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# EFFICACY OF FIRE CUPPING (ḤIJĀMA NĀRIYYA) IN ALLEVIATING SYMPTOMS OF WAJA'AL-MAFĀṢIL-I-KATIF (FROZEN SHOULDER):

# **CASE REPORT**

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#### **ABSTRACT**

Background:- Frozen shoulder, also known as adhesive capsulitis, is the major cause of shoulder pain and disability in the general population. The prevalence is 2-5% in the general population and 10- 20% in diabetics. It typically affects females aged 40 to 60. In 12% of cases, both shoulders are affected, although the left shoulder is more frequently afflicted. Objectives:- In This case study our objective is to evaluate the efficacy of Fire Cupping (Hijāma Nāriyya) in Alleviating Symptoms of Waja'al-Mafāṣil-i-Katif(Frozen shoulder). Methods:- A 61-year-old diabetic male patient presented to the OPD of the Regional Research Institute of Unani Medicine, Srinagar. Over a 4-week period, the affected shoulder was treated with Ḥijāma Nāriyya (fire cupping) on specific spots three times per week, with weekly assessments. Result- This study found that regimental therapy Ḥijāma Nāriyya (fire cupping) effectively reduces pain, stiffness, and increases mobility in the shoulder joint, as well as enhancing range of motion in frozen shoulder. The patient's VAS scores was

decreased and also indicating a decrease in symptoms. *Conclusion*- The treatment was safe and bearable, and the patient's quality of life improved significantly. After treatment, there was a statistically significant decrease in VAS and Improvement in overall shoulder mobility.

**KEYWORDS:** Frozen Shoulder, Case Report, *ḤijāmaNāriyya*, fire Cupping, Adhesive Capsulitis, Unani Management.

#### INTRODUCTION

The periarthritis affecting the periarticular soft tissues of the shoulder, also known as adhesive capsulitis or frozen shoulder, is one of the most prevalent causes of shoulder discomfort and impairment in the general population.<sup>1,2</sup> Women and those between the ages of 40 and 60 are the groups most affected. It is more likely to impact the left shoulder. Twelve percent of people have been discovered to have problems with both shoulders. Rarely does the same shoulder recur. In the general population, frozen shoulder affects around 3% of people and peaks between the ages of 40 and 70,5 whereas 10 to 36% of those with diabetes mellitus also have it.<sup>6</sup> The shoulder capsule thickens and develops adhesions, which are taut, rigid bands of tissue, in cases of frozen shoulder. The shoulder joint's range of motion is often restricted by a decrease in synovial fluid in the joint.<sup>7</sup> It is common in clinical practice to diagnose frozen shoulder in any patient who has a painful, stiff shoulder. 8It is yet unknown what causes sticky capsulitis. However, the development of adhesive capsulitis is linked to a number of medical conditions, including autoimmune diseases, diabetes, age, thyroid disease, chest or breast surgery, impingement syndrome, pulmonary disease, myocardial infarction, and cerebrovascular accident, as well as prolonged immobilisation. 9-13 Although it can appear as early as six months or as late as ten years, adhesive capsulitis often appears between twelve and forty-two months. Frozen shoulder syndrome was divided into "primary" and "secondary" categories by Lundberg. 14Patients who come with no noteworthy symptoms in their history, clinical examination, or radiographic evaluation to account for their discomfort and lack of mobility are said to have primary adhesive capsulitis. Patients with secondary adhesive capsulitis, on the other hand, often report upper extremity injuries or surgery before shoulder symptoms appear. 15

#### Concept of *Hijāma* in the unani system of medicine

One of the regular therapies that works well for reducing pain and soreness is cupping therapy, also known as Hijāma. It is a tried-and-true method of treating carpal tunnel

syndrome, arthritis, fibromyalgia, and joint pain without resorting to intrusive procedures. According to the Unani medical system, the primary goals of *Ḥijāma* are diversion of matter (*Imala-e-mawad*, *Aleeluzwa se uzwa-e-shirki ki janib*) to the related organ, evacuation of matter (*Ikhraj-e mawad/Tanqiya Ghalba-e-khilt*) when the cause of pain may be accumulation of morbid matter, *Taskeen alam* (to relieve pain), *Tehleele auram* (to reduce inflammation), and *Tehleele riyah* and *Taskheene muqam* (local calorific).<sup>16</sup>

# MATERIAL AND METHODS

This study was conducted in 2024 at the *Regional Research Institute of Unani Medicine*, *Srinagar*, *University of Kashmir*. The study's results were published without divulging patient identities, as per their agreement. A *ḤijāmaNāriyya* kit with medium-sized glass fire cups was used to apply the cups to the afflicted region.

