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A COMPLETE REVIEW OF *TAQASHSHUR-AL-JILD* (PSORIASIS) WITH SPECIAL REFERENCE TO UNANI MEDICINE.

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Abstract: Psoriasis is an auto-immune, chronic inflammatory papulo squamous skin disease characterized by well-circumscribed, sharply demarcated erythematous plaques which are covered with whitish silvery scales. It mainly occurs due to variations in the normal growth of epidermal layer of skin and differentiation. Psoriasis is a global disease. Prevalence varies among different nations from 0.1 percent to 11.8 percent. Psoriasis has been vividly described by Unani physicians not as a disease under separate heading but have described it along with other diseases that also share a close clinical resemblance with Psoriasis. One such disease as mentioned in classical Unani texts is *Baraṣ Aswad,* which is characterized by dryness of skin and the development of scales on the skin which shares lot of resemblance with scales of fish. Others have discussed Psoriasis under the heading of *Qūbā Mutaqashshira* which mainly causes *Khushūnat* (roughness) of skin, coupled with intense itching and peeling of large round scales resembling fish scales (*Faloos- i-Māhī).* Recently, Unani physicians gave it the terminology of *Taqashshur-al-Jild.* Diagnosis is done mainly on the basis of clinical signs and symptoms and assessment is also done on the basis of Psoriasis Area Severity Index (PASI) Scale and certain specific investigations.

Keywords **-** Psoriasis, *Baraṣ Aswad, Qūbā Mutaqashshira, Khushūnat, Taqashshur-al-Jild.*

INTRODUCTION:

Psoriasis is derived from Greek word *"Psora"* which means itching and "*iasis*" which means condition. The term "*Psora*" was first used by the eminent Greek physician Hippocrates (460-377 BC).[1] Psoriasis is a chronic, papulo squamous, inflammatory skin disorder mainly presents as well demarcated erythematous plaques with sharply defined borders. These plaques are covered with whitish silvery scales.[2] It is a chronic, non-contagious, disabling disease that severely impairs the quality of life of patients. Psoriasis can affect any age group.[3] Plaque Psoriasis is the most prevalent type of Psoriasis thus, affecting nearly around 90% of patients. It can be characterized as an inflammatory proliferative disorder of the skin, with significant genetic and environmental influences[4,5].

Psoriasis is not mentioned as a separate disease entity in Unani Medicine, but almost all Classical Unani literature has defined various diseases that have scales and associated itching. One such prevalent skin disease is *Baraṣ Aswad*, which is characterized by dryness of skin and the development of scales on the skin which shares lot of resemblance with scales of fish. Eminent and world-

famous Unani physicians such as *Ibn Sīnā* [6], *Nafīs ibn 'Iwaḍ Al-Kirmānī*[7], *Ibn Hubal Baghdādī*[8], *Jamāluddīn Aqsarā'ī*[9] and *Zakariyyā Rāzī*[10,11,12] characterized the condition known as *Baraṣ Aswad*, which is very similar to Plaque Psoriasis.

ETIOLOGY:

According to Unani physicians, *Baraṣ Aswad* is caused by an imbalance in the quantity and quality of body humors, particularly *Sawdā* (black bile), along with *Mādda Raḍḍiyya* (morbid matter), as well as skin sensitivity.[6,10,13] The disease is also linked to *Asbāb Baironi* (external factors), and *Asbāb Andruni* (internal factors), which have an impact on the disease's progression. *Ibn Zuhr* claims that the excessive accumulation of abnormal *Sawdā'* in the skin impairs nutrition causes skin malfunction, and renders the skin incapable of excreting abnormal *Sawdāwī Khilṭ.* Skin tissues subsequently decompose into dead scales and fall off.[13] In his book *Kāmil al-Ṣanā'a al-Ṭibbiyya*, *'Alī ibn 'Abbās Majūsī,* (Haly Abbas) discussed how the body's *Ṭabī'iyyat* (Physis) expels viscous humour (*Khilṭe Ghlaeez*) from the internal organs towards the skin when *Balgham Mirāri* (bilious phlegm) and blood mix. This humour then accumulates within the skin, causing scaling and also results into chronic, severe itching. This abnormal condition can occasionally arise from *Ḍu'f jild* (skin weakness) when the *Ṭabī'iyyat* (Physis) tries to expel the wastes that are *Akhlāṭe Ghalliẓa* towards the skin. Due to *Ḍu'f Dāfi'-i-yah* (weakness of the expulsive power), it is unable to expel them and resolve those waste humours. So, the waste humours build up here and make the skin dry, scaly and itchy.[14,15]

