and testicular arteries ensures optimal function of the reproductive organs. Conditions such as varicocele impair vascular integrity, reducing Shukra quality.

Shukra dhatu- Body is composed of seven main building blocks so called *Dhatu*, *Shukra* is the seventh *Dhatu* and situated in the entire body made up from the *Prasadamsha* of *Majja*. *Shukra* is present within *Shukradhara Kala* and *Shukradhara Kala* is present all over the body. *Shukra Dhatu* and *Beeja Shukra* both are formed by *Shukradhara Kala*. *Shukra* is explained into two categories: - a) *Sarvadaihiik Shukra* b) *Sthanik Shukra*.

Sarvadaihiik Shukra is pervading throughout the body and *Sthanik Shukra* is semen (*Virya*) with seminal fluids in male and *Artava* in female. Reproduction (*Navnirmiti*) is main function of *Shukra* which is due to *Sthanik Shukra*. But formation and nourishment of *Sthanik Shukra* is depending on *Sarvadaihiik Shukra*. *Dehabala*, *Utsaha*, *Dhairya*, *Harsha*, *Priti* are other functions of *Sarvadaihiik Shukra*. *Strotas* are circulating passages, which carry *Dhatu*s undergoing transformation. So the *Shukravaha Strotas* carry substances, which are supposed to be transformed into particular *Dhatu* which is responsible for Reproduction. So it is clear that it is not the *Sarvadaihiik Shukra*, which circulates in the *Shukravaha Strotas*. It is *Shukra Beeja*. Hence as *Charaka* mentioned the type of *Strotas* according to the number of *murtimant bhavas* present in the body, therefore it is assumed that presence of *Anukta* accessory *Sarvadaihiik shukravaha Strotas* in the entire body as *Shukradhara Kala* is situated everywhere in the internal body.

Rasavaha strotas- The transformation of *Rasa Dhatu* into *Shukra Dhatu* underscores the importance of circulatory and metabolic health. Efficient functioning of *Rasavaha Strotas* ensures the nourishment of reproductive tissues. As per *Acharya Charaka*, *Klaibya* is indicated in the *Dhatu Pradoshaj Vikara* of *Rasavaha Strotas*. It clearly means that *Rasavaha Stroto dushti* may lead to the *Klaibya*. On going through the textual references, it is found that *Chinta*, *Atichinta*, *Shoka* etc. psychogenic factors leads to *Agnimandya* in the body. Due to *Agnimandya*, *Ama* is formed in the channels which create dysfunction of further progressive *dhatu* from *Ahar Ras* and *Shukra dhatu* is one of it. This also suggests that psychic involvement in the development of pathology of *Klaibya*.

Manovaha strotas- *Manas* and *Sharir* are considered independent entities in *Ayurveda*, but only in the sense that an organism is a complex blend of mind, soul, and body. So, it is properly defined as the *Ayurvedic* theory cannot be considered a dualistic approach. There are following two explanations for it- first, the soul is a part of the complex human system, and second, the *Ayurvedic* philosophy is one of integration rather than separate existence. *Sharirik* and *Manasik Doshas* are shown to have a mutual effect. It appears that *Ayurveda* has adopted the psychosomatic approach, with a greater focus on the integration of these two components. *Mana* is considered as *Ubhayendriya* having both functions – 1. Receiving the stimulations from *Gyanendriyas* and 2. Transmitting the motor responses to the *Karmendriyas*. Hence in somatic sickness, psychological factors have not been disregarded, and in psychological disease, physiological issues have been given appropriate consideration.

Acharya Sushruta stated that various disease like fever, diarrhea, *Vatik Shiroroga*, *Chhardi*, *Ama*, *Ajirna*, *Dhwajabhanga* and *Klaibya* in males, *Akamta* in females are originated having psychosomatic causes as well as emotional disturbances. (Su.Su. 23/21)

Acharya Charaka said in his description of the *Strotas* that all of the channels in the body are also for *Vata*, *Pitta*, and *Kapha Dosh*. Similarly, *Manas* provides *Chetana* to all living cells in the body, hence all of the pathways in the body are similarly for *Manas*. It has also been stated that *Manas* has an ethical relationship with *Sparsanendriya* (as above mentioned), and because it is diffused throughout the body, *Manas* maintains communication with the outside world.

