

Seven Layers of Skin in Ayurvedic Biology: Insights from Rasa Ratna Samuccaya

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Abstract - This paper explores the ancient Ayurvedic concept of the seven layers of skin (tvach) as described in the Rasa Ratna Samuccaya, and compares it with modern dermatological and anatomical science. It highlights the precision of Ayurvedic anatomical observations and their relevance to modern integrative dermatology. By drawing parallels between ancient classifications and contemporary biological understanding, this study establishes how traditional knowledge systems can inform and enrich present-day medical practice.

Keywords - Ayurveda, Skin Layers, Tvach, Rasa Ratna Samuccaya, Dermatology, Tridosha, Panchamahabhuta, Psychodermatology, Integrative Medicine.

INTRODUCTION

The Rasa Ratna Samuccaya, a classical text of Ayurveda, provides a detailed account of the structure and function of human skin. Specifically, it describes seven distinct layers, each associated with particular diseases, functions, and anatomical measurements. These observations are grounded in Ayurvedic principles of Tridosha and Panchamahabhuta. Modern medicine, through anatomy and dermatology, also recognizes layered skin architecture. This convergence between ancient and modern perspectives opens up a meaningful dialogue in integrative biological sciences.

RESEARCH OBJECTIVES

- To analyze the Ayurvedic concept of the seven layers of skin from Rasa Ratna Samuccaya.
- To compare these layers with modern dermatological structures and functions.
- To assess the relevance of Ayurvedic skin pathology classification in modern skin diseases.
- To explore the implications for holistic and personalized medical approaches.

SEVEN LAYERS OF SKIN IN AYURVEDA:

Sanskrit Verses and Translation

Verse : तस्य खल्वेवंप्रवृत्तस्य शुक्रशोणितस्याभिपच्यमानस्य क्षीरस्येव
सन्तानिका: सप्त त्वचो भवन्ति ।

Translation: As the properly transformed semen and blood (governed by the five elements) develop, the body forms seven layers of skin, like the layers of cream atop boiled milk.

Avabhāsīni - Thickness: 1/18th of a barley grain. Function: Reveals skin tone, radiance; site of diseases like Sidhma, Padmakantaka. Modern Equivalent: Stratum corneum/lucidum.

Lohitā - Thickness: 1/16th of a barley grain. Function: Pigmentation disorders-Tilakalaka, Nyaccha, Vyanga. Modern Equivalent: Melanocytes and superficial vascular tissues.

Shvetā - Thickness: 1/12th of a barley grain. Function: Inflammation, boils-Charmadala, Ajagalli, Mashaka.

Modern Equivalent: Epidermal basal layer.

Tāmra - Thickness: 1/8th of a barley grain. Function: Skin disorders like Kilāsa, Kuṣṭha. Modern Equivalent: Deep dermis.

Vedini - Thickness: 1/5th of a barley grain. Function: Diseases like Kuṣṭha and Visarpa. Modern Equivalent: Sensory dermis.

Rohinī - Thickness: One barley grain. Function: Granthi, Arbuda, etc. Modern Equivalent: Subcutaneous tissue.

Māṁsadharā - Thickness: Two fingerbreadths. Function: Deep lesions-Bhagandara, Arśa, Vidradhi. Modern Equivalent: Fascia and muscle interface.

INTERPRETATION

Anatomical Precision: Ayurvedic measurement units like vṛīhi and yava match micrometer-level modern dermatological tools.

Disease Localization: Specific skin pathologies are linked with specific layers, like modern dermatopathology.

Elemental and Energetic Function: Concepts like Bhrajaka Pitta relate to neuroendocrine and psychosomatic skin health.

Diagnostic and Therapeutic Integration: Layer-specific treatments show similarities with modern personalized dermatology.

Bridging Psycho dermatology: Ayurvedic mind-body connections reflect current psychodermatology insights.

CONCLUSIONS

The seven-layer skin model in Rasa Ratna Samuccaya stands as a testament to Ayurveda's advanced understanding of anatomy and disease. Far from being primitive, it reflects a holistic and nuanced view that aligns with several aspects of modern dermatology, particularly in the domains of histological depth, psychosomatic disease interpretation, and personalized care. This integrative model encourages a dialogue between ancient and modern systems-leading to more holistic, precise, and culturally sensitive approaches to skin health.

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