EPIDEMIOLOGY:

The prevalence varies from region to region but it is roughly 2% worldwide. According to World Health Organization (WHO), Psoriasis Prevalence among different countries ranges from 0.09%to 11.43%.[3] Thus, suggesting Psoriasis is a world-wide health problem with nearly 100 million persons affected all over the world[3]. Prevalence of Psoriasis in India, varies from 0.44% to 2.8%. Prevalence of Psoriasis in Kashmir valley has been reported to be around 2.4%. Psoriasis is twice more common among males than females. Majority of patients usually present in their 3rd or 4th decade of life[16].

PATHOGENESIS:

Ibn Zuhr claims that the excessive accumulation of abnormal *Sawdā'* in the skin impairs nutrition causes skin malfunction, and renders the skin incapable of excreting abnormal *Sawdāwī Khilṭ.* Skin tissues subsequently decompose into dead scales and fall off.[13]

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CLASSIFICATION:

CHRONIC PLAQUE PSORIASIS:

A chronic, inflammatory skin disease called Psoriasis Vulgaris is characterized by erythematous plaques with distinct borders and whitish scales.[2] Almost 90% of all cases of Psoriasis are caused by this type, making it the most prevalent type. Extensor surfaces are frequently affected by erythematous, scaly patches or plaques. This manifestation is by far the most common.

Other Types of Psoriasis include**:** **Guttate Psoriasis**, [2,4,17,18] **Flexural Psoriasis**[19]**, Rupiod, Elephantine and Ostraceous Psoriasis**[4]**, Erythrodermic Psoriasis**[20]**, Pustular Psoriasis**[21]**, Scalp Psoriasis**[2,4]**, Nail Psoriasis**[2,4,22]**, Palmo Plantar Psoriasis**[2,4]**.**

SYMPTOMS:

Psoriasis comes in a variety of clinical forms, but it most frequently manifests as persistent, symmetric, erythematous, well-defined, dry red scaly papules and plaques. The scales are many, loose, dry and silvery and they can be white or micaceous.[4]

SIGNS:

KOEBNER'S PHENOMENON / ISOMORPHIC RESPONSE:

The Koebner's phenomenon is the development of new Psoriatic lesions in the stable skin regions in Psoriatic patients after an injury. It is an all or none phenomena that happens more frequently while the disease is in remission i.e., if Psoriasis occurs in one site of injury it will occur at all sites of injury.[5] The first to describe it was Heinrich Koebner in 1878. Koebner's phenomenon is brought on by skin injuries that affect both the Epidermis and Dermis.

MEMBRANE OF BERKLEY:

When all of the scales have been removed, the stratum mucosum (basement membrane) is visible as a crimson, moist surface with red dots that represent dilated capillaries.[23]

AUSPITZ SIGN:

Many bleeding sites result from the ripping of the capillaries at the tips of the protruding papillae and from continued scratching. [19]

WORNOFF'S RING: The cause of a surrounding area of hypopigmentation is usually not known, but experimental studies suggest that prostaglandin E2 deficiency is the cause. This condition is uncommon and is typically related to treatment, most frequently with topical corticosteroids or UV radiation.[24]

SIGNE DE LA TACHE DE BOUGIE/ CANDLE GREASE SIGN:

Even from non-scaling lesions, candle grease can be seen when a Psoriatic lesion is scratched with the tip of a dissecting forcep.[2,4,19]

GRATTAGE TEST: When scales are removed from Psoriatic lesions, there is pinpoint bleeding, which is a well-known dermatological sign named after Heinrich Auspitz. The Grattage test is the method used to elicit the Auspitz sign.[25]

