



**ORIGINAL RESEARCH PAPER**

**Unani Medicine**

**CLINICAL EFFICACY OF WET CUPPING IN THE MANAGEMENT OF PSORIASIS**

**KEY WORDS:** PASI scoring, Psoriasis, Unani (Greek) Medicine, Unani principles

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**ABSTRACT**

Psoriasis is a chronic inflammatory disease of skin which affects about 1-3% of world population. The names psoriasis seemingly emerged from the greek word 'psora' meaning 'itch'. The aetiology of psoriasis is unknown. The theory of nervous origin has been given the best substantiation. According to this theory psoriasis is caused by the disturbances in the function of nervous system. In the present study, we used the Regimental therapy (Wet cupping) as Unani treatment for the management of Psoriasis disease. The selection was made based on the various sign and symptoms indicative of this disease. A total of 60 patients were selected for the present study .The duration of the study was 2 months and follow-up was done for fortnight. All the patients responded well to this therapy with their entire satisfaction by achieving almost 90-100% cure clinically.

**INTRODUCTION**

Psoriasis is a prolonged inflammation of the skin. The cause of psoriasis is still unclear. This condition is neither infectious nor it affect the general health. It is a papulosquamous disorder occurs due to altered kinetics affects 2 to 3 % of the total population. Psoriasis often appears between the ages of 15 to 25, but can develop at any age [1]. Among children it is more prevalent in girls while in adults males are afflicted more [2]. It is a chronic non infectious, recurrent inflammatory disease of skin characterized by well defined erythematous sharply demarcated papules and rounded plaques covered by silvery micaceous scales variably pruritic and typical extensor distribution. Psoriatic lesions are usually presents for months but onset may be sudden.[3] The basic pathophysiology behind the development of Psoriasis is T-cell activation, which migrated from lymph nodes and systemic circulation to skin and causes release of cytokines, that trigger on cutaneous inflammation and hyperproliferation of the epidermis results in erythematous, raised plaques with overlying scale [4-6]

Various modes of treatments are available for the management of psoriasis like topical and systemic administration of steroids, phototherapy and combination of both. As psoriasis is a chronic disease which require prolong treatment, hence for its long term management efficacious medicine with least adverse affect is required. Although, above mentioned conventional therapies have good effect on psoriasis, but in long term they become insufficient due to poor efficacy, quick relapse of lesions and potential adverse effects of medicines like hepatotoxicity, nephrotoxicity, bone marrow suppression, hyperlipidaemia, adrenal insufficiency, Cushing's syndrome, etc [7,8]. As far as Unani system of medicine is concerned, psoriasis is not mentioned at all in any classical text, but various skin ailments having scale and itching are described in detail by most of the Unani physicians in their treatises. Among them *Taqashshure Jild* is one, characterised by dryness of skin and scale formation, which clinically resembles very much with the psoriasis [9-14]. Ibn Zohr and Majoosi clearly explained the pathogenesis of *Taqashshure Jild* on the basis of Humoral theory, according to them, excessive amount of *Khilte ghaleez* (Abnormal Sauda) gets accumulated in the skin and hamper its nutrition and function, due to which skin becomes dead and fallout in the form of scales [15,16,17]. As far as the treatment of *Taqashshure jild* is concerned, Unani physicians are successfully treating this ailment since ancient times by adopting

various modes of treatment like: Evacuation of *Khilte Ghaleez* (Abnormal Sauda): this may be done through *Fasd* (Venesection), *Irsale Alaq* (Leeching), *Munzijo-Mushil*, or *Hajama*. *Tarteebe Mizaj* and *Badan by Hammam*, *Ghiza* and Rest.

**MATERIAL AND METHODS**

**Plan of the Basal Study**

The patients fulfilling the diagnostic criteria were selected for the study and interviewed thoroughly along with their family members and/or relative to obtain detailed information about the patient as well as the disease and collected in different data viz-

1. Demographic profile
2. Clinical profile

**Duration of treatment**

The total duration of treatment was fixed for 2 month with the regular fortnight follow-ups.