Sparshanendriya - The skin is the site of *Sparsanendriya*. Although *Sparsanendriya* is *Panchbhautik*, yet there is a strong *Vata* predominance. According to *Charaka*, *Sparsanendriya* is the most important and is found in all *Indriyas*. Texts contain several allusions to *Sparsanendriya Vyapaktva* in all *Indriyas* (*Gyanendriyan* and *Karmendriyan*). *Acharya charaka* describes that as the juice persists in the sugarcane, ghee in the whole curd, and oil exists in whole part of the sesame seed, in particular way, semen pervades in the entire body and ready to be expelled out due to the frequent sensation of touch arises from the genitalia. *Charkas*'s notion is quite accurate and scientific about it. In reality, all *Indriyas* interact with their own *Indriyarth* via touching. No *Indriya* could perform their usual tasks if they were not in contact or touched by their own *Indriyarth*. On going through textual references concerned with ejaculation of *shukra*, the term *Harsha* is defined as enhancing pleasure to launch a sexual act through psychological causes. *Harsha* can be defined as the

desire generated by *Samkalpa* (Determination), which leads to an erection and ejaculation. *Harsha* refers to a psychological process that begins with the enjoyment of many sensory organs and progresses to arousal and transformation of awareness. The skin of glans penis comprises a very sensitive sensory end organ system that transfers sexual feeling to the central nervous system. Sexual sensation signals in the anterolateral system enter the spinal cord from the dorsal spinal nerve roots, synapse in the dorsal horns of the spinal gray matter, then pass through to the opposite side of the cord, and ascend across the anterior and lateral white columns. They converge at every level of the lower brain stem and the thalamus. The sensory cortex conducts the final order to neuron. This generates frequent sexual desires.

Jananendriya (Motor organ of sex- Penis) - In *Ayurvedic* terminology, the penis is referred to as *Upastha*, with various synonyms including *Shepha*, *Shishna*, *Medhra*, and *Dhvaja*. According to *Ayurvedic* texts, the normal dimensions of the penis are approximately 6 *Angula* in length and 5 *Angula* in circumference. It comprises two muscular components: *Sevani* and *Peshi*. Interestingly, this differs from modern anatomical descriptions, which identify three distinct muscles. It's possible that the ancient *Ayurvedic* text, *Sushruta*, considered the two corpora cavernosa as a single entity, *Peshi*. The classification of *Upastha* as a *Karmendriya* highlights its significance in *Ayurvedic* physiology. Furthermore, the attribution of pleasure (*Ananda*) as its primary function underscores the psychological importance of *Upastha*, distinguishing it from other *Karmendriyas*. The (*Asatmyendriyarthā Samyog*) of *Jananendriya* (Reproductive Organs) and their respective objects or stimuli can lead to various reproductive health issues.

This occurs in three distinct ways

1. *Heena Yoga*: Insufficient or deficient stimulation of *Jananendriya*, leading to reduced reproductive function, decreased libido, or infertility. As in the case of *Libido*.
2. *Ati Yoga*: Excessive or exaggerated stimulation of *Jananendriya*, resulting in overactive reproductive function, increased risk of infections, or reproductive organ damage. As in the case of *Ati Mathuna*.
3. *Mithyaa Yoga*: Perverted or distorted stimulation of *Jananendriya*, causing confusion or misinterpretation of reproductive signals, potentially leading to issues like erectile dysfunction, premature ejaculation, or reproductive organ dysfunction. As in the case of *Aprakritik Maithuna*.

These three forms of inappropriate correlation between *Jananendriya* and their stimuli can disrupt the balance of reproductive health, ultimately leading to various diseases and disorders like *Klaihya*.

Impact on reproductive health

The *Shukravaha Strotas*, as described in *Ayurvedic* texts, play a pivotal role in maintaining reproductive health by ensuring the proper formation, storage, and nourishment of *Shukra Dhatu*. Any imbalance or dysfunction in these channels can significantly affect an individual's reproductive capabilities and overall vitality. Following key aspects highlighting the impact of *Shukravaha Strotas* on reproductive health:

