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Shadma Ishrat

Department of Amraze Jild Wa Zohrawiya, Faculty of Unani Medicine, AMU, Aligarh, Uttar Pradesh, India

Zamir Ahmad

Department of Amraze Jild Wa Zohrawiya, Faculty of Unani Medicine, AMU, Aligarh, Uttar Pradesh, India

SM Ahmer

Assistant Professor, Department of Ilmul Amraz, Faculty of Unani Medicine, AMU, Aligarh, Uttar Pradesh, India

Nazish Fatima

Department of Microbiology, Faculty of Medicine, AMU, Aligarh, Aligarh, Uttar Pradesh, India

Corresponding Author: SM Ahmer

Assistant Professor, Department of Ilmul Amraz, Faculty of Unani Medicine, AMU, Aligarh, Uttar Pradesh, India

A comprehensive review on *Qooba* (Dermatophytosis)

Shadma Ishrat, Zamir Ahmad, SM Ahmer and Nazish Fatima

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Abstract

Qooba (dermatophytosis) is the roughness on the surface of the skin, which is associated with itching, scaling, erythema, and dryness. In modern literature, Dermatophytosis is defined as a superficial infection of the keratinized layer of skin caused by a group of keratinophilic fungi. According to Unani Medicine, blood dyscrasia is responsible for the pathogenesis of Qooba (dermatophytosis). Dermatophytosis is the commonest form of skin infection affecting about 20-25% of the world population and poses a considerable worldwide health problem as per the WHO report. This review study makes an effort to identify the cause of Dermatophytosis and describes the condition's classification and treatment from both the Unani and modern medicine perspectives.

Keywords: Skin, Qooba, Unani Medicne

Introduction

Qooba (Dermatophytosis) has been considered a major public health problem in many parts of the world. As per WHO estimate, it affects more than 20-25% of the world's population, making it one of the most common forms of infection. The variability of incidence has been changed due to climatic conditions across the world [1].

In Unani literature, it is defined as a type of roughness on the surface of the skin accompanied by itching, scaling, and redness. The color of the lesion is red or black in color, and the periphery is red, which signifies the active infection. Sometimes, there may be a discharge of yellowish fluid ^[2, 3, 4]. Various names have been given to it, like *Paryoon* and *Daryoon* in the Persian language, in Hindi (or local language) it is commonly known as *Daad*, while in English or in medical science it is called Fungal infection, Ringworm, Tinia, superficial dermatophytosis/mycosis, superficial mycotic infection and Favus ^[2, 5, 6, 7, 8, 9, 10, 11]

In Modern medicine, dermatophytoses are fungal infections caused by three genera of fungi that invade and multiply within keratinized tissue (hair, skin, and nails). These fungi, are collectively called "dermatophytes". The three genera are *Microsporum*, *Trichophyton*, and *Epidermophyton* [12, 13].

This paper is an attempt to understand the classification, etiology, signs and symptoms, and management of *Qooba* (Dermatophytosis) from the perspective of Unani as well as modern medicine.

Historical Perspective

Qooba (Dermatophytosis) is one of the oldest and commonest skin diseases existing even before its true mycological nature was established.

Unani physicians have provided detailed information about Qooba in their respective texts. Some of the few are discussed below:

- **Aulus Cornelius Celsus:** The Roman encyclopaedist, in his treatise *De Re Medicina*, described a suppurative infection of the scalp known as the *kerion of Celsus* [14].
- Dioscorides (60 A.D.): Described Qooba in children and its treatment in De Materia
 Medica [15]
- **Jalinus** (**Galen 129-200 A.D.**): In the book of *Mayameer*, gave the description of *Qooba*, and its causes and classified it into acute and chronic *Qooba* ^[15].
- **Ismail Jurjani** (12th century AD): In his book *Zakheera Khwarzamshahi*, states that *Paryun* is a Persian name for *Qooba* and in Hindi, it is named *Daad*. He described *Khilt-e-bad* (Noxious humor) and the weakness of *Quwat-e-tabiyat* (corrective faculty) as the two main causes of the existence of *Qooba* ^[5].

