



## CLINICAL EFFICACY OF WET CUPPING IN PATIENTS OF VITILIGO

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### ABSTRACT

*Bars* (vitiligo) is an acquired, progressive, widespread pigmentary disorder of the skin and hair branded by well white macules, devoid of identifiable melanocytes. *Bars* (vitiligo) a dermatological, cosmetic, social and not always a genetic problem is affecting 0.5-1% of the world population. A preliminary clinical study was conducted in the RRIUM, Srinagar to assess the safety and efficacy of a *hijama mae shurt* (wet cupping) in the management of *Bars* (vitiligo) on scientific parameters. 30 patients, diagnosed with vitiligo, were included in the study after obtaining their informed consents. All the patients were clinically assessed and diagnosed on the basis of thorough history and dermatological examination. Then, *hijama mae shurt* (Wet cupping) were planned in each month (weekly once) period of 30 days. The response to treatment is observed in terms of reduction in area of depigmentation after treatment. Most important factor noted is trigger or sudden upsurge of re-pigmentation after the treatment. Good result is noted in 40% cases, moderate in 26.6% cases and mild in just 33.3% cases noted. The result is statistically highly significant at 1% level. No major side effects of the treatment given are observed. Further, *hijama mae shurt* (Wet cupping) was found safe and fairly well accepted by the patients. It was therefore, *hijama mae shurt* (Wet cupping) concluded that can be used safely and effectively for the treatment of *bars* (vitiligo).

**KEYWORDS:** *Bars*, Vitiligo, *hijama mae shurt*, USM.

### INTRODUCTION

Vitiligo, also known as leukoderma, is an acquired depigmentary disorder characterized by the appearance of white patches resulting from the loss of functional melanocytes and melanin from the skin.<sup>[1]</sup> Vitiligo is an acquired, idiopathic, and worldwide common depigmentation disorder with an estimated prevalence from 0.1 to 8%. These numbers are based on clinical population studies and field research examining inhabitants of geographically enclosed areas. The often cited prevalence of 8% could not be confirmed after excluding clinical patient populations. Accordingly, the worldwide prevalence of Vitiligo ranges between 0.5 and 2%.<sup>[2]</sup> Adults and children of both sexes are equally affected; the proportion of patients with a positive family history varies from one part of the world to another, with particularly wide ranges reported in India (25-18%), with reports of up to 40% elsewhere in the world.<sup>[3]</sup> Some dermatological outpatient records show the incidence of vitiligo to be 3% to 4% in India although an incidence as high as 8.8% has also been reported.<sup>[4]</sup> The exact aetiology of Vitiligo is unknown, but four main theories exist to explain it: the autoimmune hypothesis, the neural hypothesis, the self-destruct hypothesis, and the growth

factor defect hypothesis, but none satisfactory. It is believed that Vitiligo is a polygenic trait and that a convergence theory, combining elements of different theories across a spectrum of expression is the most accurate aetiology.<sup>[5]</sup> Vitiligo is not a physically damaging disease; other than an increased sensitivity to UV radiation most of the disease effects are social and psychological, especially for dark-skinned races. There are both surgical and nonsurgical treatments for Vitiligo but fails to give cosmetically acceptable pigmentation.<sup>[6]</sup>

In Unani system Vitiligo is known as *Bars* and has a variety of names such as *Safed Daagh*, *Safed Kodh*, *Phuleri* and *Savitra*. *Zakaria Razi* has stated that due to excessive accumulation of *Balghame ghaleez* (thick phlegm), the affected parts become phlegmatic and soft like that of molluscs. Further, the circulating blood is altered on reaching the affected part and becomes phlegmatic, and the area getting such blood cannot be nourished properly. Moreover, if *Bars* spreads over a large portion of the body or when it becomes highly chronic or when whitish fluid comes out on pricking the patches, it is not curable.<sup>[7]</sup>

Raban Tabri (810-895 A.D.), a legendary Unani Physician and author of his famous book *Firdausul Hikmat* says that the actual pathogenesis of Bahaq wa Bars is attributed to Fasade dam (blood impairment) and Buroodat dam (coldness of blood). If the blood impairment occurs due to Sauda, then Bahaq Aswad is produced and if the blood impairment is due to Balgham.<sup>[8]</sup> Ahmad bin Rabban Mohd Tabri (10th century A.D.), the author of *Moalijate Buqratiya*, is of the opinion that the causative matter of Bahaq neither penetrates deep into the skin nor whitens the hairs of the affected site. He described that Bars is of two types. In the first type of Bars, the ratoobate fasida (morbid fluids) affects completely the site of lesion and may reach deep up to the bones. This type of Bars is difficult to treat. In the second type of Bars, the lesion is superficial and its treatment is possible.<sup>[9]</sup>

## MATERIAL AND METHODS

The present study was an open, pre and post evaluation, non-randomized trial conducted at the RRIUM, Srinagar. A total of 45 patients of *Bars* (vitiligo) were registered, among which 15 patients did not fulfil inclusion criteria and were excluded from the study. The remaining 30 patients, who were eligible based on the inclusion criteria, were enrolled after obtaining their informed consents. The patients were clinically assessed and diagnosed on the basis of history and dermatological examination. All the findings were recorded on the case record proforma, designed for the study.

Patients of either gender in the age group of 20-60 years were enrolled in the trial. Patients below 20 years and above 60 years, patients with any systemic illness such as diabetes mellitus, HTN, and malignancy were excluded. Similarly, patients who had taken any local or systemic treatment for their disease in the past one month prior to the trial were also excluded.

Routine investigations like complete haemogram, urine and stool examination, Random blood sugar, Liver Function Test and Renal Function Test were done before treatment in order to exclude the other systemic ailments.

