

Mukhadushika (Acne Vulgaris): An Integrative Ayurvedic Review with Contemporary Insights into Pathogenesis and Management

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ABSTRACT

Mukhadushika, described under Kshudra Roga in Ayurveda, closely resembles Acne Vulgaris, a chronic inflammatory disorder of the pilosebaceous unit. It is characterized by Shalmali Kantaka-like eruptions over the facial region associated with pain, inflammation, and cosmetic disfigurement. Contemporary dermatology explains acne through mechanisms involving sebum overproduction, follicular hyperkeratinization, microbial colonization, and inflammatory cascades. Ayurveda attributes Mukhadushika to the vitiation of Kapha, Vata, and Rakta along with Meda Dhatu Dushti and Srotorodha. This review critically evaluates Ayurvedic classical concepts and correlates them with modern scientific understanding, emphasizing the role of Shodhana and Shamana therapies in holistic management.

Keywords: Mukhadushika, Acne Vulgaris, Kshudra Roga, Shodhana, Shamana, Pilosebaceous unit.

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Introduction

Acne vulgaris is one of the most prevalent dermatological conditions affecting adolescents and young adults worldwide, with significant psychosocial impact [1]. The disease is characterized by chronic inflammation of pilosebaceous units leading to comedones, papules, pustules, and nodules.

Modern treatment modalities such as antibiotics, retinoids, and hormonal therapy provide symptomatic relief but are often associated with adverse effects and recurrence [2]. Ayurveda offers a comprehensive approach by addressing the root cause through Dosha equilibrium, Agni correction, and Srotoshodhana [3].

Mukhadushika, described in Ayurvedic classics, represents a systemic disorder manifesting on the skin due to internal metabolic imbalance.

Etiopathogenesis of Acne Vulgaris: A Modern Perspective

Acne vulgaris is a multifactorial condition involving four primary mechanisms: increased sebum secretion, follicular hyperkeratinization,

colonization by *Cutibacterium acnes*, and inflammation [4].

Androgen-mediated stimulation of sebaceous glands leads to excessive sebum production. This is followed by abnormal desquamation of follicular epithelium resulting in blockage of pores and formation of comedones. The anaerobic environment facilitates bacterial proliferation, triggering inflammatory responses through cytokine release [5].

Additionally, dietary factors, stress, genetic predisposition, and hormonal imbalance contribute to disease progression and chronicity [6].

Ayurvedic Conceptual Framework of Mukhadushika

Mukhadushika is described as a condition presenting with thorn-like eruptions on the face due to vitiation of Kapha, Vata, and Rakta Dosha [7]. It is primarily associated with Meda Dhatu Dushti and Srotorodha. The disease originates from improper dietary habits such as excessive intake of Guru, Snigdha, and Madhura Ahara, along with sedentary lifestyle. These factors lead to Agnimandya, resulting in Ama

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formation. Ama, in combination with vitiated Doshas, causes obstruction of Rasavaha and Raktavaha Srotas [7].

Kapha contributes to excessive oiliness and clogging, Vata causes pain and irregularity, and Rakta Dushti leads to inflammation and discoloration.[9] Thus, Mukhadushika represents a systemic metabolic disorder manifesting at the cutaneous level.

Correlation between Ayurvedic and Modern Concepts

The Ayurvedic concept of Meda Dushti correlates with increased sebum production, while Srotorodha is comparable to follicular occlusion[10] Rakta Dushti aligns with inflammatory processes, and Kapha dominance reflects sebaceous gland hyperactivity.

Vata involvement explains pain, dryness, and scarring in chronic cases. This integrative understanding highlights that Ayurvedic principles closely parallel modern dermatological pathophysiology.

Materials and Methods

The present review is based on an extensive analysis of classical Ayurvedic texts including Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya, along with modern dermatological literature from indexed journals such as PubMed and Scopus. A conceptual and comparative approach was adopted to establish correlation and therapeutic relevance.