- Hakeem Akbar Arzani (17th century AD): In *Tib-e-Akbar* termed the Qooba as the roughness of the surface of the skin. Color may be red or black, spreading in nature, and may attain chronicity and shed off as fish-like scales ^[7].
- Ahmad Tabari (10th century AD): In his book *Moalejat-e-Buqratiya*, stated that *Qooba* is very similar to *urticaria*, and affects the external surface of the skin, usually, it is round in shape and it affects the large surface area. Regarding Etiopathogenesis, he stated that pathogenic irritating matter escapes out from minute capillaries resulting in the formation of hyperpigmented papule which later spreads and takes a large annular shape. He also mentioned that *Qooba* has three *jins* (types) viz; *Jins-e-damwi*, *Jins-e-ratoobi*, and *Jins-e-saudawi* [16].
- Ali Ibn Abbas Majoosi (1930-999): Ali Ibn Abbas Majoosi, in his book *Kamil-us-Sana*, stated that *Qooba* originates from *sauda* and sauda is formed from *ehtraq-e-dam*, he also discussed the causes, clinical presentation, and treatment of *Qooba* [17].
- Rabban Tabari (810-895): He mentioned in his book *Firdaus-ul-Hikmat* that improper functioning of *Quwwat-e-hazima* results in *Fasid* blood (vicious blood) which circulates to the whole body resulting in itching and causing *Qooba*.

This *fasid* blood contains *ghilzat* and *baroodat*. Also, if *hiddat* develops in *fasid* blood and the amount of *ratoobat* reduces then it may cause dry *Qooba* ^[16].

- Hakeem Ghulam Jeelani: In the book *Makhzan-e-Hikmat*, Hakeem Ghulam Jeelani gave a detailed theory about *Qooba*. He states that it is a contagious disease. He also mentioned that if it affects the head area is termed *Daus salab*, when it affects the beard region it is termed *ul-hayya*, and for nails known as *Da-ul-zafeer*. Small vesicles/papules appear on the surface of the skin. These vesicles combine together to form a circular lesion. When these lesions flare up, they may cause severe itching ^[6].
- Hasan Al Qamri (9th century A.D): He mentioned in his book *Ghina Muna*, that the causative agent of *Qooba* is sanguine humor, which is formed after *ehtraq* (burnt) transformed into melancholic humor. When *Qooba* extended to the muscular part of the skin, termed *Daad Kaaghzi* ^[18].
- Zakariya Razi (850-923 A.D): He mentioned the classification and treatment of *Qooba* in his book *Al Hawi-fit-tib*. He classified the *Qooba* into *Qooba-e-ratab* and *Qooba-e-yabis*, in addition to this he explored that local application of oil is beneficial to treating the *Qooba* [15].
- Allama Hakeem Kabir Uddin: In Tarjuma-e-Kabir (shar-e-asbab), Hakeem Kabir Uddin states that Qooba is dryness of the external surface of the skin, it might be red or black in appearance. It is contagious in nature and caused by a particular type of madda (madda tul Qooba).

If the humor develops the properties of *hiddat*, *borquit*, and saudawiyat due to the presence of madda-tul-qooba, it might produce *Qooba*, and it may further complicate ^[19].

Unani Classification of *Qooba* (Dermatophytosis)

- According to Zakariya Razi, Qooba is classified as
 - Qooba Ratab (Damwi), manifests as red itchy lesions with oozing fluid. This type is associated with Dam (blood) which is converted into sauda and causes Qooba.
 - Qooba Yabis (Saudawi), manifests as whitish in color. This type is associated with Balgham maleh (saline phlegm) which is formed by ehtiraq and further transformed into sauda [15].
- *Ibn-e-Sina* classified *Qooba* into the following types: *Damwi* (*Ratab*), there is an oozing of fluid with itching. *Saudawi* (*Yabis*), occurs due to the *istehala* (metabolism) of *balgham-e-shor* and the *ehtiraq* (combustion) of *balgham-e-maleh* (saline phlegm). *Mutaqashshir*, this type resembles *bars-e-aswad*, due to extreme dryness leading to scaling. *Ghair Mutaqashshir*, *qooba* without scaling.