- 1. Infertility and Sexual disorders:** Dysfunction in the *Shukravaha Strotas* can lead to various reproductive health issues, including infertility, erectile dysfunction, loss of libido, and premature ejaculation in men. In women, it can result in menstrual irregularities, hormonal imbalances, and challenges in conception. These issues often arise from disturbances in the *Swadhisthan Chakra* or disruptions in the flow of *Apana Vata*.
- 2. Psychosomatic influences:** The intimate connection between the *Manovaha Strotas* and *Shukravaha Strotas* underscores the psychosomatic impact on reproductive health. Emotional stress, anxiety, and depression can disrupt the normal functioning of *Shukra Dhatu*, leading to reduced fertility and sexual vitality.
- 3. Nutritional and Metabolic factors:** The transformation of *Rasa Dhatu* into *Shukra Dhatu* highlights the importance of proper nutrition and metabolic health in maintaining reproductive well-being. Impaired *Rasavaha Strotas* due to poor diet or lifestyle can result in the inadequate nourishment of *Shukra Dhatu*, leading to reproductive dysfunction.
- 4. Hormonal imbalances:** Anatomical and physiological correlations, such as the *Shukradhara Kala's* role in regulating hormonal activity, suggest that disruptions in these systems can lead to imbalances in reproductive hormones like testosterone, estrogen, and progesterone. These imbalances can manifest as conditions like polycystic ovarian syndrome (PCOS) in women and low sperm count in men.

5. **Energetic dynamics:** The role of *chakras*, particularly the *Swadhisthan Chakra*, in governing reproductive energy is crucial. Blockages or imbalances in this energy center can result in reduced reproductive vitality and creativity. *Ayurvedic* interventions like meditation, *Pranayama*, and chakra balancing can help restore harmony and enhance reproductive health.
6. **Impact of physical trauma:** Injury to vital anatomical structures associated with *Shukravaha Strotas*, such as *Vitap Marma* or vascular components like *Shukravaha Dhamani*, can severely affect reproductive health. Such trauma may lead to conditions like impotence, reduced sperm quality, or structural damage to reproductive organs.
7. ***Ayurvedic* interventions:** *Ayurveda* provides a holistic approach to addressing reproductive health issues through personalized interventions. These include herbal formulations (like *Ashwagandha*, *Shatavari*, and *Gokshura, kraunch Beeja* etc), *Panchakarma* therapies (e.g., *Basti*, *Shirodhara* and *Abhyanga*), and lifestyle modifications to restore balance in *Shukravaha Strotas* and promote reproductive harmony.

By considering the anatomical, physiological, and energetic dimensions of the *Shukravaha Strotas*, *Ayurveda* offers a unique perspective on reproductive health. The integration of physical, emotional, and spiritual well-being forms the cornerstone of a holistic approach to addressing and preventing reproductive health challenges.

CONCLUSION

The review of *Shukravaha Strotas Sharir* provides a detailed understanding of the *Ayurvedic* perspective on reproductive health, emphasizing the anatomical, physiological, and subtle aspects of *Shukravaha Strotas* and their implications for reproductive vitality and overall well-being. This intricate system is deeply interlinked with various physical structures such as the *Swadhisthan Chakra*, *Vitap Marma*, *Shukradhara Kala*, vascular networks, and muscular components, as well as subtle energy channels and psychosomatic factors.

The analysis underscores that disruptions in the functioning of *Shukravaha Strotas* due to physical, emotional, or lifestyle factors can lead to significant reproductive disorders, such as infertility, sexual dysfunctions, and hormonal imbalances. It also highlights the profound

influence of *Rasavaha* and *Manovaha Strotas* in nourishing and harmonizing reproductive tissues, emphasizing the role of mental and emotional health.

Ayurveda's holistic approach, integrating herbal therapies, lifestyle modifications, and *Panchakarma*, offers promising interventions to restore the balance of *Shukravaha Strotas*. By addressing the root causes and harmonizing the interplay between the physical, mental, and energetic dimensions, individuals can achieve better reproductive health and vitality.

This review concludes with a call for more research and exploration to deepen the understanding of *Shukravaha Strotas*, fostering the integration of *Ayurveda* with modern scientific insights for a comprehensive approach to reproductive health care.