# **Case History**

A 61 year old Diabetic male patient presented with complaint of pain and stiffness in the left shoulder for the last 6 month. He had been treated by his family physician, who had prescribed him analgesic and anti-inflammatory medications with physiotherapy, and he continued to worsen on these treatments. He then came to the *Regional Research Institute of Unani Medicine, Srinagar, University of Kashmir,* with restricted movements in the left shoulder and acute pain in the posterior arm. He found it difficult to dress and comb his hair using his left hand, and the ache worsened by moving in arms and lying on the affected arm. History of the patient The pain started off slowly, a condition which is commonly referred to as insertion of the deltoid or deltoid muscle region and bicipital tendon. Movement of the shoulders had aggravated the pain especially when doing external rotation and direct pressure over the affected side during sleeping, and could be relieved by limiting extremity use. The patient complained of soreness in the proximal upper back and neck that may have been due to compensatory overuse of accessory muscles. He complained of inability to put on a coat, to reach into the hip pocket for a wallet, and to comb his hair as if having a frozen shoulder.

# **Examination**

#### Table.1:

Category	Findings				
Diagnosis	Primary adhesive capsulitis (Frozen shoulder), Phase Two				
Symptoms	Stiffness and limited mobility in left shoulder, pulling sensation in antagonist muscle groups (trapezius, levator scapulae, scalene muscles)				
<b>Previous History</b>	No prior symptoms, trauma, or surgery related to shoulder joint				
Cervical Spine Movements	Right lateral flexion, right rotation, and flexion induced pulling sensation in antagonist muscles				
<b>Facet Joint Findings</b>	Aberrant motions with tenderness in left C2-3, C7-T1, T3-4 facet joints on static and motion palpation				
Active ROM (Left Shoulder)	- Internal Rotation: 15° - External Rotation: 10° - Flexion: 20° - Extension: 20° - Abduction: 10°				
Resisted Strength (Left Shoulder)	- Flexion: 2/5 - Abduction: 2/5 - Internal Rotation: 2/5 - External Rotation: 2/5				
Passive ROM (Left Shoulder)	5° more than active ROM in each direction				
Joint Mobility	Restricted and painful posterior and postero-inferior movements at the left glenohumeral joint				
Tenderness	Severe point tenderness over the left deltoid tubercle				

# **Intervention of therapy**

In the present case study, procedure was explained to the patient in detailed before the intervention and written consent was obtained from the patient. The treating physician first gently massage manually with *Roghan-i-Bābūna* on affected part for 5 min and then applied 4 (*Ḥijāma Nāriyya*) fire cups on the following *Ḥijāma* points. One cup on the anterior aspect of Left shoulder, one cup posterior, one cup lateral side of the shoulder and one cup superior aspect. Follow up and assessment was done on alternate days i.e three days in a weeks for two weeks and during the treatment, no adverse effects like burning, erythema, blisters, itching were noticed and treatment was safe and tolerable to the patient.

#### **ROM: Range of Motion**

At baseline, pain, tenderness, and stiffness were noted using Visual Analog Scale (VAS) for pain. After some necessary briefing to the patient, he was told to rate his pain, tenderness, and stiffness at shoulder joint on a linear scale of 1 to 10 after every sitting for two weeks. At

baseline, VAS scores for pain, tenderness, and stiffness were 9, 8 and 9 respectively. After 4 weeks of therapy, VAS scores for pain, tenderness, and stiffness were reduced from 9 to 1 respectively with 87.5% improvement in pain, and upto 95% improvement in tenderness and stiffness.

# Follow up and outcome measures

The treatment was given every week up to 28 days, follow up on every week for four weeks; and findings and outcomes were monitored and patient was then assessed on days 0, 7<sup>th</sup> 14<sup>th</sup>, 21<sup>st</sup> and 28<sup>th</sup> dayof the treatment with the help of objective parameters i.e, Visual Analogue Scale (VAS) and WOMAC Scores for measurement of pain and active range of motion (Observing intensity of joint stiffness during the daily life activities). The total VAS was 9 (pain is very severe at this score) at Baseline 0<sup>th</sup> day-9, 7<sup>th</sup> day-8, 14<sup>th</sup> day-6, 21<sup>st</sup> day-4 and on 28<sup>th</sup> day was 1, pointing to reduction in the severity of symptoms.

