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Avicenna (980–1037 AD) and Nocturnal Itching: Exploring Gut-Skin Connection

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Summary

Avicenna's historical insights on digestive health and dermatological symptoms' interrelationship, mainly nocturnal itching, are examined here. In his Canon of Medicine, Avicenna explains a deep relationship between the digestive system and the skin, pointing out that effective waste elimination via the skin is vital for overall wellness. The discussion highlights the significant impact of nocturnal itching on patients with inflammatory skin conditions, such as atopic dermatitis, psoriasis, and chronic urticaria, in studying the roles of skin barrier function and hormonal fluctuations. Furthermore, modern scientific research on the gut-skin axis is integrated to illustrate the continued relevance of Avicenna's therapeutic recommendations, such as addressing internal imbalances, body cleansing, and topical therapies.

Keywords: *Urticaria, Persian Medicine, Itching, Avicenna*

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Introduction

Nocturnal itching is a significant challenge for individuals with inflammatory skin conditions like atopic dermatitis, psoriasis, urticaria, or lichen simplex. The itch, often disrupting sleep and daily activities, arises from increased skin blood circulation, heightened trans-epidermal water loss, and low nighttime cortisol levels (1). Inflammatory cytokines such as IL-6 and IL-31 amplified this discomfort, creating a frustrating cycle of irritation and sleep disturbances (1, 2).

The Persian polymath *Avicenna* (980–1037 AD) explored skin diseases extensively in his renowned work, "Al-Qānūn fī al-Tibb" (The Canon of Medicine). He provided a comprehensive approach to various skin conditions, including psoriasis, acne, and urticaria,

detailing their treatments alongside dietary recommendations.

Avicenna emphasized the connection between skin health and the digestive system, theorizing that intensified nighttime digestion produces vapors that struggle to escape through constricted skin pores, leading to itching. He identified this symptom as a hallmark of conditions like "Shara" and "Banat el-layl," which resembled urticaria with minor skin rashes that worsen in cold weather and at night, hence the term "night girls"(3, 4). To alleviate nocturnal itching, *Avicenna* recommended body cleansing, phlebotomy, and topical treatments to open the pores and release trapped vapors (Table 1) (3).

Table 1. Avicenna's Topical Remedies for Nocturnal Itching

Scientific name	Family	Common name	Traditional name	Part used	Mechanism of action	Forms
***Aloe barbadensis* (miller)**	Asphodelaceae	Aloe vera	Sabr	leaves	Immunomodulatory, Anti-inflammatory	Dried Leaf Gel
Commiphora Myrrha	Burseraceae	Myrrh	Morr	Resin	Inhibition of histamine and IL-31 production	Powder
Lens culinaris	Fabaceae	Lentil	Adas	Seeds	Anti-inflammatory	Flour
***Linum usitatissimum* (L.)**	Linaceae	Flax	Katan	Seeds	Anti-inflammatory	Oil
***Apium graveolens* (L.)**	Apiaceae	Celery	Karafs	Leaves	Anti-inflammatory	Juice
***Ricinus communis* (L.)**	Euphorbiaceae	Ricinus	Karchak	Seeds	Immunomodulatory, Anti-inflammatory	Oil
***Lawsonia inermis* (L.)**	Lythraceae	Henna	Henna	Leaves	Immunomodulatory	Powder

Recent research backs *Avicenna's* insights, highlighting the link between skin and digestive health, mainly through the Gut–Skin Axis, where changes in the microbiome affect immune responses and skin conditions (5). Skin diseases like urticaria often accompany gastrointestinal symptoms, reflecting a complex relationship between these systems (6). Similarly, conditions such as irritable bowel syndrome and inflammatory bowel disease can manifest as dry skin and itching, further underscoring the gut-skin connection (7, 8).

Avicenna's insights regarding digestion and its relationship to nocturnal itching remain relevant today, providing a historical foundation for ongoing scientific studies into the connections between the digestive system and skin health. His insights also highlight the importance of integrative approaches in addressing nocturnal itching effectively.

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None.

Conflict of interest
The authors declare no conflict of interest

Authors' Contribution
Conceptualization, Maryam Taghavi Shirazi.; writing—original draft preparation, Maryam Taghavi Shirazi and Sajjad Sadeghi; writing—review and editing, Maryam Taghavi Shirazi; supervision, Maryam Taghavi Shirazi.

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