JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

CLINICAL EFFECT OF UNANI FORMULATION IN THE MANAGEMENT OF PSORIASIS: A CASE REPORT

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ABSTRACT

Psoriasis is a chronic inflammatory dermatosis with multiple etiological factors, it is characterised by erythematous, clearly defined patches or plaques that are coated in loose silvery scales. In unani literature, psoriasis is discussed under a variety of categories, including Da-us-Sadaf, Taqashshure Jild, and Qooba-e-mutaqashshira. It is brought on by the preponderance of *Khilt ghaleez* (abnormal humour) and is characterised by skin scaling. In order to treat *Taqashshure jild*, the Unani scholars have been using a variety of herb-mineral preparations orally as well as locally which are beneficial and as well as tolerated without any noticed side effect. There are many available possible treatment options for psoriasis but this case report is based on clinical evaluation of Unani formulations and phototherapy in the management of psoriasis. A 40-year-old female patient with psoriasis visited the OPD at Ajmal Khan Tibbiya College Hospital, AMU, Aligarh with complaints of erythema, itching and scaling. The Unani formulation both local and oral along with phototherapy was used for a period of three months. The results of the study showed that the medications used to treat psoriasis were successful in ameliorating the clinical presentation of disease condition. This formulation needs to be studied on a larger sample size with longer follow-up.

KEYWORDS: Psoriasis, Da-us-sadaf, Taqashshure jild,silvery scales, phototherapy.

1. Introduction

The word "psoriasis" is a derivative of the Greek word "psora," which signifies scales.[1] Chronic papulosquamous skin disease psoriasis is characterised by well-defined, erythematous, indurated plaques and papules that are covered in broad, loose, silvery scales. It is mostly associated with a history of remissions and relapses.[5] These come in a range of sizes, from pin point to large plaque. In addition to the skin, it can affect the joints and nails. About 2% to 4% of people around the world are afflicted by this disease.[2] Most frequently it occurs between the ages of 15 and 25. It is twice more common in males compared to the female population . About one-third of individuals with a positive family history of psoriasis and people of all races may be affected by the disease in all psoriasis sufferers.[3]A biochemical or cellular flaw exists inside the keratinocyte. As a result, before, factors such cyclic AMP, protein kinase C, polyamines, and Transforming Growth Factor (TGF) alpha were implicated as aberrant in psoriasis and were involved in epidermal function. Cyclosporine, a T-cell suppressor, was discovered to significantly improve psoriasis, which marked a big change. Many studies have been conducted on the function of lymphocyte subsets and cytokines in chemotaxis, homing, and the activation of inflammatory cells. Although some people consider psoriasis to be an autoimmune disorder, no real autoantigen has been firmly discovered yet.[4]

Psoriasis comes in three different forms: chronic plaque psoriasis, acute guttate psoriasis, and pustular psoriasis. Each variety is distinguished by the time it first manifests, the diagnostic it receives, and its morphology. Lesions are frequently bilaterally symmetrical, favouring extensor muscles, the scalp (from which it may run into the forehead and nape of the neck), and pressure points (knees and elbows). Face involvement is unusual and shows psoriasis that is resistant to treatment. Involvement of the intertrigenous area is seen in flexural psoriasis. Psoriasis is entirely diagnosed based on clinical examination, skin involvement, and its characteristics. To confirm the

clinical diagnosis of psoriasis, two bedside tests, such as the Grattage Test, Auspitz Sign, Candle Grease Sign, Holo or Wornoff Sign, or Koebner or Isomorphic Phenomenon, may be performed. [5]

Psoriasis is referred to as *Da us Sadaf* in Unani medicine. An Arabic phrase that consists of two words, *Daa*, which means disease, and Sadaf, which means pearl. It is referred to as Da-us Sadaf because of the scales that shed from the lesions.[2]

Based on its clinical features, such as erythematous plaques with overlying micaceous scale, it can be compared favorably to *Taqashshur al-Jild*, a condition described in Unani medicine in which there is skin scaling due to the predominance of *khilt e suda* (black bile). Based on *Nazariyya-i-Akhlat* (humoral theory), *Ibn-e-Zuhr* and *Ibn 'Abbas Majoosi* thoroughly explained the pathophysiology of Taqashshur al-Jild (psoriasis). They assert that an excessive build up of Sawda' Ghaliz (thick black bile), which impairs the skin's ability of nutrition and function, causes the skin to become lifeless and shed in the form of scales.[3]

Psoriasis can be made worse by factors like excessive alcohol consumption, drug use (ACE inhibitors, beta-blockers, antimalarials, indomethacin, systemic interferon), trauma from either thermal or chemical causes, obesity, smoking, and exposure to sunlight.For the accurate diagnosis of psoriasis, no test is currently available. To distinguish it from a fungal infection and cancer, skin scraping and biopsy are procedures that are occasionally used.[6]

2.MATERIALS AND METHODS

2.1 Case Report

In January, 2022: A 40 years-old female patient visited our OPD of Amraze jild wa Tazeeniyat (Unani Dermatology & Cosmetology), Ajmal Khan Tibbiya College Hospital, AMU,Aligarh with the complaints of erythematous patches with loose, silvery scales & flaking on lower extrimities with itching & pain.

