WJPMR, 2026, 12(9), 260-264

Review Article

WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

Impact Factor: 7.533

ISSN (O): 2455-3301

ISSN (P): 3051-2557

Coden USA: WJPMBB

PITYRIASIS ALBA- A COMPARATIVE REVIEW OF MODERN DERMATOLOGY AND UNANI MEDICINE

[*1]Asia Khanam, [2]Javed Ali Khan, [3]Rajesh

[1]Research Officer SL-I, [2]Research Associate, [3]Research Officer SL-III
Regional Research Centre (Unani), Prayagraj, Uttar Pradesh, India. Under Central Council for Research in Unani Medicine, New Delhi, India.

***Corresponding Author: Asia Khanam**

Research Officer SL-I, Regional Research Centre (Unani), Prayagraj, Uttar Pradesh, India. under Central Council for Research in Unani Medicine, New Delhi, India. **DOI:** https://doi.org/10.5281/zenodo.22253654

How to cite this Article: [*1]Asia Khanam, [2]Javed Ali Khan, [3]Rajesh (2026). Pityriasis Alba- A Comparative Review Of Modern Dermatology And Unani Medicine. World Journal of Pharmaceutical and Medical Research, 12(9), 260–264.

Article Received on 10/08/2026 **Article Revised on 31/08/2026** **Article Published on 01/09/2026**

ABSTRACT

Background: Pityriasis alba (PA) is a common acquired hypopigmentary disorder predominantly affecting children and adolescents. Although it is generally considered a benign and self-limiting condition, its resemblance to other hypopigmentary disorders often creates diagnostic challenges. In Unani medicine, PA has been tentatively correlated with *Bahaq Abyad*; however, the validity of this association has not been critically evaluated. **Objective:** To critically compare pityriasis alba and *Bahaq Abyad* by reviewing their epidemiology, etiopathogenesis, clinical features, diagnosis, and therapeutic approaches from modern dermatological and Unani perspectives. **Methods:** A narrative review was conducted using relevant contemporary scientific literature and classical Unani texts. Evidence related to the epidemiology, etiopathogenesis, clinical manifestations, diagnosis, and management of pityriasis alba was critically reviewed and comparatively analyzed with the classical description of *Bahaq Abyad* to evaluate their similarities and differences. **Conclusions:** The available evidence does not support a definitive correlation between pityriasis alba and *Bahaq Abyad*. Instead, *Bahaq Abyad* appears to represent a distinct clinical entity with features overlapping more than one modern hypopigmentary disorder.

KEYWORDS: Pityriasis alba; Bahaq Abyad; Unani medicine; Hypopigmentary disorders; Narrative review.

1. INTRODUCTION

Pityriasis alba (PA) is a common acquired pigmentary disorder characterized by ill-defined hypopigmented macules and patches with fine scaling, predominantly affecting the face and other sun-exposed areas.[1] It primarily occurs in children and adolescents and is often regarded as a mild manifestation within the spectrum of atopic dermatitis and related eczematous dermatoses.[2] The lesions are usually asymptomatic and gradually regain normal pigmentation over time.[1] Owing to its characteristic clinical presentation, the condition remains one of the most frequently encountered causes of acquired facial hypopigmentation in pediatric dermatology.[1,4] Although it follows a benign and self-limiting course, the disorder is of considerable clinical importance because of its cosmetic impact and frequent resemblance to other hypopigmentary disorders, particularly vitiligo.[2] Despite its high prevalence, several aspects of pityriasis alba, particularly its etiopathogenesis and relationship with traditional disease concepts, remain incompletely understood. Although no direct description of pityriasis alba exists in classical Unani literature, certain clinical features resemble those of *Bahaq Abyaz*, a superficial hypopigmentary disorder described by Unani scholars.[5] However, the exact correlation between these entities remains uncertain. Therefore, the present review provides a comparative overview of pityriasis alba from modern dermatological and Unani perspectives.