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A REVIEW ARTICLE ON TRI- SHARIR CONCEPT OF AYURVEDA**Dr. Akhand Singh Baghel^{1*}, Dr. Yogesh Wane², Dr. Prakash Joshi³ and Dr. Shweta Ojha⁴**

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Article Received on
13 June 2023,

Revised on 03 July 2023,
Accepted on 23 July 2023

DOI: 10.20959/wjpr202313-29171

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ABSTRACT

Ayurveda the life science tells the main perspective of life. It is said that four Purusharthas of life cannot be achieved without Arogya. Means a healthy body is only capable to achieve Dharma, Artha, Kama and moksha respectively in a life cycle so called "Ayu". Arogya is depending upon quality of structure of the body. Every human body is designed in a very sophisticated manner to respond and react to this universe. An ayurveda physician or Vaidya should know the actual Rachana of human body or sharir which is so called the adhishtana of the sukh and dukh. One should know the perfect combination and origin basics of tri sharir which play significant role in a healthy life. According to Ayurveda Atma, Mana, Indriya, Prana and Buddhi are

the entities from which a whole body comprises of. So it's time to discuss the actual perspective of these entities along the sharir & to study it's structural and behavioral combination to achieve and maintain Arogya while achieving all the Purusharthas in this universe.

KEYWORDS:- Sthool sharir, Sookshma sharir, Atma, Indriya, Mana, Buddhi, Chetana, Purushartha.

INTRODUCTION

In Ayurvedic scriptures sharir sthan tells the all aspects of structural and physiological phenomenon of human body. Sharir sthan contains all the basic and elaborated information regarding creation (Rachana) and function (kriya) of a living human body. Rachana sharir is a

unique and integrated study of Anatomy (gross body) with subtle body (Sookshm sharir) which narrates philosophical, scientific and clinical aspect of the body. In the Shaarir sthana of ayurved it is found that there is a universal concept of tri-sharir which is described in other Indian scriptures like Vedas, Upanishads and other shaarir granthas. In the context of sharir Rachana in ayurveda the human body is made up of three components of life which is the perfect combination of Karan sharir, Sookshm sharir and Sthool sharir.

Sthool sharir is the gross materialistic body that we can see physically. It is made up of Panchamahabhoot along with Anga Pratyang and Indriya Adhishthana which is thoroughly called physical body.

Sookshm sharir is the subtle body which cannot be seen physically. This body comprises of five Karmendriyan, five Gyanendriyan, panch praan, man, buddhi and ahankar. It is said that in the state of dream one performs all the actions due to the activeness of this body or it could be said like that one can feel the presence of Sookshm sharir within the body during dreams. At the time of death this body goes along with Atma or Jeev.

Karan sharir is the causal body. In others word physical body and subtle body is created or assembled just due to the requirement of manifestation of a new body just to fulfill desires and get moksha. Karan sharir is the component that carries the desires to one body to another body. It is immortal till the all desires become zero or negligible. It is said in Bhagvadgeeta that Atma is Ajar and Amar & cannot be destroyed until it will get moksha.

These three sharir along together in a human being hosts different functions of “life”.

Staying within the other two bodies the Karan sharir is the entity which continuous omnipresent in this universe after the other bodies are gone or destroyed. Then it acts as a seed for the new life in a new living body.

The Sookshm sharir includes the mind, thoughts, senses and vital energies.

The Sthool sharir is the physical body made up of cells, tissues, organs, bones (Anga-Pratyanga) which houses the subtle and causal body within it assembled or along together.

Combination of three bodies

According to Acharya Charak in sutra sthan “Ayu” is the combination of sharir (Sthool sharir), Indriya, Mann (Sookshma sharir) and Atma (Karan sharir). These all bodies are combined together to make a life.

Acharya Charak also stated in Shaarir sthan that origin of Purush so called Atma. He stated that icchha, dhvesh, moh and karma are the basic reasons for the origin of Atma. Ayurveda (Sharir sthan of charak) accepts and follow the concept of punarjanma and this concept is thoroughly proved by the all Pramanas (Pratyaksha, Aaptopadesh, Anuman, yukti), ayurved texts mentioned about Karya-karan vaad theory means behind every work done or happening there is a genuine and particular reason to originate/initiate and completion of that work.

Hence behind the creation of human body there should be also a particular and genuine reason. As above mentioned that there is Punarjanma concept means Ichha, Dwesh, Moha, Karma of previous life would become the reason of taking birth in the next life.

Atma is the entity that contains all the information about previous life and acts as a “Beej” to become a source of life for a human being.

A liberated Atma searches and find some infrastructure to fulfill it’s particular desires (Ichha, Dwesh, Moha, Karma). It is a beauty of Indian scriptures like Shrimad BhagvadGeeta where it has been stated that Atma is Ajar and Amar which lives within the physical body and performs it’s action with the help of Indriyas and Mana.

