



## EFFICACY OF WET CUPPING (*HIJAMA BI'LSHART*) IN THE MANAGEMENT OF FROZEN SHOULDER-A CASE STUDY

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### ABSTRACT

**Background and Purpose:** Frozen shoulder is a prevalent and incapacitating condition, characterized by shoulder pain and progressive loss of shoulder mobility. The prevalence of frozen shoulder in the general population has been reported to range from 2% to 5%, with some studies indicating a range of 0.5% to 10%. The purpose of this case report is to evaluate the Efficacy of Wet cupping (*Hijama bi'l Shart*) in the management of Frozen shoulder. **Case Description:** The patient was a 45-year-old female who presented with the complaint of pain in left shoulder radiating to left arm for two months. She also complained of limited range of motion (ROM) of left shoulder for two months. The diagnosis of frozen shoulder was determined following examination and evaluation. **Intervention and Outcome:** The patient was subjected to *Hijama bi'l Shart*. Outcome measures included ROM measurements, Visual analog scale (VAS) score and Shoulder Pain and Disability Index (SPADI) and were accessed before and after the intervention. Patient felt relieved after the session. The outcome was positive with increased shoulder ROM and decreased VAS score and SPADI score. VAS score reduced from 6 to 2. Similarly SPADI score was reduced from 40 to 20. **Conclusion:** Wet

cupping appears to show promising results in the management of pain and inflammation. This case study involving the effect of wet cupping in the management of frozen shoulder has shown significant results by improving the ROM, VAS and SPADI scores in the patient.

**KEYWORDS:** Frozen shoulder, Wet cupping, *Hijama bi'l Shart*, VAS, SPADI

## INTRODUCTION

Frozen shoulder is a prevalent and incapacitating condition, characterized by shoulder pain and progressive loss of shoulder mobility.<sup>1</sup> The prevalence of frozen shoulder in the general population has been reported to range from 2% to 5%, with some studies indicating a range of 0.5% to 10%.<sup>2</sup>

The severity of the ailment can range from mild pain and/or less severe movement restriction to severe pain and/or severe movement restriction. Shoulder stiffness that develops gradually, intense discomfort, particularly at night, and limitations in the shoulder's active and passive range of motion are important features. There are two types of frozen shoulder: primary (idiopathic), when the cause is unknown, and secondary, when there is another known cause.<sup>3</sup> The hallmark of frozen shoulder is fibro proliferative tissue fibrosis, in which fibroblasts—which primarily produce type I and type III collagen—develop into myofibroblasts, a smooth muscle phenotype. This condition is accompanied by inflammation, neo-angiogenesis, and neo-innervation, leading to shoulder capsular fibrotic contractures and the resulting clinical stiffness.<sup>1</sup>

The current management of FS primarily focuses on pain relief and restoring active and passive mobility and function. The most effective conservative treatments include education, physiotherapy, corticosteroid injections, and pharmacological therapy.<sup>4</sup>

In Unani literature, frozen shoulder is referred to as *Waja'al-Kati for Mujammid-al-Katif*. Unani scholars refer to this condition as *Tahajjur*, which means “to become hard”.<sup>5</sup>

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*Waja al Khāṣira* (lower backache), *Waja al Warik* (hip joint), *Waja'al Aqab* (heel), *Waja' al Qatan*, and other pain-related conditions are all included under one general term i.e, “*Waja' al-Mafasil*”.<sup>6</sup>

The same is true for shoulder joint pain, which is referred to as *Waja' al- Katif*. It is classified into four categories based on the type of humor involved: *Safrāwī* (bilious), *Balghamī* (phlegmatic), *Sawdāwī* (melancholic), and *Damwī* (sanguineous).<sup>7</sup>

In Unani system of medicine there is wide variety of treatment approaches to combat it. Apart from various single and compound drugs available, Unani system provides various regimenal therapies like *Takmeed* (Fomentation), *Zimad* (Medicated Paste), *Roghanyaat* (oils), *Dalak* (Massage), *Hijāma*, *Fasd* (Venesection) etc. *Hijāma* is an Arabic term that is characterized by applying cups, and it has the literal meaning of sucking. It is a procedure that involves applying cup-shaped glass vessels to the body's surface, creating a vacuum with heat or a specialized suction device, and removing any morbid materials from the diseased area while also promoting blood flow to the affected area.<sup>8</sup>

*Hijama bi'l Shart* (Wet cupping) is been widely used in alleviating the pain<sup>9</sup>

The Unani medical system's rational approach to manage pain and the long history of successful *Hijama bi'l Shart* (wet cupping) practices provided a solid foundation for anticipating a positive outcome of the study. The current case study was designed to validate the use of *Hijama-Bi'l-Shart* in the treatment of frozen shoulder based on VAS and The Shoulder Pain and Disability Index (SPADI).

## CASE REPORT

A 45 year old hypertensive, non diabetic and euthyroid female visited the OPD of RRIUM, Srinagaron 12/11/2024, with the complaint of pain in left shoulder radiating to left arm for two months. She also complained about decrease in normal range of movements for 1 month and tingling in left forearm for 15 days. The pain was insidious and sharp in nature and aggravated with exertion and was relieved on rest. She had undergone cholecystectomy 20 years back. She was on anti hypertensive medication for 5 years. She was peri menopausal with obstetric history of P<sub>3</sub>A<sub>0</sub>L<sub>3</sub>. She has taken only over the counter medication for pain relief.