2. Epidemiology

It is a common pigmentary disorder of childhood with a worldwide distribution. Epidemiological studies suggest that it affects up to 5% of children and constitutes a substantial proportion of hypopigmentary dermatoses encountered in pediatric dermatology practice.[1] Reported prevalence ranges from approximately 1% to 20% across different populations, reflecting variations in climatic conditions, socioeconomic status, skin phototypes, and study methodologies. Higher frequencies have generally been reported from tropical and developing regions.[1,6] The condition predominantly

affects children during the first and second decades of life. A large Chinese study involving 2,726 patients reported a median age of onset of 7 years, with most cases occurring between 1 and 14 years of age.[6] Similar observations have been reported in Indian populations, where the highest prevalence was noted among children aged 6–10 years.[4] Although a slight male predominance has been described in some studies, sex-related differences remain inconsistent.[4,6] The disorder appears to occur more frequently in individuals with darker skin phototypes and those from lower socioeconomic backgrounds.[1,4,6]

3. Etiopathogenesis

3.1: Modern Perspective

Its etiopathogenesis remains incompletely understood and is considered multifactorial in nature. Current evidence suggests that genetic predisposition, immune dysregulation, nutritional factors, and environmental influences contribute to disease development.[1] Several studies have reported a significant association with atopic conditions, particularly atopic dermatitis and xerosis, indicating that epidermal barrier dysfunction may play a central role.[1,6,7] Histopathological studies have demonstrated features of mild spongiotic dermatitis with reduced melanin content, suggesting that the characteristic hypopigmentation results from low-grade inflammation rather than permanent melanocyte damage.[8] Environmental factors, including excessive sun exposure, frequent bathing, use of harsh soaps, wind exposure, and inadequate skin moisturization, may further aggravate epidermal dryness and lesion development.[1,6] Recent studies have also highlighted the possible role of micronutrient deficiencies, particularly zinc, vitamin D, and magnesium, although the available evidence remains insufficient to establish a definitive causal relationship.[9,10] Collectively, the available evidence indicates that the disorder arises from complex interactions among genetic susceptibility, epidermal barrier dysfunction, and environmental factors.[1,6-10]

3.2 Unani Perspective

From the Unani perspective, pityriasis alba has no direct description in classical literature; however, hypopigmentary skin disorders have been discussed under the broad category of *Bahaq*. Classical Unani scholars attributed the development of *Bahaq Abyad* to disturbances in the quality and quantity of humours (*Akhlat*), particularly the predominance of *Balgham*, leading to *Taghayyur-e-Lawn* (alteration of skin colour) manifested as superficial whitish or hypopigmented patches.[11,12] The underlying pathological process is believed to involve *Sue Mizaj*, especially a cold and moist temperament (*Sue Mizaj Barid Ratab*), which alters the normal physiological state of the skin.[11] According to Ibn Sina and other Unani scholars, impairment of *Quwwat-e-Mughayyira* (transformative faculty) and *Quwwat-e-Mushabbiha* (faculty responsible for maintaining normal tissue characteristics) plays a key role in the development of pigmentary disorders. When these faculties are weakened, nutrients fail to acquire the normal colour and structure of the skin, leading to the accumulation of abnormal material and subsequent pigmentary changes.[11,12] Additionally, disturbances in dietary habits, digestive function, and *Asbab-e-Sitta Zarooriya* are considered predisposing factors that promote humoral imbalance and chronic skin disorders.[13] The principal similarities and differences between pityriasis alba and the classical description of *Bahaq Abyad* are summarized in Table 1.

Table 1: Comparative Analysis of Pityriasis Alba and *Bahaq Abyad*[6-12]

Feature	Pityriasis Alba	*Bahaq Abyad* (Classical Description)
Age group	Mainly children and adolescents	Not specifically age-restricted
Common sites	Face, especially cheeks	Commonly described on the trunk and upper body
Colour	Hypopigmented patches	Whitish discoloration of the skin (Taghayyur-e-Lawn)
Scaling	Fine scaling may be present	Fine scaling present
Depth of involvement	Superficial epidermal disorder	Superficial skin involvement
Etiopathogenesis	Multifactorial; associated with atopy, xerosis, and skin barrier dysfunction	Sue Mizaj, imbalance of Akhlat (especially Balgham), and weakness of Quwwat-e-Mughayyira
Nature of disease	Non-infectious inflammatory dermatosis	Humoral disorder described in classical Unani literature

As summarized in Table 1, although pityriasis alba and *Bahaq Abyad* share certain clinical features, important differences in epidemiology, anatomical distribution, etiopathogenesis, and disease characteristics limit a direct one-to-one correlation.[5]