Sai khabees spreads to other parts of the skin and are difficult to treat. *Waqif* is of localized type. *Haad* is acute in condition with less duration and is easy to treat. *Radi* type is also difficult to treat and has a poor prognosis ^[20].

- According to literature provided in Ghina Muna, Qooba is classified as Kaghzi daad, when Qooba extended to the muscular part [18].
- According to Rabban Tabari, Qooba has been classified as:
 - O *Jins-e-damwi* appears due to *fasad-e-dam* (abnormality in the blood) and *ratoobat-e-fasida* (morbid fluid). *Jins-e-ratubi* occurs by *afoona t*(infection) and *fasid ratoobat*. Jins-e-*saudawi* occurs by *khilt* which is burnt and converted into *sauda* ^[16].
- According to the text in Kitab al-Mukhtarat fil-tib, Qooba has been classified as Khushk (dry) daad, caused by melancholic humor. Tar (wet) daad, it occurs when melancholic humor is mixed with blood which is red in color [21].

Unani Etiology

According to Unani physicians, there are several causes of *Qooba*:

- The causative factor of *Qooba* is the mixture of acute liquefied fluid of blood and black bile. The melancholic humor is also considered the cause of *Qooba*, that is black bile ^[4].
- If humor, attains the properties of *hiddat*, *borquit*, and *saudawiyat* due to the existence of *madda-tul-Qooba*, it might develop *Qooba* and it may advance the condition [19].
- It may develop from *raqeeq* and *tez madda*. May also develop when *ghaleez madda* is mixed with *tez* (sharp) blood. The cause of its existence includes burnt *ghaleez ratubat* with *balgham-e-shor* and *tez* (sharp) blood. It occurs in *Qooba-e-muzmin* (chronic state of *Qooba*) [22, 23].
- The cause of *Qooba* also resembles that of *Sa'fa*, that is *haad*, *hareef* or pungent fluid, when mixed with *ghaleez saudawi madda* (viscous melancholic humor), which is more viscous than the matter of *jarb*. It may also develop from *balgham-e-maleh* (saline phlegm) which is burnt and transformed into *sauda* (melancholic humor) ^[20].

Classification of Dermatophytes

The dermatophytes embody more than 40 closely related species classified into three genera: *Epidermophyton*, *Trichophyton*, and *Microsporum*. Only a few of these species are accountable for most human infections.

Epidermophyton

This genus has two known species, out of the two, only *E. floccosum* is pathogenic. It affects the human skin and nails.

Trichophyton

This genus contains 22 species. It is more infectious than others. Affects the hair, the glabrous skin, as well as the

nails. Includes both the human and animal species. The important species are: *T. rubrum*, *T. mentagrophyte*, *T. violaceum*, *T. verrucosum* and *T. schoenleini*.

Microsporum

This genus contains 17 species. It affects chiefly the hair, and less frequently, the glabrous skin. The important species are *M. audounii* (human variety) and *M. canis* and *lanosum* (animal varieties).

On the basis of natural habitat, usual host, and mode of transmission of dermatophytes, they are divided into three categories. (Table 1) [12, 24, 25, 26].

Table 1: Types of dermatophytes based on modes of transmission

Category Mode of transmission Typical clinical features				
Anthropophilic	Human to human	Mild to non-inflammatory		
Zoophilic	Animal to Human	Intense inflammatory (pustules and vesicles possible), acute		
Geophilic	Soil to Humans or Animals	Moderate inflammation		

Clinical Classification of Dermatophytosis

Clinically, the types of dermatophytosis are classified according to the site of infection.

Tinea manum

Found on dorsal aspects of the hand. The unilateral or asymmetrical nature of the lesion is quite notifiable. Lesions are erythematosquamous, sharply defined, polycyclic foci, that spread up to the periphery, often with small pustules. This is almost constantly caused by T rubrum or T. mentagrophytes. Fungal infection of the palm is frequently associated with tinea pedis [26].