According to the Unani Concept and classification of disease, *Baraṣ e Aswad* is a *Maraḍ-i-Murakkab* (compound disease) that develops due to impairment of *Khilṭe Sawdā'* (black bile) and also due to weakened *Quwwat-i- Dāfi'-i-yah* of the skin. This eventually results in *Waram* (inflammation*), Yubūsat wa Khushūnat* (dryness) and *Taqashshur* (Scaling) of the skin.[11,26]

RISK FACTORS: [27,28,29,30,31,32,33]

Genetic Factors.
Environmental Factors.
Stress.
Cold Weather.
Trauma to skin.
Infections eg; Beta Haemolytic streptococci.
Obesity.
Smoking.
Alcohol.
HIV.
Diet rich in calories.

COMPLICATIONS: Patients with Psoriasis are more vulnerable to develop cardiovascular disease, insulin resistance and diabetes mellitus because of the high levels of pro-inflammatory cytokines, such as tumour necrosis factor and other inflammatory reactions, oxidative stress, endothelial dysfunction. These patients are also prone to develop Systemic Arterial Hypertension and Vascular disease since there is a significant correlation between high blood pressure and the degree of Psoriasis. Other complications associated with Psoriasis include Ocular manifestations, Inflammatory Bowel Disease (IBD), Non-Alcoholic Steato Hepatitis (NASH), Osteoporosis, Lymphoma, Obesity and Psychological Comorbidities.[34,35,36,37,38,39,40,41]

DIFFERENTIAL DIAGNOSIS OF PSORIASIS:

Atopic dermatitis, nummular dermatitis, lichen simplex chronicus, pityriasis rosea, pityriasis rubra pillaris, and Tinea are among the common disorders for Plaque Psoriasis. Other diseases that come under the differential diagnosis of Psoriasis include Nummular Eczema, Seborrheic Dermatitis, Pityriasis Rosea, Secondary Syphilis Cutaneous T cell Lymphoma, Tinea Ungum**,** Discoid Lupus Erythematosus (DLE), Leprosy or Hansens Disease**,** Acute Generalised Exanthematous Pustulosis (AGEP). [5,19,42,43,44]

DIAGNOSIS: Clinical factors may be used to diagnose Psoriasis; seldom is a skin biopsy required.[19,45,46]

Beta haemolytic streptococci detection in Guttate Psoriasis requires throat swabbing.[46]

If the condition is asymmetrical, take skin scrapings or nail clippings for fungal culture.[46]

Rheumatoid factor testing and radiography are helpful in assessing arthritis[46]

If the patient is obese and at risk for metabolic syndrome, check their fasting blood sugar, cholesterol and Triglycerides[46]

Total Haemogram, liver function and renal function screening are used until systemic treatment respectively[46]

Pro Collagen peptide 3 (earlier than methotrexate)[46]

Fasting triglycerides and cholesterol (Previous to oral retinoids).[19]

Some Scales used for Assessing the Severity of Psoriasis:

A popular scale for determining the degree of Psoriasis is the Psoriasis Area and Severity Index (PASI). The PASI assigns a single score between 0 and 72 based on the evaluation of both the afflicted region and the severity of lesions. The head, arms, trunk and legs are the four components of the body that are scored independently. The estimated percentage of the affected skin area is converted into a grade, ranging from 0 to 6. The anticipated severity within each area is converted into a grade ranging from 0 to 6. Three clinical symptoms are used to determine the severity within each area: Erythema (Redness), Induration (Thickness) and Desquamation (Scaling). On a scale of 0 to 4, severity parameters range from none to maximum. Then, for each skin segment, the sum of the three severity criteria is determined, multiplied by the area score for that section, and finally multiplied by the weight of that particular section (0.1 for Head, 0.2 for Arms, 0.3 for Body and 0.4 for Legs).[47]

TREATMENT:[4,5,47,48,49]

Treatment of Psoriasis mostly consists of topical pharmacotherapy (topical corticosteroids, Dithranol, Vitamin D analogues, Calcineurin, Salicylic Acid, Coal tar, and Biologic therapies (Emollients) methods. And far as systemic therapy is concerned treatment options that are available include Folic Acid Antagonists (Methotrexate), Calcineurin Inhibitors, Retinoid like Acitretin and Phototherapy including Psoralen and Ultraviolet Light (PUVA), Ultraviolet B Light, and also Biologic Agents. All of the aforementioned drugs work well, but they also have various side effects including hypopigmentation, thinning of skin, burning, itching, and skin irritation.