**Criteria for diagnosis of Psoriasis**

1. Sharply defined erythemo-squamous lesions varying in size.
2. Presence of erythema, scaling and induration in the lesions.
3. Surface consists of non-coherent scales.
4. Positive Auspitz sign – (Bleeding occurs after scratching of scales).
5. Positive onion peeling sign/candle grease sign (after scratching the scales fall like peels of onion).

**Inclusion Criteria**

1. The patients were clinically diagnosed according to Ayurvedic signs and symptoms.
2. Age-20 to 60 yrs.
3. Sex- Either
4. Marital status- Either
5. Socioeconomic status- All classes.

**Exclusion criteria**

1. Patients having age less than 12 yrs. and more than 60 yrs.
2. Patients having inconclusive diagnosis.
3. Patients of psoriatic arthropathy and psoriatic erythroderma.

Patients having cardiac disease, renal disease and endocrine disorders were excluded in the study to avoid overlapping of

symptomatology.

**Al-hijamah (Cupping therapy):**

Cupping therapy is an effective method for extraction of harmful substances from the body. In this process specially designed cups are applied over a particular area and the negative pressure is build in. This facilitates the correction of the *mehjoom* (involved organ).[10] Depending upon the scarifications, it is of two types; *Hijama bila shurt* (dry cupping) and *Hijamah mae shurt* (wet cupping).

**Hijamah mae shurt:** It is a minor surgical eliminatory procedure where negative pressure (suction force) is applied to the skin surface using cups. Scarifications of the skin uplifting opens skin barrier for the evacuation of fluids admixed with pathogenesis causing substances. Wet cupping therapy is considered as a mode of treatment where humoral imbalance is involved.[11] For psoriasis multiple incisions (25to30) are applied over the upper and lower back area and the blood is sucked through application of cups.

**Procedure of Trial**

Prior to the procedure, the following investigations were done to rule out the exclusion criteria. Full patient history, Random blood sugar (RBS), hemogram (Hb%),BT, CT , A standard cupping therapy equipment was procured and utilized including a hand suction pump and plastic cups set. The patient was pose to lie down. The calf muscle area was washed using 10% povidone iodine solution and cupping area was marked. Then the cups (two cup over each calf muscle) were applied to produce hyperemia. After 5 to 10 minutes the cups were take away and 25 to 30 deep scarifications were given over the hyperemic skin. With manual pumping the cups were applied again with maximum negative pressure. The cups were retained for over 5 to 8 minutes. Thereafter, the pressure was released and the blood was collected in the measuring glass beaker to record the amount of blood extracted. The schedule of therapy was two month .Four sitting of *hijama mae shurt* were planned in two month (fortnight). Her vitals were recorded and under all aseptic precautions wet cupping therapy was performed.

**Scoring (PASI Score)**

The four main anatomical sites are assessed. The head (h), upper extremities (u), trunk (t) and lower extremities (l) roughly corresponding to 10, 20, 30 and 40% of body surface area (BSA), respectively. The PASI Score is calculated as follows<sup>6</sup> –

$$PASI = 0.1 (E_h + S_h + I_h) A_h + 0.2 (E_u + S_u + I_u) A_u + 0.3 (E_t + S_t + I_t) A_t + 0.4 (E_l + S_l + I_l) A_l$$

Where E = Erythema, S=Scaling, I=Induration and A=Area E, S and I are assessed according to a '4' point scale where

0=No symptoms 1=Slight 2=Moderate 3=Marked 4=Very marked

**Scoring criteria for other symptoms**

- Score 0 -No symptom
- Score 1 -Mild
- Score 2 -Moderate
- Score 3 -Severe

**Parameters of Assessment**

1. Estimation of Psoriasis area severity index (PASI Score).
2. Patients report as his own observations.
3. General assessment of the doctor (researcher).
4. Photographs taken at regular intervals.
5. Side/ toxic effects of the drug, if any