Tinea Pedis

(*Synonyms*: Mycosis of the foot, athlete's foot, ringworm of the foot)

Infection of the feet, chiefly the toes and soles. Its prevalence is higher among miners and athletes (up to 70%). Moist and warm conditions within shoes are the important factors for the occurrence of tinea pedis; hyperhidrosis and acrocyanosis are predisposing factors. The commonest types are intertriginous and squamous-hyperkeratotic types [27].

Tinea Ungium

(Synonym: Onychomycosis)

When the nail bed is invaded by dermatophytes with secondary involvement of the nail plate from the free edge of the nail fold. Onychomycosis encompasses all infections of nails caused by any fungus including non-dermatophytes and yeasts [13].

Tinea Barbae

Fungal infection of the hairy portion of the face and neck. The causative species is Trichophyton mentagrophytes. It arises as an isolated folliculitis with a purulent discharge, pathogens may spread by shaving. The inflammation with redness, scaling, and pustules, spreads superficially, then rapidly penetrates into the hair follicle and soft furunculosis papulonodules and follicular pustules start to appear. Abscesses may fuse to cover large areas of beard [13, 26].

Tinea Capitis: (Synonym: Black dot ringworm)

It is the fungal infection of the hair-bearing part of the scalp, eyebrows, or eyelashes by species of the genera *Trichophyton* and *Microsporum*. Babies and school children are often affected, adults rarely affected. It is clinically present in various ways, including a circumscribed area of alopecia with a thick crust, a boggy mass of tissue (Kerion), many hairs broken off at the level of the scalp (black dot ringworm), seborrheic dermatitis-like scaling without any alopecia, yellow cup-shaped crusts (scutula) each penetrated by a hair (also known as favus); and scattered patchy areas of hair loss with slight scale [13, 27].

Tinea Facie

It is a fungal infection of the face apart from the mustache and beard area. It is frequently caused by T. Ruburum. And T. mentagrophytes. Clinically presents as an erythematous, slightly scaling, pruritic lesion with indistinct borders ^[26].

Tinea Corporis

It refers to the fungal infection of the body. This is clinically present as multiple, large, red, scaly lesions with red raised margins. Inflammation appears in the form of vesicles and pustules is most noticeable at the periphery of the lesion. The lesion is clear at the center; when central clearing is complete, then ringed lesions are formed due to centrifugal spread. Eczematization and lichenification may become the complicating features of chronic cases [26, 27]

Tinea Cruris: (Tinea Inguinalis, Dhobi's itch)

This form arises on the inner sides of the upper part of the thighs, spreading to adjoining parts of the scrotum, penis, vulva, perineum, and later to the buttocks and trunk. It is commonly caused by Epidermophyton and Trichophyton. It begins as a small circinate lesion. Typically, it is found as well-defined patches of scaling, vesicles, and pustules with inflammation most distinct at the periphery of the lesions [13, 26]

Differential Diagnosis

There are various clinical presentations of tinea corporis, cruris, capitis, pedis, and faciei, and they can mimic other dermatologic conditions (Table 2) [12], 28, 29]

 Table 2: Differential diagnoses of Dermatophyte infection.

T. Corporis	T. Cruris	T. Faciei	T. Capitis	T. Pedis
Nummular eczema	Cutaneous	Seborrheic, Peroral,	Seborrheic dermatitis	Dyshidrotic & Contact
Nullillulai eczellia	candidiasis	Contact dermatitis	Seborniere dermatitis	dermatitis
Atopic dermatitis	Seborrheic	Rosacea	Alopecia areata	Psoriasis Vulgaris
Atopic definations	dermatitis	Rosacea	Alopecia aleata	
Stasis dermatitis	Psoriasis	Lupus erythematosus	Trichotillomania	Pustular psoriasis
Contact dermatitis	Erythrasma	Acne vulgaris	Psoriasis	Plantar dermatoses
Seborrheic dermatitis	Contact dermatitis	Annular psoriasis	If pustules: Pyoderma & Folliculitis	Secondary syphilis
Pityriasis Versicolor,	Lichen simplex		If scarring: Lichen planus, DLE, Central	If interdigital: Erythrasma
rosea	chronicus		centrifugal cicatricial alopecia	Bacterial infection.
Subacute lupus	Mycosis			
erythematosus	fungoides			

Investigations

Qooba (Dermatophytosis) can be diagnosed easily through its characteristic clinical presentation. The laboratory diagnosis of dermatophytosis depends on the microscopical observation of the dermatophyte in samples collected from the affected areas. Followed by culture and the specific identification of the fungus.