A system performs it’s function with the help of infrastructure and required amount of energy. Without particular infrastructure it will remain nonfunctional. Similarly Human body system/life system is governed by soul or Atma. Atma needs Indriya and Mann to receive the information and transmit the command. Mann and Indriya needs a physically arranged organ system to maintain the “Ayu”/life.

If we compare a body with an organization or a company which is designed to perform A particular work or to get or achieve the target or goal or desires. A company needs a place/ well equipped building, a Boss, a Supervisor, and some Employees to perform, to fulfill the desires and targets of company.

Similarly a living human body is designed where a physical body so called Sthool sharir is well equipped or furnished building/infrastructure where a boss (Karan sharir) Jeevatma stays to fulfill it's desires and targets. The boss (Atma) governs the supervisor (Mana) and controls it to take and give information (knowledge and senses) with the help of employees so called Gyanendriyas and Karmendriyas. So Indriyas are directly connected or related to Mana and reports to Atma. It is said in ayurveda scripture and BhagvadGeeta as well that *Gyanasya adhikaranam Atma* means to obtain or assimilate the knowledge is the basic quality of Jeevatma.

It can also be said that Atma is the Karta of all the activities which one performs in the universe with the help of Mana and (Karan) Indriyas.

Sthool Sharir - Made up of 5 Mahabhoots differentiated in Urdhwa sharir, Adhah sharir and Madhya sharir. Anga and Pratyang as well. It provides seat or place for the Atma, Mana, Indriyas and Prana to stay.

Sookshm Sharir - It is made of Indriyas, Mana, Buddhi and Prana it acts as Karan/Sadhan for Atma to respond/react to the universe.

Karan Sharir - It is Nirvikar Achetan Asamvaayi Atma. That acts as seed of Karan to create a living physical body, as Acharya charak said that Atma is Karan Dravya for origin of a sharir.

CONCLUSION

In Ayurveda the root cause of manifestation of a disease is Pragya Apradh or Asatmendriyarth samyog. It is said that every action has a cause to happen as Karya-karanvaad principle. So we discussed that origin of sharir has also a cause and similarly origin of disease has also the cause which manifests in the two Adhishthana called Sthool sharir and Mana. Hence it is very clear that Atma is totally void of manifestation of a disease. Atma cannot be diseased but it has the character to measure the state of body as sukhi or dukhi. Because sukh and dukh are the two of the cardinal properties of Atma. As we discussed about the tri sharir concept and knowing the reason of manifestation of disease Nidana sevan or hetu for the particular disease in the body is carried out by the Asatmendriyarth samyog which is concerned with Indriyas governed by the Mana. This process is the consequence of the buddhi which get vitiated and ready to commit Apradh as manifestation of disease as called Pragya Apradh.

So, Ayurveda deals with the treatment of ROGI as well as management of ROGA. As Vaidya knows the basic concept of origin or combination of SHARIR.

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A Case Study of Ayurvedic Treatment of Vitiligo (Shwitra) in Child

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ABSTRACT

The skin is the largest and most visible organ of the human body, playing a vital role in overall health. Any anomalies in the skin can create both physical and psychological problems for an individual, primarily due to cosmetic concerns. Unfortunately, in some societies, particularly those with limited knowledge, certain skin conditions like leucoderma are mistakenly considered infectious, making it extremely challenging for affected individuals to integrate into society. In *Ayurvedic* classics, *Shwitra* is recognized as a type of *Kushtha*, a skin disorder caused by the vitiation of the three *Doshas* (*Tridosha*) and the imbalance of tissues like blood (*Rakta*), muscle (*Mamsa*), and fat (*Meda*). *Shwitra* can be correlated with Vitiligo or leucoderma, characterized by white patches on the skin resulting from partial or complete loss of skin pigmentation, leading to cosmetic imbalance. Vitiligo is an autoimmune disease that may be associated with other autoimmune conditions, such as pernicious anaemia, Addison's disease, and diabetes mellitus. This disease results in the destruction of melanocytes, causing depigmentation. A 13-year-old male patient presented with a white patch on his right thigh, which he had been experiencing for two years. He underwent *Shaman Chikitsa* treatment for four months, and the results were assessed based on changes in the size of the patch and photographic evidence. Before initiating the study, informed written consent was secured from the patient's legal guardian, ensuring compliance with ethical standards and regulatory requirements. Follow-up assessments were conducted at one-month intervals, and after three months, significant improvement was observed in the patch's size and colour. This study highlights a novel perspective on treating *Shwitra Kushtha*, offering a cost-effective and safe treatment approach. Furthermore, this research demonstrates a new dimension in treating *Shwitra* in young patients and provides a foundation for conducting statistically significant studies in the future.