**OBSERVATION AND RESULT**

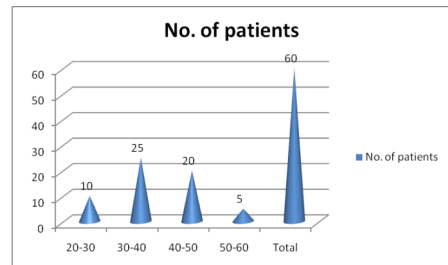
A cross-sectional study was conducted on 60 eligible patients to assess effect of wet cupping in psoriasis. The observations and results are as under:

**Table :1 Distribution of participant on the basis of age**

| Age group(in years) | No. of patients |
|---------------------|-----------------|
| 20-30               | 10              |
| 30-40               | 25              |
| 40-50               | 20              |
| 50-60               | 05              |
| Total               | 60              |

Inference : Majority of the patients were lie in the age group of 30-40years.

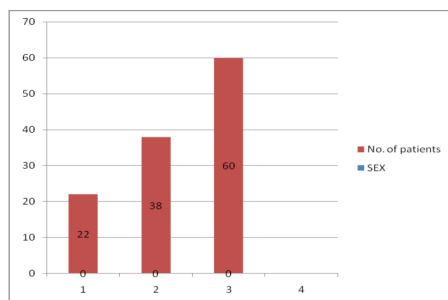
**Graph:1 Distribution of participant on the basis of age**



**Distribution of participant on the basis of sex**

| SEX    | No. of patients |
|--------|-----------------|
| MALE   | 22              |
| FEMALE | 38              |
| Total  | 60              |

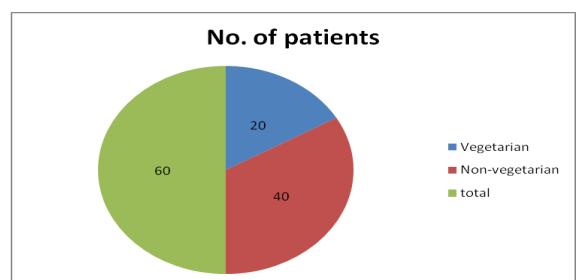
**Distribution of participant on the basis of sex**



**Distribution of participant on the basis of dietary habit**

| dietary habit  | No. of patients |
|----------------|-----------------|
| Vegetarian     | 20              |
| Non-vegetarian | 40              |
| total          | 60              |

**Distribution of participant on the basis of dietary habit**



**Table 2: Distribution of participants according to SES**

| SES          | No. of patients |
|--------------|-----------------|
| lower class  | 15              |
| Middle class | 30              |
| Higher class | 15              |
| Total        | 60              |

Inference: Majority of the participants were from middle class.

Graph:2 Distribution of participants according to SES

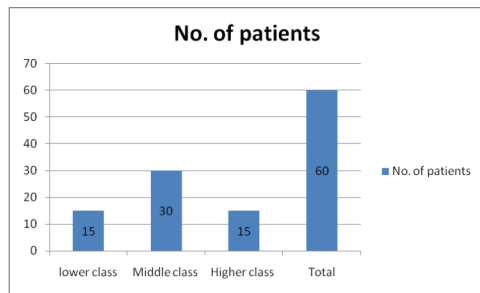


Table 3: Distribution of patients according to their education status

| Education status | No. of patients |
|------------------|-----------------|
| Illiterate       | 18              |
| Primary          | 7               |
| Graduation       | 12              |
| Post graduation  | 23              |
| Total            | 60              |