# RESULTS AND DISCUSSION

In the present case study, the treating physician first gently massage manually with *Roghan-i-Bābūna* on affected part for 5 min and then applied 4 *Ḥijāma* sterile glass fire cups on the following *Ḥijāma* points. One cup on the anterior aspect of Left shoulder, one cup posterior, one cup lateral side of the shoulder and one cup superior aspect. Follow up was done on alternate days at every week for two weeks. The patient was assessed on the first, seventh, and fourteenth days of treatment using objective parameters such as the Visual Analogue Scale (VAS) for pain measurement and active range of motion scores (observing the intensity of joint stiffness during daily activities). Although no trigger point was found in our patient, tender points were treated. A very promising improvement was noted in the range of motion of the shoulder and pain on VAS scale. At the affected shoulder the WOMAC was apply to assessment of joint range of movements Measurement was done for the active and passive motion of each of these movements from baseline and to end of the treatment on i.e; 0<sup>th</sup>, 7<sup>th</sup>, 14<sup>th</sup>, 21<sup>st</sup>, and 28<sup>th</sup> day. There was a marked improvement in the quality of life and improvement in VAS score and WOMAC Score for pain, tenderness, and stiffness (Table 2).

# **Outcomes of the case study**

The patient was asked to rate his knee pain on VAS scale and WOMAC scale at the Baseline, 7<sup>th</sup>, 14<sup>th</sup>, 21<sup>st</sup>, and 28<sup>th</sup> day, for four weeks as shown in Table 2.

Table.2:

Parameters	Baseline 0 <sup>th</sup> day	7 <sup>th</sup> day	14 <sup>th</sup> day	21 <sup>st</sup> day	28 <sup>th</sup> day
VAS	9	8	6	4	1
WOMAC	90	56	44	34	18

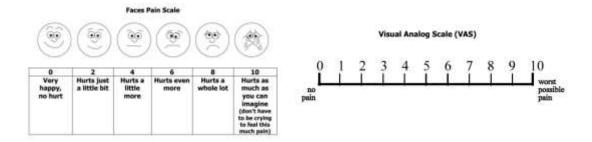
#### **WOMAC Scale**

The WOMAC questionnaire consists of three sub-scales: pain (five questions), stiffness (two questions), and physical function (17 questions). The sub-scale scores range from 0 to 20 for pain, 0 to 8 for stiffness, and 0 to 68 for physical functioning. The total WOMAC score is computed by combining the items from all three sub-scales. (0-96). Higher WOMAC ratings indicate increased pain, stiffness, and functional limitations. Table 3 displays the WOMAC baselinescores on the 0th, 7th, 14th, 21st, and 28th days of therapy.

**Table 3: WOMAC Scale Scores** 

Parameters	Baseline 0 <sup>th</sup> day	7 <sup>th</sup> day	14 <sup>th</sup> day	21 <sup>st</sup> day	28 <sup>th</sup> day
Rt Shoulder joint	46	40	26	20	18
Lt Shoulder joint	90	56	44	34	18

# Visual analog scale Figure.1



The VAS scale is used to measure the level of pain, with 0 indicating no pain at all and 10 indicating severe pain that requires immediate medical intervention. [17]

# **CONCLUSION**

In this case study, we have tried to illustrate the potentials of "Hijāma Nāriyya (Fire cupping) therapy" in a diabetic patient with a frozen shoulder. The frozen shoulder was treated successfully through Hijāma Nāriyya (Fire cupping) therapy, one of the unique modes of treatment described in the Unani system of medicine. However, further researches with randomised controlled studies on a large scale are required to elaborate the effectiveness of this modality of treatment. [18]

# **Declaration of patient consent**

The authors confirm that all appropriate patient consent forms have been submitted to them. The patient signed these forms, agreeing to the journal's disclosure of their clinical data. Although every effort will be taken to protect the patient's identity, complete anonymity cannot be guaranteed. The patient understands that their names and initials will not be published.

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#### **Conflict of Interest**

None.

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