4. Clinical Features

It is characterized by ill-defined hypopigmented macules and patches with fine, dry scaling.[1,2] The lesions are typically round or oval in shape and predominantly involve the face, particularly the cheeks, chin, forehead, and perioral region.[1,2] Less commonly, the neck, shoulders, upper trunk, and upper limbs may also be affected. Multiple lesions are more frequently observed than solitary patches.[2] The lesions are usually asymptomatic, although mild pruritus may occasionally be present.[2] Clinical evolution generally occurs in three stages: an initial erythematous and mildly scaly phase, followed by the development of hypopigmented patches with indistinct borders, and finally a resolving stage

characterized by gradual repigmentation and minimal scaling.[1,2,3]

5. Diagnosis

The diagnosis of pityriasis alba is primarily clinical and is based on the presence of ill-defined hypopigmented patches with fine scaling, predominantly affecting the face.[14] Dermoscopy serves as a useful adjunctive tool, typically demonstrating ill-defined white structureless areas, fine scales, and preservation of normal hair pigmentation.[14,15] Wood's lamp examination usually shows minimal accentuation of lesions, unlike the bright fluorescence observed in vitiligo.[16] KOH examination is generally negative and is mainly performed to exclude pityriasis versicolor in doubtful cases.[17] The combined use of clinical examination, dermoscopy, Wood's lamp evaluation, and KOH testing facilitates accurate diagnosis and differentiation from other hypopigmentary disorders.[14-17]

Table 2: Differential Diagnosis.[14,15]

Disorder	Characteristic Features	Differentiating Features
Pityriasis Alba	Ill-defined hypopigmented patches with fine scaling	Normal hair colour and negative KOH
Vitiligo	Well-defined depigmented patches	Bright Wood's lamp fluorescence and absence of scaling
Pityriasis Versicolor	Hypo-/hyperpigmented scaly patches	Positive KOH examination and fungal etiology
Post-inflammatory Hypopigmentation	Hypopigmentation following skin inflammation	History of preceding inflammatory dermatosis
Nevus Depigmentosus	Stable hypopigmented patch	Congenital and non-progressive lesion

6.1 Modern Management

Pityriasis alba is a benign, self-limiting dermatosis; therefore, management primarily aims to alleviate xerosis, improve cosmetic appearance, and provide appropriate patient reassurance.[1,17] Patients and caregivers should be informed about the favorable prognosis of the condition and the likelihood of gradual spontaneous repigmentation.[1,17] Conservative measures constitute the cornerstone of management. Regular application of emollients is recommended to restore skin hydration and reduce scaling, whereas broad-spectrum sunscreens may decrease the contrast between affected and surrounding skin and prevent sun-induced accentuation of lesions.[1,17] In addition, avoidance of aggravating factors, including excessive sun exposure, harsh soaps, and frequent hot bathing, is advised.[1,17]

Pharmacological intervention may be considered in patients with persistent, symptomatic, or cosmetically distressing lesions. Low- to mid-potency topical corticosteroids can reduce associated inflammation and facilitate clinical improvement.[17] Topical calcineurin inhibitors, particularly tacrolimus 0.03% ointment, have also demonstrated efficacy in enhancing repigmentation and may represent a suitable alternative to corticosteroid therapy.[17] Overall, the prognosis of pityriasis alba is excellent, with most patients achieving complete repigmentation without permanent sequelae.[1,17]

6.2 Unani Therapeutic Perspectives

In Unani medicine, the management is based on the principles of *Tadeel-e-Mizaj* (restoration of normal temperament), *Islah-e-Akhlat* (correction of humoral imbalance), and *Tanqiya-e-Balgham* (evacuation of morbid phlegm). Since the condition is traditionally attributed to the predominance of *Balgham***,** treatment focuses on correcting humoral imbalance and restoring normal skin pigmentation.[11,12]

