Ayurvedic Management of Mukhadushika by Shodhana and Shamana Chikitsa: A case study

Dr. Pratiksha Shinde[1], Dr. Manish Bhoyar[2], Dr. Rupali Hange[3]
[1]*MD Scholar, Department of Rasashastra evum Bhaishajya kalpana, Govt. Ayurveda College and Hospital, Nagpur*
[2]*Associate Professor, Department of Rasashastra evum Bhaishajya kalpana, Govt. Ayurveda College and Hospital, Nagpur*
[3]*Professor & HOD Department of Rasashastra evum Bhaishajya kalpana, Govt. Ayurveda College and Hospital, Nagpur*
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***Abstract*—Mukhadushika (acne), commonly correlated with Acne vulgaris, is a Kshudraroga (minor skin disorder) described in Ayurvedic classics. The present case study evaluated the role of Shodhana Chikitsa (purificatory therapy) and Shamana Chikitsa (palliative therapy) in the management of Mukhadushika. A 20-year-old female presented with a 6-month history of erythematous, painful and pus-filled facial lesions associated with itching. The patient was treated with Jalaukavacharana (leech therapy) as Shodhana Chikitsa, along with Arogyavardhini Vati, Triphala Guggulu, Mahamanjishtadi Kashaya, Avipattikara Churna, and Chandanadi Lepa as Shamana Chikitsa. Clinical assessment was performed at baseline and at 15-day intervals for 3 months using the Comprehensive Acne Severity Scale (CASS). Approximately 90% clinical improvement was observed, with reduction in acne lesions, itching, and pain. The case suggests that an integrated approach of Shodhana and Shamana Chikitsa may be beneficial in the management of Mukhadushika; however, further studies are required to establish its therapeutic efficacy.**

***Index Terms*—Mukhadushika, Acne vulgaris, Shodhana Chikitsa, Shamana Chikitsa, Kshudraroga.**

I. INTRODUCTION

Skin diseases constitute a major public health concern and significantly affect the physical, psychological, and social well-being of individuals. Among various dermatological disorders, Acne vulgaris is one of the most common chronic inflammatory conditions, affecting more than 80% of the population worldwide. It commonly occurs during adolescence, with a prevalence of approximately 83–85% in adolescent girls and 95–100% in adolescent boys between the ages of 16–17 years. Although not life-threatening, acne can negatively impact self-esteem and quality of life due to cosmetic disfigurement and potential scarring.

In Ayurveda, Mukhadushika (acne) is described under Kshudra Roga (Minor skin disorders) by Sushruta. The term Yuvan Pidika is also used, as the condition predominantly occurs during the Yuva Avastha (adolescent period) and is characterized by small eruptive lesions resembling Pidika on the face. Since it adversely affects the appearance of the face (Mukha), it is termed Mukhadushika. Mukhadushika can be correlated with Acne vulgaris based on similarities in clinical presentation and pathogenesis.

Acne vulgaris is a pleomorphic disorder of the pilosebaceous unit associated with abnormalities in sebum production and follicular keratinization. It is characterized by both inflammatory lesions, such as papules, pustules, and nodules, and non-inflammatory lesions including open and closed comedones. (3) According to Ayurvedic principles, Mukhadushika occurs due to the vitiation of Vata and Kapha Dosha along with the involvement of Rakta and Meda Dhatu, leading to eruptions resembling the thorns of Shalmali on the facial region. (2) Ayurveda emphasizes a holistic approach for the management of Mukhadushika, involving Shodhana Chikitsa (purificatory therapy), Shamana Chikitsa (palliative therapy), and adherence to appropriate Pathya Ahara and Vihara (dietary and lifestyle modifications). The present case study highlights the potential efficacy of an integrated therapeutic approach comprising

Shodhana Chikitsa, Shamana Chikitsa, and appropriate Pathya Ahara–Vihara, targeting the underlying etiopathogenesis of Mukhadushika rather than focusing solely on symptomatic management.

II. PATIENT INFORMATION

A 20-year-old female patient presented to the Skin Outpatient Department (OPD) of Government Ayurved Hospital, Nagpur, with chief complaints of Araktavarni Pitika Utpatti (erythematous eruptions) over the Mukha Pradesh (facial region), associated with Kandu (itching), Vedanayukta Pitika (painful acne lesions) and Puyayukta Pitika Utpatti (pus-filled eruptions) for the past six months. The patient had previously undergone treatment with topical and systemic allopathic medications for 3 years but did not achieve satisfactory relief. There was no significant history of any associated systemic illness.