Direct microscopy

Skin and nail scrapings and epilated hairs should be examined using 20% KOH. It is a quick and economical bedside tool to provide evidence of fungal infection. Positive scrapings are considered on the basis of the presence of refractile, long, smooth, branching, undulating, and septate hyphal filaments with or without arthroconidia spores. Fluorescent staining with optical brighteners (diamino stilbene) is the most sensitive technique to microscopically detect fungi in skin scales, nails, and hair. These substances bind to chitin, which is the main cell wall component of fungi.

Culture and antifungal sensitivity

Sabouraud dextrose agar (SDA, 4% peptone, 1% glucose, agar, water) is the most frequently used isolation media for dermatophytosis. The development of a colony takes 7–14 days. Modified SDA, with the addition of gentamicin, chloramphenicol, and cycloheximide is more selective for dermatophytes as chloramphenicol inhibits the growth of saprophytic fungus. It is incubated at room temperature for up to 5-14 days. Dermatophytes utilize the protein that results in excess ammonium ions and an alkaline environment which turns the medium from yellow to bright red.

Woods's light examination

Hair fluoresces with a blue-green color when infected with Microsporum canis or Microsporum audouinii. The rare Trichophyton schoenleinii develops a paler green fluorescence of infected hair. Fungal infections of the skin do not have fluorescence.

Biopsy

- PAS- Periodic Acid Schiff stain depicts red hyphae
- Methenamine silver stain depicts black hyphae [28, 29, 30, 31]

Management

The Unani system of medicine embraces a holistic approach to the treatment of *Qooba*. It depends upon the clinical manifestation, involvement of the *khilt* (humor), severity, and duration of the disease. After the identification of the

khilt involved, that is *Khilt-e-sauda* (melancholic humor), the next step is the removal of the causative *khilt*, that is excessive *sauda* from the body, by the process called *tanqiya-e-badan*. It is done in three steps: *Munzij therapy*, *Mushil* therapy, and *Tabrid* therapy.

Management according to dominating humor

- When *khilt-e-dam* is involved, *fasd* (venesection) is done at the nearest site of the lesion, after that *Ghassal advia* (irrigator) is used for local application. The following combination of drugs is advised for local application in the form of *tila*:
 - Kharpaza (Cucumis melo), Ushna (Usnea longissima), Arad-e-baqla (Vicia faba), Arad-enakhood (Cicer arietinum).
 - o Mazu (Quercus infectoria) and Vinegar.
 - O Samagh-e-arbi (Acacia arabica), samagh-e-farsi, Ushaq (Dorema ammoniacum), vinegar.
 - o Roghan-e-gandum (oil of Triticum sativum) [5, 15, 16, 32]
- When *madda-e-ratab* is involved, *mushil* therapy (purgative) should be given to eliminating the morbid matter.
 - O Decoction of *Matbookh afteemun* and *Ayarij* feeqra.

The following drug combinations can be used in the form of topical applications:

- o Aqlimia zahab, Hartal (Arsenic), pulverized in Gulnar (Punica granatum) and Gul-e-surkh (Rosa damascena), mixed with vinegar.
- Aspand (Peganum harmala), Kundush, and Turbud (Operculina turpethum), are crushed and mixed with vinegar
- Pulverized Asafoetida root mixed with vinegar [16].

When *Khil-e-sauda* is involved in the pathogenesis of *Qooba*, then elimination of *Khilt-e-sauda* is the first step through *ishal* with the help of formulation *Matbookh-e-aftimoon* (*Cuscuta epithymum*) and *loghazia*, along with *aab-e-halela siyah* and *zabeeb*. *Fasad-e-basaleeq* (Vanesaction of basilica vein) is also indicated. Then a topical application of *ghassal Advia* is used:

• Wax, fats of duck, cocks, and oil in the form of *tila* [16].