On general examination, the gait and built of patient was normal. There was no icterus, pallor, clubbing, cyanosis. The vitals were normal with BP 130/80mmHg, Pulse 72 bpm, Temperature- 98. 4°F and Respiratory Rate 16 pm. Systemic examination of the patient was

normal. On examination of right shoulder it was found that the range of movements were decreased with abduction 70°, flexion 90°, internal rotation 50°, external rotation 50°.

The patient was explained about the benefits and procedure of wet cupping. Consent was taken and she was admitted to the IPD of RRIUM, Srinagar for the procedure.

### Procedure

Under aseptic conditions, neck and left shoulder of the patient was exposed, cleaned and draped. The respective area was massaged with *Roghan-e-baboonaby* gliding cups over it for 3 minutes. Then 3 cups were placed at point 1, 55 and 21 using negative pressure created by suction pump for 5 minutes and then removed.<sup>10,11</sup> Superficial cuts were given by means of blade no. 11. Then the same cups were placed back over the same points for 15-20 minutes until the blood clotted. ASD was maintained. Vitals were rechecked and patient was monitored for 12 hours and then discharged.

CUPPING POINT	AREA INVOLVED
1	At skin overlying the spinous process of 7 <sup>th</sup> cervical vertebrae
55	Below region 1
21	At the midpoint of skin covering left trapezii



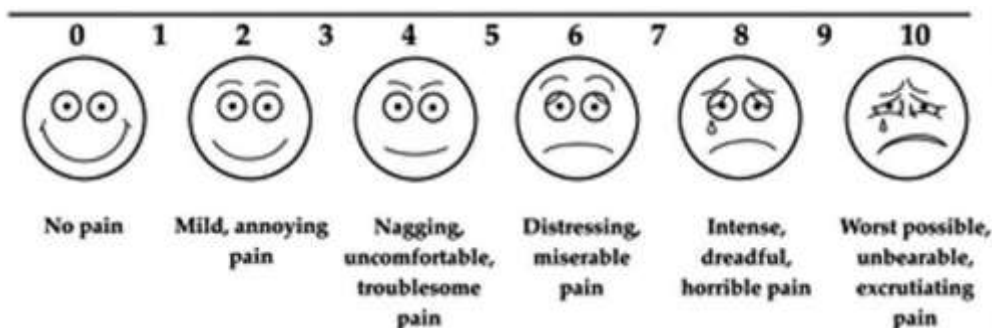
(Fig-1)<sup>[10]</sup>

### RESULTS

The assessment was done before and after the procedure of wet cupping. The scales used were Visual Analogue Scale (VAS) and The Shoulder Pain and Disability Index (SPADI).

**VAS score**

VAS	BEFORE	AFTER
	6	2

**SPADI SCORE**

SPADI SCORE	BEFORE	AFTER
	40	20

**ROM**

Rom	Abduction	Flexion	Internal rotation	External rotation
Before	70	90	50	50
After	140	130	70	80

**DISCUSSION**

*Hijama bi'l Shart*, or wet cupping, is a therapeutic method used in the Unani medical system all over the world which is characterized by blood letting. In this instance, the primary goals of treatment was to reduce discomfort, maintain or restore the range of motion and flexibility, and eventually enhance the patient's quality of life.

Al Bedah A et al., concluded through his study that wet cupping is quite effective in reducing pain and disability associated with persistent nonspecific low back pain.<sup>12</sup>

The immunomodulation theory, put forth by Guo et al., proposed that the mechanism of action of acupuncture and cupping was same. According to immunomodulation hypothesis, altering the microenvironment through skin stimulation may result in biological signals that trigger the immune system's neuroendocrine function.<sup>13</sup>

The gate control theory is another potential mechanism that could account for the analgesic effect of cupping therapy. It states that intense sensory stimulation can result in a dramatic

reduction in pain for different lengths of time by blocking messages from sensory neurons carrying pain impulses by faster-moving impulses.<sup>14</sup>

These studies support the fact that wet cupping can prove as potent treatment in treating frozen shoulder. In our study there was significant decrease in VAS and SPADI score. Also the ROM improved markedly. The VAS score decreased from 6 to 2 while as SPADI score dropped from 40 to 20. Abduction improved by 70°, flexion by 40°, internal rotation by 30° and external rotation by 30°. Hence the results support the positive outcome of wet cupping in the management of frozen shoulder.

## CONCLUSION

Wet cupping appears to show promising results in management of pain and inflammation. This case study involving the effect of wet cupping in the management of frozen shoulder has shown significant results. However there is scope for further research involving large sample size and comparison of the effect of this therapy with other therapies available in Unani system of medicine. Further studies focusing on the biochemical and biomolecular perspective are the need for hour.

## ABBREVIATIONS

ROM	Range of motion
VAS	Visual analog scale
SPADI	Shoulder Pain and Disability Index
FS	Frozen shoulder
OPD	Out patient department

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## CONFLICT OF INTEREST

There are no conflicts of interest to declare.

## STATEMENT OF INFORMED CONSENT

The patient involved in the study provided informed consent.

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None.

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