According to the patient she developed the lesions six months back. Past H/o treatment shows symptomatic treatment from some outside local practitioners. She had mild symptoms two year back which was relieved spontaneously. No H/O DM, TB, HTN, bronchial asthma or any other chronic disease was present. She denied any exposure to any kind of chemical, fumes. Her Family history with similar ailments was negative. On examination patient was distressed & anxious.On examination: morphology of lesion-Well defined erythematous, indurated plaques surmounted by large, loose, flaky silvery scales which easily removable by grating.

Distribution was symmetrical & polycyclic in shape & worst in winters. Grattage & Auspitz test was positive. Dermoscopy of the lesions showed regularly distributed dotted vessels on reddish background with patchy distributed white scales. There were no associated symproms like Arthralgia. Nail & scalp was normal, Face was spared, Oral lesions were absent.The patient was diagnosed with Psoriasis on the basis of history and clinical examination.

Blood investigations like CBC LFT,KFT ,RA factor & ESR was done both before and after treatment which shows that all were in normal range.

Before starting the treatment, written consent was obtained from the patient. She was well-informed regarding the Unani medicine and also informed if the treatment will be effective, the case might be published in the journal without revealing the patient's identity. The photography of the lesions before the commencement of the treatment and after completion of treatment was done and then the photographs before and after treatment were compared to access the efficacy of the compound formulation.

2.2Intervention and Follow-up

The treatment was started on the principles of classical Unani regime.The patient was given Unani treatment both oral as well as topical, she was advised to take *Safoof* (powder) of Gule-e-Mundi (6grams), *Barg-e-Shahtra* (6grams) and *charaita talkh* (6grams) in the form of decoction.twice a day for 2 weeks (Table 1). Along with the decoction, the patient was also advised to take 4-5 drops of Roghan badam shireen (oil of Prunus amygdalus) mixed with 250 ml of milk orally at bedtime for the purpose of tarteeb-e-mizaj. She was advised to apply the paste of Soranil (a market product) mixed with *Roghan-e-naryal* (oil of Cocos nucifera Linn.) on the affected part, twice a day for 2 weeks (Table 2).The single drugs of decoction, namely *Gul-e-Mundi*, *Barg-e-Shahtra*, and *Charaita talkh* were bought from the Ilaj-e-kamil (outlet of Dawakhana Tibbiya College,A.M.U.,Aligarh).The topical formulation was purchased from the Unani pharmacy shop outside the Ajmal khan Tibbia Hospital named as Soranil ointment.

She has also advised the phototherapy (NB-UVB) of the affected area once a day for two weeks. Phototherapy was done in the department of Amraz-e-jild wa Tazeeniyat.Follow up was done at every 15th day with a good response of the treatment.After 15 days same treatment was given for next 15 days and then only Unani topical medicine and decoction was given for the next 2 month.

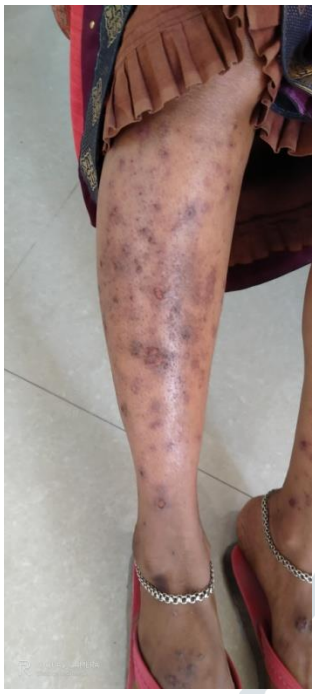
Table 1.