KEY WORDS: Shwitra, Vitiligo, Bakuchi, Kshudra Kushtha, Melanocytes, Hypo-Pigmentation

INTRODUCTION

The skin, being the largest human organ, is highly susceptible to various disorders due to its size and external location. In *Ayurvedic* medicine, skin diseases are categorized under "*Kushtha Roga*," which is

further divided into *Maha Kushtha* and *Kshudra Kushtha*. The etiology of *Kushtha* involves the vitiation of three *Doshas* (*Vata*, *Pitta*, and *Kapha*) and four *Dushya* (*Twak*, *Mamsa*, *Rakta*, and *Lasika*) by various factors.

Shwitra, a type of *Kshudra Kushtha*, is characterized by white discoloration patches on the skin, earning its name from the Sanskrit word "*Shweta*," meaning white. This condition is described in various Ayurvedic classics, including the *Brihatrayees* and *Laghutrayees*. Unlike other *Kushtha* diseases, *Shwitra* primarily affects the skin's appearance; causing cosmetic concerns that can disrupt a patient's psychological well-being. The primary causes of *Shwitra* include *Virudhahar-sevana* (consumption of incompatible foods) and *Papakarma* (bad deeds). This condition involves the imbalance of all three *Doshas* and affects the *Rakta*, *Mamsa*, and *Meda Dhatus*. *Shwitra* is particularly associated with *Bhrajaka Pitta*, which plays a crucial role in maintaining skin colour. In modern medicine, *Shwitra's* characteristics resemble those of *Vitiligo*, a condition where skin colour loss occurs due to the destruction of melanocytes. *Vitiligo* affects both sexes equally, with a worldwide prevalence of 1%. India has a higher incidence rate, estimated between 3-4%. Treatment options in modern medicine include topical corticosteroids, skin grafting, and plastic surgery, which can be costly. In contrast, *Ayurvedic* medicine offers a more holistic approach, focusing on eliminating the causes of *Dosha* imbalance through *Pathya Sevana*. This approach combines local applications with oral medications to break the cycle of *Dosha-Dushya Sammurchana*, providing a more natural and cost-effective treatment option for *Shwitra*.

CASE REPORT-

A 13-year-old male child came with complaints of white patch over the right thigh since 2 years. The patch was small initially and is gradually increasing in size and when selected for treatment size approximately had a dimension of 10x8 cm. Lesion is free from itching or burning sensation. Patient has taken treatment from contemporary medical science in the form of steroids and other ointments with no any improvement since last 1 year. According to the patient's parents, the pregnancy progressed normally, and the child was delivered in a hospital without any reported complications or noticeable congenital abnormalities at birth. 1) Past History: No history of any major illness. 2) Family History: Nothing significant, all the family members are said to be healthy. 3) Skin Examination of the patients was conducted -one large patch on right thigh with bright white colour of patch with surrounding normal pigmented area. The sensation for cold and hot substance in the patch is normal without itching or burning sensation. Routine blood investigations were done and were found normal. General condition of patient was fair, vitals are normal. Local and systemic examinations reveal that no physical abnormality detected. Personal history is normal with BP- 120/80 mmHg and PR- 70/min.

MATERIALS AND METHODS

Patient was treated in the outpatient department of Rachana Sharir (Skin Care Unit) at Govt. Dhanwantari Ayurveda Medical College & Hospital, Ujjain (M.P.) in between 16/03/2023 to 15/07/2023 and OPD registration number of the patient is 9987. Medicine was administered in two forms along with diet regimen and lifestyle modifications..

1. Oral administration of *Arogyawardhini vati* 2 tablets with hot water before food twice a day for 3 months to attain the optimum levels of *Deepana* and *Pachana* and *Dhatu pachak* effect and oral administration of *Aimil Leukoskin* drops -30 Drops twice for 3 months after meal with a cup of

2. normal water.
3. External application of *Bakuchi tail* mixed with Vaseline in required quantity as external application over the lesion everyday followed by exposure to the sunlight for about 30mins for 3 months daily at morning. And use of external application of *Charaka Pharma's* Pigmento ointment in mid day one time.
4. Proper advice regarding life style modifications and diet has been given.