A standard cupping therapy equipment was procured and utilized including a hand suction pump and plastic cups set. The patient was posed to lie down. The upper and lower back area was washed using 10% povidone iodine solution and cupping area was marked. Then the cups (two cup over eachside of upper back and lower back) were applied to produce hyperemia. After 5 to 10 minutes the cups were taken 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 one month. Four sittings of *hijama mae shurt* were planned in each month (weekly

once). No additional medication was allowed. The primary outcome of this study was pre- and post treatment comparison of efficacy and safety of *hijama mae shurt* (Wet cupping) on bars (Vitiligo). The response to the treatment is observed in terms of normal pigmentation developed & reduction in area of depigmentation after treatment and expressed as percentage improvement in each patient. Most important factor noted is trigger or sudden upsurge of repigmentation. Photographs before & after treatment taken. Also side effects if any observed, noted & treated accordingly. Percentage relief is calculated according to following formula:

$$\text{Percentage relief} = \frac{A_o - A_L}{A_o} \times 100$$

Where,  $A_o$  = % of Vitiligo lesion before treatment.  $A_L$  = % of vitiligo lesion after 1 months of treatment.

The criteria for evaluation is decided as:-

| Trigger for Repigmentation   | Result   |
|--|----------|
| 0 %  | Nil      |
| 1- 33% (intermittent re-pigmentation)                                      | Mild     |
| 2- 34-67% (dense re-pigmentation with borders around lesions)              | Moderate |
| 3- 68-100 % (very dense re-pigmentation with borders & Normal skin colour) | Good     |

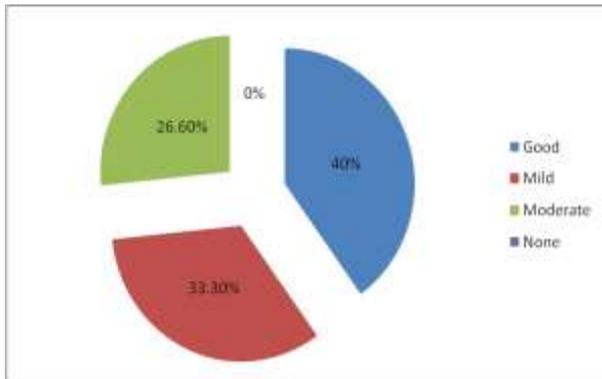
## RESULTS AND DISCUSSION

**Table No. 1: Baseline demographic and clinical profile of patients.**

| Parameter                    | No. of Patients |
|------------------------------|-----------------|
| <b>Age in Years</b>          |                 |
| 20-25                        | 3               |
| 26-30                        | 7               |
| 31-35                        | 5               |
| 36-40                        | 4               |
| 41-45                        | 5               |
| 46-50                        | 3               |
| 51-55                        | 2               |
| 56-60                        | 1               |
| Total                        | 30              |
| <b>Gender</b>                |                 |
| Male                         | 8               |
| Female                       | 22              |
| Total                        | 30              |
| <b>Family History</b>        |                 |
| Absent                       | 10              |
| Present                      | 20              |
| <b>Socio economic status</b> |                 |
| Upper class                  | 12              |
| Middle class                 | 8               |
| Lower class                  | 10              |
| <b>Site of lesion</b>        |                 |
| Face                         | 4               |
| Face and neck                | 10              |
| Eyelids                      | 6               |
| B/L Hands                    | 5               |
| Lower Limbs                  | 3               |
| Upper and lower back         | 2               |

**Table 2: Showing % of result after wet cupping therapy.**

| Result                               | No. of Patients | Percentage |
|--------------------------------------|-----------------|------------|
| No trigger for re-pigmentation       | 0               | 0          |
| Mild trigger for re-pigmentation     | 10              | 33.3       |
| Moderate trigger for re-pigmentation | 8               | 26.66      |
| Good trigger for re-pigmentation     | 12              | 40         |

**Graph 1: Showing % of result after wet cupping therapy.**

Wet Cupping therapy is based on the belief that diseases are caused when the positive energy flowing through the meridians or channels of the body faces congestion and blockages. Removing this congestion can induce the body to heal itself. Cupping therapy draws blood to the affected areas and thus energizes the skin tissues. This flow of blood brings oxygen and fresh nutrients while the lymphatic system that produces the necessary antibodies needed to cause healing are also stimulated. The blood flow further works to detoxify and remove the pathogens that cause the skin conditions. All these factors together result in the skin healing itself. When wet cupping is used, it is often noted that instead of blood, more of a white fluid is released that indicates the removal of toxins. Conventional forms of healing Vitiligo, eczema and psoriasis are often directed at alleviating the symptoms and discomfort like itching and burning sensations. But, cupping therapy might just work better because it induces healing on a subcutaneous level.<sup>[10]</sup> No obnoxious adverse effects were observed and the wet cupping therapy was found safe and fairly well accepted by the patients. In the light of above discussion, it may be concluded that wet cupping therapy is safe and statistically effective in the treatment of Vitiligo. Although the study showed remarkable response, its limitations include lack of blinding, lack of randomization, small population and no control group studied. Therefore, studies with randomized standard controlled designs on large sample with long duration and long follow-up period need to be carried out for further exploration of efficacy and safety of wet cupping therapy.

## CONCLUSION

*Hijamah* has been used for centuries to treat human diseases. It is considered that this traditional treatment (also known as wet cupping) has the potential to treat many kinds of diseases. Its role in this regard has been greatly emphasized by our prophet Muhammad (PHUH), not only verbally but practically as well. This study puts some light on the effectiveness of *Hijamah* to treat Vitiligo.

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