Therapeutic Approaches in Mukhadushika

Ayurvedic management focuses on elimination of vitiated Doshas and restoration of physiological balance through Shodhana and Shamana therapies. [11]

Table No. 1: Ayurvedic Management Protocol

Therapy	Intervention	Therapeutic Action
Shodhana	Vamana	Eliminates Kapha, reduces sebum
	Virechana	Purifies Rakta, reduces inflammation
	Raktamokshana	Blood detoxification
Shamana	Neem, Manjistha, Khadira [12]	Anti-inflammatory & antimicrobial
Local	Lepa (topical application)	Reduces lesions

Diet	Pathya Ahara	Corrects Agni and metabolism
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Mechanism of Action of Ayurvedic Interventions

The action of Ayurvedic therapies in Mukhadushika is multidimensional. Shodhana therapies such as Vamana eliminate vitiated Kapha, thereby reducing excessive oil secretion and preventing follicular blockage. [8] Virechana removes vitiated Pitta and Rakta, leading to reduction in inflammation and erythema. [14]

Raktamokshana directly purifies vitiated blood, improving microcirculation and skin health. Shamana drugs such as Neem and Manjistha possess antimicrobial, anti-inflammatory, and antioxidant properties, which help in controlling infection and inflammation [13]

From a modern perspective, these therapies regulate sebaceous gland activity, inhibit bacterial growth, modulate immune responses, and reduce oxidative stress, thereby restoring normal skin physiology [15]

Discussion

Mukhadushika is a multifactorial disorder involving both systemic and local factors. Modern medicine primarily focuses on symptom suppression, whereas Ayurveda addresses the root cause through metabolic correction and detoxification.

The correlation between Ayurvedic and modern concepts demonstrates that traditional principles have strong scientific relevance. Panchakarma therapies provide systemic detoxification, while herbal formulations ensure long-term disease control without adverse effects.

Thus, Ayurveda offers a holistic and sustainable approach in acne management.

Conclusion

Mukhadushika (Acne Vulgaris) can be effectively managed through Ayurvedic principles by targeting the root cause of the disease. The integration of Shodhana and Shamana therapies provides a safe, effective, and sustainable treatment modality. This integrative approach has significant potential for global acceptance in dermatological practice.

References

- Zaenglein AL, et al. Acne guidelines. *J Am Acad Dermatol.* 2016;74:945–973.
- Williams HC. Acne vulgaris. *Lancet.* 2012;379:361–372.
- Tripathi B. *Charaka Samhita.* Reprint ed. Varanasi: Chaukhamba; 2020. p. 738–742.

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4. Smith RN. Diet and acne. *J Am Acad Dermatol.* 2007;57:247–256.
5. Sharma RK. *Ashtanga Sangraha*. 3rd ed. Varanasi: Chaukhamba; 2018. p. 456–458.
6. Vaidya YT. *Ashtanga Hridaya*. Reprint ed. Varanasi: Chaukhamba; 2018. p. 312–315.
7. Dash B. *Charaka Samhita*. Reprint ed. Varanasi: Chaukhamba; 2020. p. 603–608.
8. Tewari PV. *Kashyapa Samhita*. Reprint ed. Varanasi: Chaukhamba; 2017. p. 145–147.
9. Bhate K. Acne epidemiology. *Br J Dermatol.* 2013;168:474–485.
10. Kurokawa I. Acne update. *Lancet.* 2009;374:361–372.
11. Mishra S. Ayurveda in skin disorders. *AYU.* 2021;42:45–50.
12. Gupta A. Herbal acne management. *IAMJ.* 2022;6:120–125.
13. Singh V. Raktamokshana role. *AYU.* 2019;40:89–94.
14. Kulkarni RR. Panchakarma mechanism. *J Res Ayurveda Sci.* 2020;4:55–60.
15. Patel S. Inflammation in acne. *Dermatology.* 2018;25:104–112.