Management of Psoriasis in Unani Medicine:[6,7,8,9,10,11,12]

*Uṣūl-i-'Ilāj (*Principles of Treatment):

Nuḍj-wa Tanqiya'-i- Akhlāṭ Ghair Ṭabī'a (Concoction and expulsion of abnormal humors).

Taḥlīl-i-Awrām (resolution).

Taṣfiya al-Dam (blood purification.

Indimāl-i-Zakhm (Cicatrization).

Taskhīn Jild (Demulcefication).

Tarṭīb-i-'Umūmī-wa- Maqāmī (general and local moisturization) and the use of *Jālī* (Detergent) drugs.

'Ilāj-e-Taqashshur-al-Jild:

Izalae-e-Sabab: Treat and remove the underlying cause.

Tanqiya'-i- Mādda: It is recommended to administer a decoction of the herbs *Halayla Zard Musaffa, Kishmish Munaqqa, Maghze Faloos Khayar Shambar, Ma'jūn Najah, Iṭrīfal Shahtara* and *Tiryāq Farooque* (1.75 gms) along with *Sharbat Aslussoos* (35 gms).[13,14,50]

Muṣaffī-i-Dam: *Shahtara, Haldi, Post-i-Neem, Babchi, Mundi, Charaita, Ushba, Chobchini, Gulle Surkh, Sandal Safed, Surkh* .[51]

Compond Drugs: *Ma'jūn-i-Ushba, Khamīra-i-Sandal, Sharbat-i-Unnab, Sharbat-i-Murakkab.* '*Araq-i-Shahtara,* '*Araq-i-Ushba, Sharbat-i-Banafsha, Sharbat-i-Nilofar,* and *Ḥabb-i-Musaffi Khoon.*[8,10,11,13,14,15]

(Adwiya Murakkab Maqāmī) Topical Therapy: *Ṭilā'* of *Roghane Gul, Sirka* and *Murdār Sung*.

Local application of *Ṭilā' c*omposed of *Haldi, Hinna, Murdār Sung, Zaravand, Post Anar*, *Sirka, Sharāb* and *Roghane Gull*.

Marham Da-al-Sadaf, Marham Gulabi, Marham Basliqoon, Marham Ahmar, and paste of *Tukhme Jarjeer, Tukhme Mooli*, and *Kundur* with *Sirka* may be applied locally on the affected parts of the body.

Roghane Gundum, Roghane Banafsha, Roghane Nilofer, Roghane Chalmogra, Roghane Kameela, Roghane Badam, Roghane Khardal, Roghane Hindi and *Mom Safaid* are also beneficial in *Taqashshur al Jild.*[6,12,52,53]

CONCLUSION: Psoriasis is an auto-immune, chronic inflammatory skin disease characterized by well-circumscribed, sharply demarcated redcolored papules which are covered with whitish silvery scales. It mainly occurs due to variations in the normal growth of epidermal layer of skin and differentiation. Basic causative factor responsible for Psoriasis is still not well understood. It was primarily considered to be a disease of keratinocytes in the past. But very recently, auto-immune nature of disease has been discovered. Psoriasis can affect any age group but most commonly occurs in the age group of 50-69 years. Typically, age of onset shows a bimodal distribution at around 20-30 years of age and again around 50-60 years of age. Psoriasis is a global disease. Prevalence varies among different nations from 0.1 percent to 11.8 percent. Since majority of instances occur in adulthood, which can adversely affect social and occupational functioning of the patients. As a result of this disease, quality of life of patients gets affected to a great extent. Thus, Psoriasis is a major global health problem. Despite of several treatment modalities available, but explicit type of treatment option is still a challenge. Thus, various alternative treatment options available in Unani system of Medicine can help in this regard.

CONFLICT OF INTEREST: None.

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