Evidence-Based Therapeutic Benefits of Cupping Therapy (Ḩijāma): A Comprehensive Review

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Abstract

Ila'il tadeeb (regimenal therapy) is one of the preferred treatment methods used in Unani system of medicine since ancient times. Ḩijāma is one of the effective modalities of treatment in Ila'il tadeeb. It is a unique therapeutic procedure in which cup like vessels are placed on the body surface by creating a vacuum to either let out blood from below the skin surface or just plain suction without bloodletting. The objective of this comprehensive review paper is to address the claims of Unani physicians and clinical studies conducted on the efficacy of Ḩijāma. Various published clinical trials showed the efficacy of Ḩijāma in the management of a number of diseases. Though, the effect showed by some clinical trials was short term. Hence, it is suggested that rigorous, well-designed, controlled, randomized and long duration follow up clinical trials on large sample size are to be conducted by trained clinicians or researchers to establish the efficacy of Ḩijāma in the management of various diseases.

Keywords: Ila'il tadeeb, Ḩijāma, Therapeutic Benefits

Introduction:

Al Ḩijāma is an Arabic word which means application of cups and the literary meaning of Ḩijāma is sucking. It is a technique carried out by application of cup shaped glass vessels on the body surface, creating vacuum by heat or by special suction apparatus, in order to evacuate the morbid materials, to divert the material from the diseased part and to encourage the blood flow to the affected site. Rāzi stated that cupping is a process of releasing the blood (toxic) from superficial small vessels located in muscles. Ḩijāma can be defined as a minor surgical excretory procedure that creates superficial skin scarification to open skin barrier and creates a pressure gradient and a traction force across the skin and underlying capillaries to drain interstitial fluids and enhances blood clearance and waste excretion through skin.

Classifications of Ḩijāma in Unani Medicine:

On the basis of scarification Ḩijā ma has been classified into two main types.

1. Ḩijāma bish-Shart (wet cupping /cupping with scarification)
2. Ḩijāma bilū-Shart (dry cupping /cupping without scarification)
3. Ḩijāma-i-Āabi (Hydro cupping)

Ḩijāma bilū Shart is further divided into two types

a) Ḩijāma-Nāriyah/ba-ātish (cupping with fire)

Apartment from these two types, Abul-qāsim-al-Zahrāwī has mentioned a third type of Ḩijāma in his book as follows.

3. Ḩijāma-i-Āabi (Hydro cupping)

Ḩijāma bila Shart is further divided into two types

a) Ḩijāma-Nāriyah/ba-ātish (cupping with fire)

b) Ḩijāma-Ghair-Nāriyah/be-ātish (cupping without fire)

Further Ḩijāma is of two kinds on the basis of condition and situations

1. Ḩijāma Iḥdirār (Mandatory)
2. Ḩijāma Ikhtiyyār (Optional)

On the basis of movement of cups, Ḩijāma bila-Sharṭ is
Mechanism of Action in Unani Medicine:

Unani system of medicine which elaborates that cupping therapy works on the basis of two following fundamentals.

1. 
Tanjīya-i-Mawād (Evacuation of morbid matter)

2. 
Imāla-i-Mawād (Diversion of morbid matter)

In case of Hijāma bila Shart (Dry cupping) which works on the principle of Imāla-i-Mawād causes the diversion of morbid matter from one site to another.

In case of Hijāma bish Shart which works on the principle of Tanjīya-i-Mawād evacuates the morbid matter from the affected site. Ḫālīnūs has mentioned that when the humours become thick in affected joint, Hijāma becomes very useful. It opens the pores of the skin, enhances the blood circulation, nourish the affected area with fresh blood and improves the eliminative function which allows the Akhlāt-i-fāsida to be evacuated from the body. It helps to draw out and eliminate the imbalanced qualities i.e. Ḥār (heat), Bārid (cold), Raqāb (moistness), Yābis (dryness).

Mechanism of Action of Hijāma in Modern Medicine:

Exact mechanism of Hijāma bish Shart is still unknown but many researchers tried to explain themechanism of action of Hijāma bish Shart through some theories like Pain gate theory, Prostaglandin theory, Endorphins and Encephalin production theory, Nitric oxide theory and Taibah theory etc. The short description of each of these theories is given as under:

Pain gate theory: This theory states that there is a gate or channel to transfer pain signals from its actual site of origin to the brain. When suction cup is applied, it produces pain which interfere with the actual pain which can’t be transmitted in the same gate or channel and in this way, elimination of pain occurs.

Prostaglandin theory: Prostaglandins are produced as a result of inflammation in our body and these prostaglandins transmit pain signals to the brain. By doing Hijāma bish Shart, we take these products out from the body and this results in reduction of pain.

Endorphins and encephalin production theory: These are natural components released in our body and these components are called ‘endogenous please substances’ which reduce the pain and enhance the mood.