The principal therapeutic approach is *Tanqiya-e-Balgham*, which is conventionally achieved through the sequential administration of *Munzijat-e-Balgham*, *Mushilat-e-Balgham*, and *Tabreed-e-Badan*.[11,12] *Munzijat-e-Balgham* is administered before purgation to prepare the morbid phlegmatic matter for elimination. A commonly prescribed formulation consists of *Maweez Munaqqa* (*Vitis vinifera*, 9 fruits), *Badiyan* (*Foeniculum vulgare*, 7 g), *Asl-us-Soos Muqashhar* (*Glycyrrhiza glabra*, 5 g), *Parsiyaoshan* (*Adiantum capillus-veneris*, 7 g), *Anjeer Zard* (*Ficus hispida*, 2 fruits), and *Gule Surkh* (*Rosa damascena*, 7 g). The ingredients are boiled, filtered, and administered after mixing with either 46 g of *Gulqand* or 23 g of *Sikanjabeen*.[11,12] Subsequently, *Mushilat-e-Balgham* is administered to facilitate the evacuation of the prepared phlegmatic matter. Several compound formulations have been described in classical Unani literature, as summarized in Table 3.[11,12] Following evacuation therapy, *Tabreed-e-Badan* is recommended using *Mubarrid* (refrigerant) drugs to minimize the adverse effects of *Mushilat* on the intestines and to restore humoral equilibrium. Commonly used agents include *Loab-e-Bahidana* (*Cydonia vulgaris*), *Loab-e-Aspaghol* (*Plantago ovata*), *Loab-e-Resha Khatmi* (*Althaea officinalis*), *Sheera Unnab* (*Ziziphus jujuba*), *Sheera Badiyan* (*Foeniculum vulgare*), and *Arq Shahtara* (*Fumaria parviflora*).[11,12] Classical Unani texts also recommend topical therapy using drugs possessing *Jali* (detergent), *Muhallil* (resolvent), *Muhammir* (rubefacient), and *Musakhkhin* (warming)

properties. The commonly described topical formulations are summarized in Table 4.[11,12]

Ilāj bi'l Ghidhā (Dietotherapy): It is advised to consume light and easily digestible foods (*Ghiza-e-Lateef*) while avoiding foods with a cold and moist temperament, as well as dietary items believed to promote the predominance of *Balgham* or produce *Ghaleez Akhlat*, including excessive intake of fatty foods, fresh vegetables, fruits, and fish. Conversely, foods with relatively hot and dry qualities, including goat and birds meat, spices such as black pepper, cumin, and cinnamon, are traditionally recommended to restore humoral balance.[11,12]

Table 3: Commonly Described *Mushilat-e-Balgham* Formulations for *Bahaq Abyad*.[11,12]

Sr. No.	Ingredients (Quantity)	Administration
1.	*Haleela Kabuli* (Terminalia chebula) 7 g; *Turbud* (Operculina turpethum) 10 g; *Shahad* (Honey)	10.5 g/day
2.	*Itrifal Sagheer* 7 g; *Turbud* (Operculina turpethum) 3.5 g; *Shahme Hanzal* (Citrullus colocynthis) 1.27 g	Once weekly
3.	*Ayaraj Fiqra* (Aloe barbadensis) 5 g; *Ghariqoon* (Agaricus alba) 4 g; *Shahme Hanzal* (Citrullus colocynthis) 2 g; *Sonth* (Zingiber officinale) 2 g; *Saqmonia* (Convolvulus scammonia) 0.5 g	Mixed with *Aab-e-Karafs* (Apium graveolens) and prepared as Qurs
4.	*Haleela Siyah* (Terminalia chebula) 40 g; *Sana* (Cassia angustifolia) 12 g; *Mastagi* (Pistacia lentiscus) 12 g; *Aftimoon* (Cuscuta epithymum) 20 g	Powdered, mixed with honey; 8 g on an empty stomach

Table 4: Commonly Described Topical Formulations for *Bahaq Abyad* in Classical Unani Literature.[11,12]

Sr.No.	Ingredients	Method of application
1.	*Haldi* (Curcuma longa) + *Sirka* (vinegar), or *Sirka* alone	Apply locally over the affected area.
2.	*Sirka* (vinegar) + *Unsul* (Urginea scilla)	Apply over the lesion followed by brief sun exposure.
3. (Shiyaf)	*Khardil* (Brassica nigra), *Gandhak* (Sulphur), and *Usara Unsul* (Urginea scilla)	Mix with *Arq Payaz* and massage until mild erythema develops.
4.	*Nilofar* (Nymphaea alba) with its root	Apply locally over the affected area.
5.	*Tukhme Khatmi* (Althaea officinalis) + *Sirka* (vinegar)	Apply locally over the lesion.
6.	*Tukhme Panwar* (Cassia tora) 3 g, *Babchi* (Psoralea corylifolia) 3 g, *Tukhme Turb* (Raphanus sativus) 3 g mixed with water	Apply as a paste over the affected area.
7.	*Naushadar* (Ammonium chloride) 6 g triturated with *Arq Payaz*	Rub gently over the affected area with a cloth.

7. CONCLUSION

The available classical and contemporary evidence does not sufficiently support the currently accepted correlation between pityriasis alba and *Bahaq Abyad*. Although both conditions share certain clinical features, important differences in epidemiology, anatomical distribution, and etiopathogenesis suggest that *Bahaq Abyad* may represent a distinct clinical entity with overlapping characteristics of more than one modern hypopigmentary disorder. Further comparative clinical and textual studies are required to clarify this relationship.