Past history

No significant past medical or surgical history was reported.

General Examination:

On general examination, the following findings were observed Table 1.

Table 1: Clinical Examination and Samprapti Ghataka of the Patient

Category	Parameters	Findings
General Examination	Body Temperature	98.5°F
	Blood Pressure	110/70 mmHg
	Pulse Rate	78/minute
	Bowel Habit	Irregular
Astavidha Pariksha (Eight-fold examination)	Nadi (Pulse)	Vatapittaja
	Mala (Stool)	Baddha Koshta (constipation)
	Mutra (Urine)	5–6 times/day
	Jivha (Tongue)	Saama (coated tongue)
	Shabda (Speech)	Spashta (clear)
	Sparsha (Touch)	Snigdha (unctuous)
	Druk (Vision)	Prakrita (normal)
	Aakruti (Body build)	Madhyama (moderate)
Samprapti Ghataka (Factors involved in pathogenesis)	Dosha (Bio-humours)	Kapha and Vata
	Dushya (Affected tissues)	Rakta and Meda
	Rogamarga (Pathway of disease)	Bahya (external)
	Sthana (Site of manifestation)	Twacha (skin) involving Mukha Pradesh (facial region)
	Srotas (Channels involved)	Rasavaha and Raktavaha Srotas
	Avastha (Stage)	Roopavastha (manifest stage)
	Bheda (Type)	Mukhadushika

III. CLINICAL FINDINGS

The patient presented with Araktavarni Pitika Utpatti (erythematous papules) over the Mukha Pradesh (facial region), associated with Kandu (itching), Vedanayukta Pitika (painful acne lesions) and Puyayukta Pitika Utpatti (pus-filled lesions). No additional complaints were observed during the examination.

IV TIMELINE

The patient was managed with a structured Ayurvedic treatment regimen over a period of 90 days, comprising both Shamana Chikitsa and Shodhana Chikitsa. As an initial component of Shamana Chikitsa, Deepana–Pachana Chikitsa (Digestive and metabolic correction therapy) was administered for the first 15 days to enhance Agni (digestive and metabolic functions), facilitate Ama Pachana (Accumulated metabolic by-products) correct metabolic impairment, and optimize the therapeutic efficacy of the subsequent interventions. Following this preparatory phase, Shamana Chikitsa was continued with appropriate internal formulations selected according to the patient's clinical presentation and disease status. (Table 2).

As a component of Shodhana Chikitsa, Jalaukavacharana (leech therapy) was initiated on Day 16 with the objective of achieving Rakta Shodhana and alleviating the local inflammatory manifestations associated with Mukhadushika. A total of three sittings of Jalaukavacharana were performed at 15-day intervals throughout the treatment period.

In addition to the internal medications and Jalaukavacharana, Chandanadi Lepa was administered regularly as a local application throughout the treatment course. The formulation was prescribed to reduce erythema, inflammation, tenderness, and pustular lesions, thereby promoting local healing, improving skin health, and preventing further aggravation of the condition. The patient was evaluated at regular follow-up visits to assess clinical progress, treatment response, and changes in symptom severity. Progressive improvement was observed throughout the treatment period, as evidenced by a reduction in inflammatory lesions, pustules, pain, itching, and erythema. By the completion of therapy, marked improvement was noted in both subjective symptoms and objective clinical findings.

Throughout the treatment period, strict adherence to prescribed Pathya-Apathya (dietary and lifestyle modifications) was emphasized to prevent aggravation of Doshas, support the therapeutic interventions, and facilitate sustained clinical improvement. No adverse drug reactions or treatment-related complications were observed during the course of management.

A. Aahara and Vihara Advised During Treatment

1. Pathya (Recommended Dietary and Lifestyle Measures)

The patient was advised to follow a balanced and easily digestible diet comprising Mudga (green gram), rice, wheat, green leafy vegetables, and fresh seasonal fruits. Adequate water intake and timely consumption of meals were encouraged to maintain optimal digestive and metabolic functions. Proper nocturnal sleep was recommended to support physiological homeostasis and tissue repair.

As part of the lifestyle regimen, daily practice of Pranayama for 10–15 minutes in a clean and well-ventilated environment was advised to promote overall physical and mental well-being. Maintenance of facial hygiene was emphasized, including gentle cleansing of the face after outdoor exposure and before bedtime, to minimize the accumulation of dirt, excess sebum, and environmental pollutants.