Image showing marked improvement in the hypo pigmented patch present on right thigh.

DISCUSSION

After the initiation of the treatment no significant changes were observed by the patient (first follow up). 8th day onwards patient noticed slight colour change in the lesion with skin slightly turning in to pinkish. In subsequent days there is formation of small blebs with eruption with slight burning sensation and itching. May be due to the rough use of *Bakuchi oil*, Patient reported with blebs on second follow up. Sunlight exposure of the patient was reinsured and precaution during application of *Bakuchi oil* has been recalled to the patient. Patient was slightly disturbed due to appearance of blebs with burning sensation. Patient was reassured with proper counselling. Third week onwards blebs get dried up replacing the dark skin over the hypo pigmented area. Same results continued till next month and hypo pigmented area was completely replaced by normal skin by 2 months. There are no undue adverse effects during the treatment period.

CONCLUSION

Although *Shwitra*, categorized as a *Kashtasadhya Vyadhi*, is a chronic condition requiring prolonged treatment, it can be effectively managed and significantly improved through a multi-faceted approach. This comprehensive strategy incorporates:

1. *Shodhana* (Purification): Eliminating toxins and impurities from the body through procedures like *Panchakarma* as per need.
2. *Shamana* (Palliation): Implementing measures to alleviate symptoms and prevent disease progression.

3. External application of oils and *Lepas*: Utilizing topical treatments to soothe and nourish the affected skin.

In developing this personalized treatment plan, consideration must be given to various factors, including:

1. *Rugna* (Patient): The individual's unique characteristics, needs, and responses.
2. *Bala* (Strength): The patient's physical and mental resilience.
3. *Vyadhi Bala* (Disease Strength): The severity and progression of the condition.
4. *Dosha* (Constitutional imbalance): The underlying imbalances of Vata, Pitta, and Kapha.
5. *Dushya* (Affected tissues): The specific tissues and systems impacted by the disease.
6. *Desha* (Geographical location): Environmental and regional factors influencing the patient's health.
7. *Prakriti* (Individual constitution): The patient's innate physical and mental characteristics.
8. *Kala* (Time): Temporal considerations, including the timing of treatment and the patient's age.

By carefully evaluating these factors and tailoring treatment accordingly, healthcare practitioners can develop an effective management plan for *Shwitra*, promoting better improvement and enhanced quality of life for patients.

Arogyawardhani vati (*Rogadhikar of Kushtha*) contains *kutki* (*Yakrit uttejaka*) as its main ingredient along with *Tamra Bhasm*, LUKOSKIN DROPS is a proved medicine for Vitiligo and the direct topical application of *Psoralea corylifolia* (*Bakuchi*) oil, as well as key ingredient in PIGMENTO OINTMENT, triggers the activation of melanocytes, specialized cells responsible for producing melanin, the primary skin pigment. This stimulation enhances melanin synthesis, promoting skin pigmentation.

Additionally, the formulation incorporates several herbs with distinct benefits:

Acorus calamus (*Vacha*), *Cassia tora* (*Chakramarda*), and *Melia azadirachta* (*Nimba*) exhibit antifungal properties, providing protection against fungal infections.

Tephrosia purpurea (*Sharpunkha*) demonstrates immunomodulatory effects, influencing both cell-mediated and humoral immunity. This helps regulate and balance the immune system, promoting overall skin health.

The administration of above treatment protocol along with proper *Pathya-Apathya Sevana* leads to benefit in the hypo-pigmented patch in the right thigh of the child in 3 months of the treatment cycle as described above.

Pathyapathya of Shwitra (Kushtha)

1. **Pathya Ahara-** Purana dhanya, Laghu anna, Yava, Mudga, Amalaki, Tikta Shaka, Ghrita, Triphalanimbayukta anna and ghrita, Tikta rasa pradhan dravya, Tamrajala, Khadirajala.
2. **Apathya Ahara-** Guru anna, Amla-Katu Lavana rasa, Matsya, Anupa pashu paksi mamsa, Dadhi, Dugdha, Madhu, Mulaka, Guda, Viruddhahara, Mithyahara.
3. **Pathya Vihara-** Abhyangam, Lepa, Snanam, Pranayam,
4. **Apathya Vihara-** Divaswapna, Chardivega nigraha, Ratrijagarana, Deva-guru ninda, Excess krodha, *shoka* and stress & Strain

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