In cases of *Qooba-e-haad*, topical application of *Roghan-e-alsi* (oil of *Linum usitatissimum*), *Roghan-e-gandum* (oil of *Triticum sativum*), *Roghan-e-badam talkh* (oil of *Prunus amygdalus*), *Roghan-e-narjeel* (oil of *Cocos nucifera*), *ghee* and butter are recommended.

In *Qooba-e-Radi*, the infected matter of *Qooba* is penetrated deep into the skin, then relatively more potent drugs are used such as *Ushaq* (*Dorema ammoniacum*) mixed with vinegar applied locally after leaching ^[34].

Following topical application of Unani formulations are mentioned in the Unani classical literature;

- Paste of Vinegar and ushaq (Dorema ammoniacum)/
 Tukhm-e-turb (seeds of radish) /rasot (Berberis
 aristata)/murmaki/asafoetida/hummas (Rumex
 vesicarius)/samagh arabi/zaravand mudahrij
 (Aristolochia rotunda)/ Roghan e badam talkh (Oil of
 Prunus amygdalus) [18, 35].
- Paste of Vinegar, roghan e gandum (oil of Triticum sativum), zaravand (Aristolochia rotunda), zarnikh (Arsenic), Ushaq (Dorema ammoniacum), muqil (Commiphora mukul), khardal (Brassica nigra) and zaj [36]
- Paste of Vinegar, cinnamon, and honey (Apis mellifera)
- Paste of Honey (Apis mellifera)/garlic (Allium sativum)/suddab (Ruta graveolans)/water/chukandar.³⁵
- Paste of Ushq (Dorema ammoniacum), Nakchakni (Centipede minima), and Barg-e-hina (Lawsonia inermis) [18].
- Paste of *Ushq* (*Dorema ammoniacum*), *Arq-e-lemun* (lemon juice), and vinegar ^[33].
- Arq-e-lemun (Lemon juice) and Roghan-e-gul [32, 35].
- Paste of Sulphur, kundur, zaj, sibr, and samagh arbi [20].
- Paste of Sulphur, *kaat safed*, sugar, and opium ^[35].

- Paste of Curd, *saboos-e-gandum*, and olive oil [35].
- Paste of *Tukhm-e-panwar* (*Cleome icosandra*) and mercury ^[6].
- Paste of *Zaft-e-romi* and *mom zard* ^[35].

Following are the pharmacopeial formulations for topical application;

- Habb-e-Qooba, Zimad-e-daad, Habb-e-daad, Habb-e-Tila [35].
- *Marham-e-kharish jaded* ^[32].
- Marham-e-Zarareeh [18].
- *Marham-e-Oooba* [32].
- Marham-e-Daad [37].
- *Roghan-e-Oooba* [32].

In modern medicine, dermatophyte infections can be treated with topical as well as systemic antifungal agents. Topical agents are usually sufficient for localized skin infections. Systemic therapy is necessary for the following situations.

- Extensive/relapsing dermatophytic infections.
- Tinea unguium.
- Tinea capitis.

Treatment protocols recommend a shorter duration of therapy (sometimes just 1-2 weeks), but recent reports of poor response and rapid relapses (sometimes within a few days of stopping treatment) have practically warranted increased duration of treatment (Table 3)^{12, 25, 26,39}

Table 3: Dosages and duration of treatment of oral antifungals.