Inference: Majority of the participants were from Postgraduate

Graph 3: Distribution of patients according to their education status

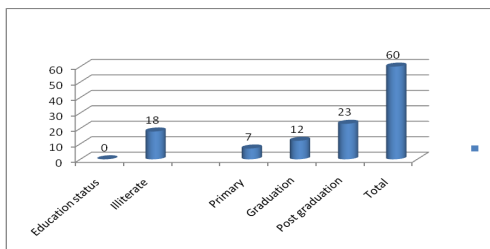


Table 4:- Distribution of patients according to their Mizaj

| Mizaj    | No. of patients |
|----------|-----------------|
| Damavi   | 22              |
| Balghami | 18              |
| Safravi  | 15              |
| Saudavi  | 05              |
| Total    | 60              |

Graph 4:- Distribution of patients according to their Mizaj

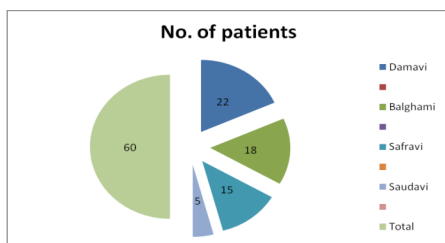


Table :5 Effect of wet cupping therapy in patients of Psoriasis

| Symptoms           | Mean ± SD   |             | Pairedt-test BT-AT             |
|--------------------|-------------|-------------|--------------------------------|
|                    | BT          | AT          |                                |
| Erythema           | 2.19 ±0.29  | 1.02 ±0.72  | 1.46±0.26<br>t=10.99 p<0.001   |
| Induration Scaling | 6.17 ± 0.42 | 0.51 ± 0.84 | 2.37 ± 0.40 t=14.45<br>p<0.001 |
| Scaling            | 2.31 ± 0.20 | 1.13 ± 0.50 | 2.65 ± 0.19<br>t=11.40 p<0.001 |
| Burning Sensation  | 1.01 ±1.02  | 0.10 ±0.20  | 0.74±1.11 t=4.12<br>p<0.001    |
| Itching            | 1.83 ±1.20  | 0.43 ±0.63  | 1.42±1.13<br>t=9.11 p<0.001    |

|                   |             |              |                                |
|-------------------|-------------|--------------|--------------------------------|
| Dryness of lesion | 6.06 ± 0.35 | 0.246 ± 0.40 | 1.40 ± 0.40<br>t=11.62 p<0.001 |
| PASI Score        | 20.30 ±5.78 | 10.00 ±4.19  | 3.49±1.66<br>t=13.11 p<0.001   |

Discussion:-

Psoriasis is a chronic inflammatory disease of skin which affect about 3% of world population. Till the date no permanent cure is available for psoriasis, but it could be manage with the help of topical and oral medicines. In conventional system of medicine topical and oral steroids with or without phototherapy are commonly prescribed for the management of psoriasis. But long term use of these medicines may invite several unwanted adverse side effects like hypertension, hypercholesterolemia, etc. So there is a dire need to develop new formulation which can provide long term relief without major side effects. As far as Unani system of medicine is concerned Psoriasis is described under the heading of Taqashshure Jild caused by deposition of Khilte ghaleez (Abnormal Sauda) in skin, and treated by various modes of treatments.

Clinical evaluation was done by observing the regression of subjective and objective parameters and using the Psoriasis Area and Severity Index (PASI) Scale. Demographic data are not of much value since it was a short duration study carried out on a small sample size. However, it was observed that out of 60 patients included in the trial, the highest incidence was found in the age group of 31–40 years while the least incidence (10%) was seen in the age group of 51-60 years. Besides, 22 patients were male and 38 patients were female. As far as dietary habits are concerned, 40 patients were non vegetarians and 20 were vegetarians. Majority of the participants were from middle class. Here in our present study and observe an impressive result as PASI score at the end of study reduced to 4.3 from 50.7,

The Mean±S.D of PASI score before treatment was 20.30±5.78 and after treatment 10.00±4.19 with p<0.001 which is highly significant. It indicates that wet cupping therapy has great role in psoriasis

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