2. Apathya (Restricted Dietary and Lifestyle Measures)

The patient was advised to avoid oily, fried, spicy, and highly processed foods, including bakery products, junk foods, curd, and carbonated beverages, as these dietary factors are considered to aggravate Kapha and Pitta Doshas. Lifestyle practices such as Ratri Jagarana (night awakening) and Diwaswapa (daytime sleeping) were discouraged due to their potential role in disturbing Dosha equilibrium and contributing to disease progression.

Additionally, the patient was instructed to refrain from squeezing, scratching, as these practices may exacerbate local inflammation, increase the risk of secondary infection, and contribute to post-inflammatory hyperpigmentation and scarring.

Table 2. Timeline of Clinical Presentation and Treatment

Timeline	Clinical Findings	Treatment Administered
Day 1–15	Aaraktavarni Pitika (erythematous papules), Kandu (itching), Vedanayukta Pitika (painful acne lesions), Puyayukta Pitika (pus-filled lesions)	Arogyavardhini Vati (250 mg) 2 vati BD, Avipattikara Churna 1 teaspoon at bedtime, Mahamanjishtadi Kashaya 3 TSF BD
Day 16–30	Mild itching present; painful acne lesions and pus-filled lesions persisted	Continued previous medications; Chandanadi lepa (Sariva, Manjishta, Lodhra, Raktachandana, and Kushta) for local application; Jalaukavacharana (Jaloka applied adjacent to the pustule) (1st sitting)
Day 31–45	Further reduction in itching; painful and pustular lesions present in reduced number	Continued previous medications and local application; Jalaukavacharana (Jaloka applied adjacent to the pustule) (2nd sitting)
Day 46–60	Significant improvement; few pustular lesions remained	Triphala Guggulu (250 mg) 2 vati BD, Avipattikara Churna 1 teaspoon at bedtime, Mahamanjishtadi Kashaya 3 TSF BD; local

		application continued; Jalaukavacharana (Jaloka applied adjacent to the pustule) (3rd sitting)
Day 61–90	Complete resolution of active lesions; no itching, pain, or pus-filled eruptions	Continued Triphala Guggulu, Avipattikara Churna, Mahamanjishtadi Kashaya, and Chandanadi lepa for local application

V. DIAGNOSTIC ASSESSMENT

Routine laboratory investigations did not reveal any systemic abnormalities. Hemoglobin level was 11.6 g/dL, while the remaining complete blood count (CBC) parameters were within normal limits. Clinical assessment of the patient was performed using the assessment scale (comprehensive acne vulgaris severity scale – CASS)

Table no 3: Assessment Scale (comprehensive acne vulgaris severity scale – CASS)

Signs and Symptoms	Normal	Mild	Moderate	Severe
Araktavarni Pitika	0	1	2	3
Kandu	0	1	2	3
Vedanayukta Pitika	0	1	2	3
Puyayukta Pitika	0	1	2	3

The baseline Assessment Scale findings are summarized in table no 4.

Table no 4: Baseline Assessment Score of the patient

Follow-up	Treatment	Araktavarni Pitika (Erythematous lesions)	Kandu (Itching)	Vedanayukta Pitika (Painful acne lesions)	Puyayukta Pitika (Pus-filled lesions)
Baseline	Before initiation of treatment	3	2	2	2
15 days	Continuation of Shamana Chikitsa	3	1	2	2
30 days	Shamana Chikitsa + 1st sitting of Jalaukavacharana (Leech therapy)	2	1	1	2
45 days	Shamana Chikitsa + 2nd sitting of Jalaukavacharana	2	0	0	2
60 days	Shamana Chikitsa + 3rd sitting of Jalaukavacharana	1	0	0	1
75 days	Continuation of Shamana Chikitsa	0	0	0	0
90 days	Continuation of Shamana Chikitsa	0	0	0	0

VI. THERAPEUTIC INTERVENTION

Conventional topical and oral medications were discontinued, and Ayurvedic treatment was initiated in two phases. The treatment protocol included Shamana Chikitsa (palliative therapy) followed by Shodhana Chikitsa (purificatory therapy).

A. Treatment protocol for the 1st Phase

In the initial phase of treatment, Shamana Chikitsa was done. Arogyavardhini vati 2 bd, Mahamanjishtadi kashaya 20 ml bd, Avipattikar churna 1 tsf before sleeping every day, Triphala guggula 2 vati bd after meal, Chandanadi lepa for local application.