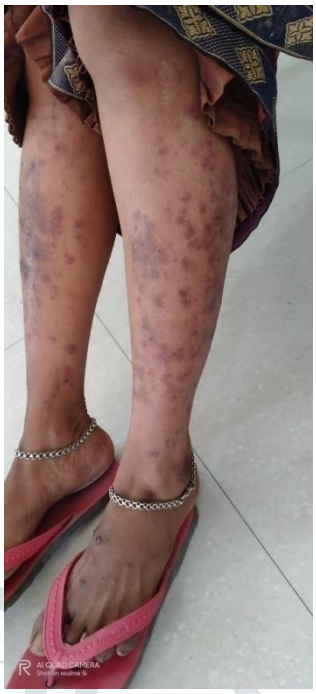
Drugs	**Scientific name**	Dose
Gul-e- Mundi	Spheranthus indicus	6gm
Barg-e- shahtra	Fumaria parviflora Linn.	6gm
Charaita Talkh	Swertia chirata Buch.	6gm

Table 2

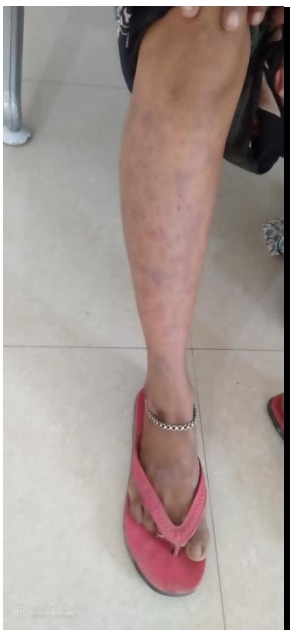
Drugs	**Scientific name**	**Dose**
Kafoor	Cinnamomum camphora Nees	10 gm
Kibreet	Sulphur	5gm
Murdar sang	Lead oxide	5gm
Tinkar	*Ore borax* /Sodium bicarborate	5gm
Ratanjot	Onosma echioides Linn.	5gm
Roghan narjeel	Cocos nucifera Linn	10 ml
Mom Zard	Cera alba	10 gm
Petroleum jelly	Petroleum jelly	10gm

Before treatment





After treatment



3.OBSERVATION AND RESULTS:

It was observed that after taking the above treatment for the period of three months, patient start getting relief after 30 days of treatment. All the laboratory test results were in normal limit at the base line and after 90 days of treatment with the Unani oral formulation and Unani topical formulation followed by NB-UVB therapy . Unani formulations used in this case study showed significant improvement in the signs and symptoms of psoriasis after 3 months of treatment.

4.DISCUSSION:

As we know Psoriasis (*Taqashshure Jild*) is a prevalent chronic recurring inflammatory disease with a global distribution that can be incapacitating due to both skin involvement and other co-morbidities. Although psoriasis care has come a long way in recent years, there is still no straightforward, safe, and efficient cure.

The results showing the efficacy of the Unani formulation in the present study may be attributed to both the topical as well as oral drug formulations.The oral drugs shahtra,charaita and mundi having action of *Musaffi-e-Dam* (blood purifier), *Mulayyin* (laxative), *Muhallil* (anti-inflammatory), *Muqawwi-e-Jigar* (liver tonic), *Dafi' Ta'ffun* (antiseptic), *Kasir-e-Riyah* (carminative), *jali* (detergent) collectively. *Roghan badam shireen* is used for *taskeen* and *tarteeb* (moisturizing) effect. The constituents of the Unani topical formulation collectively having *Qabiz* (astringent), *Mujaffif* (demulcent), *Jali* (detergent), *Muqqat-e-Mawad* (diversion of morbid material), *Mudammil-e-Qurooh* (wound healer), *Akkal* (corrosive), *Dafi'Ta'ffun* (antiseptic), *Muhallil-i-Awram* (anti-inflammatory) *musakkin* action.[7]

Mechanism of action of phototherapy in Psoriasis may be due to following mechanism- (1) Alteration of cytokine profile- Phototherapy has been demonstrated to improve clinical outcomes in psoriasis by upregulating the counter-regulatory Th2 pathway and downregulating the pro-inflammatory Th1/Th17 axis.(2).Induction of apoptosis- T lymphocytes in both dermal and epidermal psoriatic tissue are thought to undergo programmed cell death as a result of phototherapy. It is also believed that both lesional and non-lesional epidermis exhibits keratinocyte apoptosis.(3).Promotion of immune-suppression- Several studies have described UV-induced immune suppression of epidermal langerhans cells to better understand the therapeutic benefits of phototherapy.[8]

5.CONCLUSION:

On the basis of this single case study it is concluded that Oral and topical Unani formulation with NB-UVB therapy was effective in management of chronic plaque psoriasis. The drug was well tolerated and no adverse actions were observed during the study. Further Clinical trials on a larger sample size with longer follow-ups are required.

6.ACKNOWLEDGEMENT

Authors express their sincere thanks to teachers for their kind cooperation. Also thankful to the patient, staff of Amraze Jild wa Zohrawiya and colleagues and laboratory of Ajmal Khan Tibbiya hospital A.M.U Aligarh and others who are overlook here.

7.CONFLICT OF INTREST: Nill.

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