Type of Tinea	Antifungal	Dosage & Schedule
Tinea corporis/cruris	Griseofulvin (15-25 mg/kg)	500 mg-1gm/day for 4 weeks.
	Terbinafine (5 mg/Kg)	250 mg OD for 2-4 weeks.
	Fluconazole (3-8 mg/Kg)	150-300 mg/
	Itraconazole (3-5/Kg)	week for 2-4 weeks.
		100-200 mg/day for 2-4 weeks
Tinea pedis/ manuum	Griseofulvin	250 mg TDS for 4-8 weeks
	Terbinafine	250 mg OD for 2-6 weeks
	Fluconazole	150 mg/week for 2-6 weeks
	Itraconazole	200 mg/day for 2-4 weeks
Tinea barbae	Griseofulvin	250 mg TDS for 4-8 weeks
	Terbinafine	250 mg OD for 4-6 weeks
	Fluconazole	150 mg/ week for 4-6 weeks
	Itraconazole	200 mg/day for 4-6 weeks.
Tinea faciei	Griseofulvin	250 mg TDS for 4-6 weeks
		250 mg OD for 3-4 weeks
	Terbinafine	150 mg/week for 3-4 weeks
	Fluconazole	200 mg/day for 3-4 weeks
	Itraconazole	
Tinea unguium	Griseofulvin	1 g/day
		Finger nail:4-8
		Toenail: 9-12 months
	Terbinafine	250 mg/day
		Fingernail: 6 weeks
		Toenail: 12 weeks
	Fluconazole	150-300 mg once a week
		Fingernail: 3-6 months
		Toenail: 9-12 months
	Itraconazole	200 g/day for 12 weeks for toenail
		OR
		Pulse therapy 400 mg/day for 1 week/month
		Fingernails: monthly for 2-3 month
		Toenails: monthly for 3-4 months

Conclusion

In this paper, we reviewed the concept of Qooba (Dermatophytosis) in Unani and modern perspectives. However, the clinical demonstration of the disease is the same in both the literature, but its etiology is entirely different. In Unani classical literature, the etiology, classification, and management of Qooba are well documented. In modern medicine, there is a wide range of antifungal drugs available for the treatment dermatophytosis, but they have various adverse effects and relapse also occurs. While going through the Unani literature review, we came across various Unani formulations (both single and compound) mentioned for the treatment of Qooba, but still, there is a need for several clinical studies since the research area lies empty in terms of non-responsiveness, relapse, and recurrences of the disease. Apart from this most of the Unani formulations whose role is mentioned in the literature but their efficacy has not been proved yet and so they are not manufactured or not in use. So, there is a need for further review of the disease and clinical trials should be done to evaluate and validate the efficacy of Unani formulations as effective antifungal drugs.

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References

- 1. James WD, Elston DM, Berger TG. Andrews Diseases of the Skin, 12th ed., Elsevier; c2016. p. 285-90.
- 2. Khan MA. Akseer Azam. Vol-4. Kanpur: Maktba Nizami; 1289 (AH); 436-39.
- 3. Khan MA. Ramooze Azam. Vol-2. Delhi: Delhi printing press; 1335 AH: 374-76.
- Jamaluddin. Aqsaraee. Vol-1. Munshi Nawal Kishore; YNM: 478-79
- Jurjani I. Zakheera Khwarzam Shahi. (Urdu translation by Khan HH). New Delhi: Idara Kitabus Shifa. 2010;7:24-26.
- Jeelani G. Makhzan-e-Hikmat. Deoband: Faisal publication. 2009;2:1031-1032.
- 7. Arzani A. mizanut Tib. 4th edition. Hyderabad Dakan; c1952.
- Ledingham JGG, warrell DA. Concise Oxford Textbook of medicine. New York: Oxford University Press. 2000;117:119-121.
- Kasper, Fauci, Hauser *et al.*, Harrison's Principles of internal medicine. 19th edition. McGraw Hill Education. 2015;2:349-50.
- Shah Siddarth N. API Textbook of Medicine. 7th edition. Mumbai: The association of Physicians of India; c2003. p. 1304-1305.
- 11. Anonymous. The Macmillan Family encyclopedia. London: Macmillan Press Ltd. 1995;8:369.
- Burns T, Breathnach S, Cox N, Griffiths C. Rook's Textbook of Dermatology. Vol-2. 8th edition. Wiley-Blackwell.
- 13. Braun Falco O, Plewig G, Wolff HH, Winkelmann RK. Dermatology. 3rd revised edition. Springer-Verlag Berlin Heidelberg; c1984.
- Libero Ajello. Natural history of Dermatophytosis, and related fungi. Mycopathologica ET mycologia. 1974;53:93-110.
- 15. Razi AMBZ. Kitabul Fakhir Fit Tib (Urdu translation