B. Treatment protocol for 2ndPhase

The second phase of treatment, encompassing Jalaukavacharana was done on the 16th day following Nidana Parivarjana (avoidance of causative factors), Shamana Chikitsa, and Pathya-Apathya Paripalana. This phase aims to further address the patient's condition and promote their overall well-being.

VII. FOLLOW-UP AND OUTCOMES

The patient was evaluated at regular 15-day follow-up intervals throughout the 90-day treatment period. Initially, Deepana–Pachana Chikitsa was administered as a part of Shamana Chikitsa for the first 15 days with

the aim of improving Agni, enhancing digestive and metabolic functions, and facilitating the action of subsequent therapeutic interventions.

At the first follow-up (Day 16), the first sitting of Jalaukavacharana (leech therapy) was performed in addition to the ongoing Shamana Chikitsa. Clinical assessment revealed a reduction in itching (Kandu) along with mild improvement in bowel habits. During the second follow-up (Day 31), the second sitting of Jalaukavacharana was administered. Following this intervention, a further reduction in itching, pain, erythema, and inflammatory lesions was observed. At the third follow-up (Day 46), the third sitting of Jalaukavacharana was performed. Subsequent evaluation demonstrated marked improvement in the clinical features, including a reduction in pustular lesions, tenderness, and associated discomfort. By the fourth follow-up (Day 61), significant clinical improvement was evident, with substantial reduction in the number and severity of lesions. Continued administration of internal medications along with regular local application of Chandanadi Lepa contributed to progressive healing and symptomatic relief. At the completion of the 90-day treatment period, marked improvement was observed in both subjective and objective parameters, characterized by a significant reduction in inflammatory lesions, pustules, itching, pain, and erythema, with noticeable improvement in the overall appearance of the skin.



Figure 1: Clinical presentation A) Before treatment B) After one month C) After completion of three months of treatment.

VIII. DISCUSSION

Mukhadushika, an Ayurvedic condition classified under Kshudraroga, manifests as Shalmali-Kantaka-like eruptions on the face due to vitiation of Vata, Kapha, and Rakta Doshas. The current case presented with typical symptoms including Aaraktavarni Pitika (erythematous papules), Kandu (itching), Vedanayukta Pitika (painful acne lesions) and Puyayukta Pitika Utpatti (pus-filled lesions) aligning well with classical descriptions. Recognizing the involvement of Kapha, Pitta, and Rakta Dushti, a comprehensive treatment plan incorporating both Shamana (palliative) and Shodhana (purificatory) Chikitsa was initiated. This began with Deepana-Pachana Chikitsa to optimize Agni, promote Ama Pachana, and enhance the bioavailability of subsequent therapies. Following this, internal medications and local applications were administered to address the specific Dosha imbalances and cutaneous manifestations.

A key component of the internal medication regimen was Arogyavardhini Vati, selected for its broad spectrum of therapeutic actions, including Deepana, Pachana, Rechana, hepatoprotective, and Malashuddhikara properties. Its ingredients, such as Katuki, Nimba, Triphala, Guggulu, Shilajatu, and Gandhaka, collectively contribute to Kapha-Pitta Shamana, correct digestive dysfunction, and alleviate inflammatory skin lesions. Notably, previous research has highlighted the significant role of Arogyavardhini Vati in managing skin disorders, with studies demonstrating its efficacy in reducing symptoms like itching, erythema, and pustules. It's established properties in correcting digestive disorders and liver function.

Complementing this, Mahamanjishtadi Kashaya, a formulation containing Manjishtha, Guduchi, Haridra, Kutaja, Musta, and Nimba, was prescribed for its potent Raktashodhaka (blood-purifying) and Raktaprasadaka (blood-tonifying) attributes, which are crucial for reducing inflammation and promoting healthy skin regeneration. Manjistha (Rubia cordifolia) has been shown in modern studies to inhibit the proliferation of Propionibacterium acnes,while downregulating pro-inflammatory cytokines like IL-8 and TNF-alpha. This biochemical action directly mitigates the underlying chronic inflammatory cascades. Triphala Guggulu was also administered for its anti-inflammatory and antimicrobial effects. The synergistic action of Triphala and Guggulu is integral in reducing inflammatory acne lesions and preventing secondary infections. Notably, a comprehensive review by author highlights that the constituent ingredients of Triphala Guggulu work via distinct biochemical pathways to manage chronic lesions; for instance, chebulagic acid from Haritaki simultaneously inhibits both the COX and LOX pathways to reduce inflammatory mediators, while Guggulu's active steroids (E and Z-guggulsterones)

suppress key cytokines and nitric oxide secretion, effectively checking infectious wounds and microbial proliferation. For local management, Chandanadi Lepa, comprising Sariva, Manjishtha, Lodhra, Raktachandana, and Kushta, was applied topically throughout the treatment. These ingredients are known for their Raktaprasadaka, anti-inflammatory, and Mukhakantikara (complexion-enhancing) properties, which contributed to the reduction of erythema, pustules, and post-inflammatory pigmentation.