8. Conflict of interest: None.

9. Funding Source: None.

10. REFERENCES

1. Abdelwahab AA, Sayed WM, Hashim MS, Abdo RS. Pityriasis alba: an update on the epidemiologic features, etiopathogenesis and management. Sohag Med J, 2023; 27(1): 15-21. doi:10.21608/SMJ.2022.155462.1340.
2. Jassim HM. Pityriasis alba: an epidemiological and clinical study. Int J Adv Res, 2020; 8(3): 875-880. doi:10.21474/IJAR01/10701.
3. Thomas IN, James JJ, Bala A, Mohan S, Dogiparthi S, Shanmugam NP. Usage of dermoscopy as an effective diagnostic tool in pityriasis alba: a prospective observational study among children in a suburban hospital in South India. Cureus, 2023 Jun 11; 15(6): e40271. doi:10.7759/cureus.40271.
4. Ramteke K, Kar S, Patrick S, Sawant A, Ambhore V. Pityriasis alba: current clinicoepidemiologic scenario in a rural tertiary care hospital in central India. Pigment Int, 2022; 9(2): 182-187. doi:10.4103/pigmentinternational.pigmentinternational_88_20.
5. Ismail BA, Fatima S, Nawab M. The current understanding of the clinical condition Bahaq (pityriasis versicolor): hypothesis and a review of

evidences. Tradit Integr Med, 2021. doi:10.18502/tim.v6i3.7313.
6. Lv Y, Gao Y, Lan N, Sun M, Zhang C, Gao J, et al. Analysis of epidemic characteristics and related pathogenic factors of 2726 cases of pityriasis alba. Clin Cosmet Investig Dermatol, 2022; 15: 203-209. doi:10.2147/CCID.S345106.
7. Gawai S, Asokan N, Narayanan B. Association of pityriasis alba with atopic dermatitis: a cross-sectional study. Indian J Dermatol, 2021. doi:10.4103/ijd.ijd_936_20.
8. Carneiro F, Amaral G, Mendes M, Quaresma J. Tissue immunostaining for factor XIIIa in dermal dendrocytes of pityriasis alba skin lesions. An Bras Dermatol, 2014; 89: 245-249. doi:10.1590/abd1806-4841.20142201.
9. Elesawy F, Akl E, Halim W. Zinc has a role in pathogenesis of pityriasis alba. Indian J Paediatr Dermatol, 2020. doi:10.4103/ijpd.ijpd_109_19.
10. Shashikumar M, Harish M, Naidu H, et al. Profile of micronutrients in patients presenting with pityriasis alba in a tertiary care center: a case-control study. Clin Dermatol Rev, 2024. doi:10.4103/cdr.cdr_62_23.
11. Akhter F, Quamri MA, Bashir S. Concept and management of Bahaq (pityriasis versicolor) in Unani medicine: a review. Int J Res Rev, 2022. doi:10.52403/ijrr.20220752.
12. Qureshi Z, Husain MA, Shah AH, Khalid A. Unani and modern perspective to understanding and managing Bahaq (pityriasis versicolor): a comprehensive review. J Drug Deliv Ther, 2025. doi:10.22270/jddt.v15i2.7001.
13. Tauleha S, Zulkifle M, Ahmed W, Kausar S. Understanding of lifestyle disorders and their prevention in Unani medicine. MOJ Womens Health, 2021. doi:10.15406/mojwh.2021.10.00290.
14. Ankad B, Smitha SV, Errichetti E, Rangappa M. Facial pityriasis alba, polymorphous light eruption, and vitiligo in children: a dermoscopic distinction. J Skin Stem Cell, 2022. doi:10.5812/jssc.121848.
15. Labedz N, Navarrete-Dechent C, Kubisiak-Rzepczyk H, Bowszyc-Dmochowska M, Pogorzelska-Antkowiak A, Pietkiewicz P. Pityriasis versicolor: a narrative review on the diagnosis and management. Life (Basel), 2023; 13(10): 2097. doi:10.3390/life13102097.
16. Abdel-Wahab H, Ragaie MH. Pityriasis alba: toward an effective treatment. J Dermatolog Treat, 2022; 33(4): 2285-2289. doi:10.1080/09546634.2021.1959014.