Nitric Oxide theory: Nitric oxide is very important substance released in the body as a result of any trauma, and it is released also during or after Hijāma bish Shart. The functions of nitric oxide are:

1. Vasodilatation- this allows more blood flow to the area
2. Two-way vasodilatation effects
3. Muscle relaxation which cures spasm
4. Anti-thrombotic- protects the vessels from thrombosis
5. Anti-inflammatory and prevents stenosis of blood vessels.

Taibah Theory: This theory is currently the most accurate scientific explanation of Hijāma’s curative properties. It explains that Hijāma bish Shart is a minor surgical excretory procedure and its effect is similar to the mechanism of excretory function via glomerular filtration of the kidney as well as abscess drainage, by which pathological substances are removed from the body.

After reviewing many theories and discussion, it was concluded that wet cupping is dominated by control in (I) Neural, (II) Haematological, & (III) Immune system functioning.

In the neural system, effect occurs by regulation of neurotransmitters and hormones like serotonin, dopamine, endorphin, acetylcholine etc. In the haematological system, main effects occur by these two pathways:

1. Regulation of coagulation and anti-coagulation systems like decrease in the level of haematological element such as fibrinogen
2. Decrease in the hematocrit followed by increase in the blood flow and in the end organ oxygenation.

In the immune system, main effects occur by these three pathways:

1. Irritation of the immune system by producing local simulated inflammation followed by activation of complementary system and increase level of immune products such as interferon and tumour necrotizing factors.
2. Organize of traffic of lymph and increase in the flow of lymph in the lymph vessels.
3. Effect on thymus.

Effect of Cupping therapy on Musculoskeletal system:

Farhadi K et al. conducted a randomized trial to evaluate the efficacy of wet cupping therapy for nonspecific low back pain and concluded that wet cupping care was significantly more effective in reducing bodily pain than usual care at 3-month follow-up. Al Bedah A et al., through his study concluded that wet cupping is potentially effective in reducing pain and improving disability associated with persistent nonspecific low back pain at least for 2 weeks after the end of wet cupping period. Kim JI et al. conducted a randomized, waiting-list controlled, open-label, parallel-group pilot trial to evaluate the efficacy of wet cupping for persistent nonspecific low back pain and reported a significant improvement in pain in favor of wet cupping. Similarly, Mardani-Kivi M et al. conducted a randomized clinical trial to evaluate the efficacy of wet cupping on nonspecific low back pain and reported significant improvement in pain without any conventional treatment.

Lauche R et al. conducted a randomized controlled pilot study to evaluate the efficacy of a series of five dry cupping treatments on pain and mechanical thresholds in patients with chronic nonspecific neck pain and claimed that the patients of the treatment group had significant improvement in pain score after receiving cupping therapy than patients of the waiting-list control group. Cramer H et al. studied to determine the efficacy of pulsating cupping for treating chronic neck pain. It was a randomized controlled clinical trial with two parallel groups. The authors concluded that Pneumatic pulsation cupping therapy appears to be a safe and effective method to relieve pain and to improve function and quality of life in patients with chronic neck pain.

Saha FJ et al. conducted a randomized controlled trial to evaluate the efficacy of cupping massage in patients with chronic neck pain and concluded that cupping massage appears to be effective in reducing pain and increasing...
function and quality of life in patients with chronic non-specific neck pain. Arslan M et al. conducted a pilot study to evaluate the effect of traditional wet cupping on shoulder and neck pain and the authors reported significant improvement in shoulder and neck pain14. Kim TH et al. concluded that two weeks of cupping therapy and an exercise program reduce pain in patients with shoulder pain and improve neck function in video display terminal workers35. Lauche R et al. through his study concluded that significant increases were found for physical function and quality of life in patients with chronic non-specific neck pain suggesting that cupping treatment might have sustainable effects for up to 2 years36. Similarly, Wen M X et al. through his study concluded that wet cupping therapy provide a rapid therapeutic effect in nerve-root type cervical spondylosis, thus exhibiting significant analgesic effects37. Khan AA et al. conducted a randomized controlled clinical trial to evaluate the efficacy of wet cupping for arthritis was conducted by a single center, prospective, randomized, controlled trial to evaluate the pregnancy outcomes related to early reducing pain and improving dysmenorrhea and excess bleeding related symptoms like dysmenorrhea and excess bleeding using cup shaped vessels. From the above discussion it can be concluded that Hijama plays an important role in maintaining normal health, it is beneficial in both preventive and curative regimen. Hijama is used effectively for the management of musculoskeletal, reproductive, circulatory and nervous disorders. Hence, we suggest rigorous, controlled, randomized and long-duration follow-up studies on large sample size, to be conducted by trained dinicians or researchers to establish the efficacy Hijama in the management of various diseases.
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