As part of Shodhana Chikitsa, Jalaukavacharana (leech therapy) was performed at regular intervals due to the predominant involvement of Rakta Dushti. Leech saliva is rich in biologically active substances like hirudin, bdellins, eglins, hyaluronidase, histamine-like vasodilators, anti-inflammatory agents, and anaesthetic compounds. These constituents exert anti-inflammatory, analgesic, anticoagulant, and microcirculatory effects, thus facilitating the reduction of local inflammation and promoting tissue healing. Following three sessions of Jalaukavacharana, a progressive improvement in itching, pain, erythema, and pustular lesions was observed, underscoring its beneficial role in managing inflammatory skin disorders. (10) In the previous study, a patient with severe facial acne achieved complete symptom resolution following four weekly sessions of leech therapy paired with Shamana herbs. (1)

Throughout the treatment, emphasis was placed on dietary and lifestyle modifications (Pathya-Apathya). Avoiding Ushna (hot), Ruksha (dry), and Vidahi (pitta-aggravating) foods prevented further exacerbation of Pitta and Kapha Doshas. Conversely, incorporating Laghu (light), Sheeta (cold), and Pitta-Shamaka (pitta-pacifying) dietary components helped maintain Dosha equilibrium. Adherence to adequate sleep, avoidance of Diwaswapa (daytime sleep) and Ratri Jagarana (night waking), consistent facial hygiene, and regular breathing exercises further augmented the therapeutic outcomes.

The treatment protocol resulted in a gradual and sustained reduction in acne lesions, itching, pain, erythema, and pigmentation. Significant clinical improvement was evident by day 30, with near-complete resolution of symptoms and lesions achieved by the end of 90 days, without any reported adverse effects. This case highlights that an integrated Ayurvedic approach, combining both Shamana and Shodhana Chikitsa with appropriate dietary and lifestyle modifications, offers a promising strategy for effective management of Mukhadushika. Further larger-scale clinical studies are necessary to validate these findings and establish standardized treatment protocols.

Mukhadushika is described under Kshudraroga (Minor skin disorders) in the Ayurvedic classics and is characterized by Shalmali-Kantaka-like eruptions on the face resulting from the vitiation of Vata, Kapha, and Rakta. The clinical manifestations observed in the present case, including Kandu (itching), Vedanayukta Pitika (painful acne lesions), and Puyayukta Pitika Utpatti (pus-filled eruptions) were consistent with the classical description of Mukhadushika. Considering the involvement of Kapha, Pitta, and Rakta Dushti, a treatment protocol comprising both Shamana and Shodhana Chikitsa was planned. Deepana-Pachana Chikitsa was initially administered to improve Agni, facilitate Ama Pachana, and enhance the efficacy of subsequent therapeutic interventions. Thereafter, internal medications and local applications were prescribed to address the underlying Dosha imbalance and cutaneous manifestations.

IX. CONCLUSION

The present case study suggests that an integrated Ayurvedic approach comprising Shamana Chikitsa, Jalaukavacharana, local application of Chandanadi Lepa, and appropriate Pathya–Apathya was effective in the management of Mukhadushika (Acne vulgaris). Significant improvement was observed in inflammatory lesions, itching, pain, erythema, and pustules over a period of 90 days without any adverse effects. The findings indicate that Ayurvedic interventions targeting the underlying pathogenesis may provide a safe and effective therapeutic option for Mukhadushika. However, further large-scale controlled studies are required to substantiate these findings and establish standardized treatment protocols.

X. PATIENT PERSPECTIVE

At the time of presentation, I was suffering from recurrent facial acne with associated pain, inflammation, and hyperpigmented marks. The condition had a negative impact on my self-esteem and social interactions. Following the prescribed

Ayurvedic treatment, I observed a gradual reduction in the number and severity of lesions, decreased inflammation, and improvement in skin complexion. The treatment provided significant symptomatic relief, and I am satisfied with the clinical outcome.

XI. INFORMED CONSENT

Verbal informed consent was obtained from the patient before the initiation of treatment and inclusion of the case in this study.

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