- by Jafri SA, Siddiqui MY). Part 2, Aligarh; saba publishers. 1994;23:46-52.
- 16. Tabri AM Moalijat Buqratiya. Urdu translation by CCRUM. New Delhi; ministry of health and family welfare, Govt. of India; c1997. p. 211-213.
- 17. Majusi AIA. Kamilus Sana'a (Urdu translation) by Kanturi GH. New Delhi: Idara Kitabusshifa; 2010;2:252.
- 18. Qamri AMH. Ghina Muna. PNM; YNM: 392-97
- 19. Kabeeruddin H, Tarjuma-e-Kabir. (Urdu translation of Sharah-e-Asbab wa alamat). 1st edition. New Delhi: Ajaz Publication house. 2007;3:240-242.
- 20. Ibn-e-Sina AA, Al qanoon fit Tib. 1st edition. Beirut: Darul Kutub Al Ilmiyah. 1999;4:415-417.
- 21. Hubal I. Kitabul Mukhtarat fit tib (Urdu Translation by CCRUM) CCRUM, Deptt. of AYUSH, Ministry of Health and Family Welfare, Govt. of India, New Delhi; c2007. 4.
- 22. Chandpuri K, Mojazul Qanoon. Delhi: Sprinter south anarkali; c2000. p. 457.
- 23. Qurshi MH. Jame-ul-hikmat. Idara Kitabus shifa; c2011. p. 997-98.
- 24. Arora Textbook of microbiology, 2nd edition, New Delhi, CBS publishers, and distributors; c2003. p. 600.
- 25. Freedberg Irvin M *et al.*, Fitzpatrick's Dermatology in general medicine. 5th edition. McGraw Hill. 1999;2:2327, 2339, 2327-53.
- Behl PN. Practice of Dermatology, 10th edition. CBS Publishers and Distributors.
- White M Gary, Cox H Neil. Diseases of the skin-a color atlas and text. Mosby Publishers, India; c2000. p. 356-364.
- 28. Valia RG, Valia AR. Text Book and Atlas of Dermatology. 2nd edition. Bhalani Publishing House, Mumbai. 2001;1:215-18,222-232.
- Haldar B. Diagnosis and treatment of skin disorders. Skin Institute Publication, Calcutta. 1988. p. 76, 77, 81, 82, 85.
- 30. Richardson MD, Warnock DW. Fungal Infection: Diagnosis and Management. Blackwell Scientific Publications, London; c1993.
- 31. Hay RJ. Clinical manifestations and management of superficial fungal infection in the compromised patient, edited by D.W. Warnock and M.D. Richardson. John Wiley & Sons; c1992.
- 32. Anonymous. National Formulary of Unani medicine. Part-1. CCRUM, Govt. of India, Ministry of health and family welfare. Department of AYUSH.
- 33. Razi Ambz, Kitab-ul-Mansoori. (Urdu translation by CCRUM), New Delhi. Ministry of health and family welfare, Govt. of India; c1991. p. 205-206.
- Kirmani Sharah Asbab N. (Urdu translation by Kabiruddin M), 1st edition, New Delhi, Idara Kitab-ulshifa. 2009;3:240-242.
- 35. Jeelani G. Makhzan-ul-Ilaj. New Delhi, Idara Kitab-ulshifa; c2005. p. 714-717.
- 36. Arzani HA. Tib-e-Akbar. (Urdu translation by Hussain M), Faisal publications Jama Masjid Deoband. YNM, 720,721-24.
- 37. Tabri R. Firdaus-ul-Hikmat. Idara Kitab-ul-shifa, Darya Ganj, New Delhi; c2010.
- 38. Anonymous. Qarabadeen-e-Majidi. All India Unani Tibbi Conference, New Delhi, Aijaz publishing house; c1986. p. 160.
- 39. Gupta L Kumar. IADVL's Concise Textbook of Dermatology. 2nd edition. Jay pee Brothers Medical Publishers (P) Ltd., Daryaganj. New Delhi; c2019.