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# PRAGMATIC APPROACH TOWARDS THE ROLE OF *HIJAMAT* IN *IRQUNNASA* (SCIATICA) - A REVIEW

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### **ABSTRACT**

Unani scholars managed certain ailments since antiquity by regulating the metabolic process through various modes of treatment. Ibnesina (Avicenna) has advocated certain principles of treatment. Regimenal therapy is one such core method of treatment through which the morbid matter is eliminated, its excessive production is checked or its spread is arrested and resolved by certain special techniques and there by restoring humoral equilibrium. One such procedure is Hijamat (Cupping). Hijamat is an Arabic word derived from the term 'Hajm' which stands for volume, but technically used for sucking. It also means "to minimize", "to restore to basic size" or "to diminish the volume". Neuralgic pains of lower limbs are one of the commonest manifestations of *Irqunnasa* (Sciatica). The overall incidence of this condition is projected to be between 13% and 40% with the malady has the potential to become chronic and obstinate with large socioeconomic ramifications. *Irqunnasa* is mostly managed by the mainstream therapists either by medication or surgical intervention or sometimes both. The consequence of evidence based medicine in terms of high cost, disease centric management and its associated side effects warrantsaviable alternative. A meticulous attempt has been made to explore the utility of this age old regimen in the management of *Irqunnasa* (sciatica).

Keywords: Hijamat, Cupping, Irqunnasa, Sciatica, Unani medicine

### INTRODUCTION

Unani system of medicine has grown out of fusion and thoughts of diverse knowledge experiences. Its origin can be traced back to the fourth and fifth century B.C when it was first propounded by Bukhrat (Hippocrates) in Greece. According to its principles and philosophy, maintenance of health, disease and manifestations are innate process, hence proper and normal functioning of the bodily process must be ensured to maintain health. Any disturbance in the normal humoral balance whether it is excess, diminution or blockage leads to disease. Unani scholars managed certain ailments since antiquity by regulating the metabolic process through

various modes of treatment. According to Ibne sina<sup>1</sup>(Avicenna) the principles of treatment are:

- 1. Ilaj bit tadbeerwaTaghzia (Regimenal and Dieto therapy)
- 2. Ilaj bid dawa (Drug therapy)
- 3. Ilajbilyad (Surgery)

Regimenal therapy is one such core method of treatment through which the morbid matter is eliminated, its excessive production is checked or its spread is arrested and resolved by certain special techniques and there by restoring humoral equilibrium. One such procedure is AlHijamah (Cupping).

## Al Hijamah

Hijamah is an Arabic word derived from the term 'Hajm' which stands for volume, but technically used for sucking. It also means "to minimize", "to restore to basic size" or "to diminish the volume". *Hijāmat* is an ancient method which was particularly used among the Chinese, Babylonians, Egyptians and Greeks etc. The pottery cups, hollowed out animal horns and bamboo cups were used commonly for the purpose. <sup>2, 3</sup>. The importance of this regimen can be gauged from the noble saying of blessed messenger of Islam Hazrat Mohammed "Indeed the best of remedies you have is Hijama."

Basically Hijamat is of two types, but procedurally it is of three types: <sup>5, 6</sup>

- 1. *HijamatBilShart* (Wet Cupping / Cupping with scarification)
- 2. *HijamatBilaShart* (Dry Cupping / Cupping without scarification)
- 3. Hijamat Bin Nar (Fire Cupping)

*Hijamat Bil Shart* (Wet Cupping / Cupping with scarification)

It is truly a regimen for *Tadbeer Istefragh* (bloodletting technique) where Damavi *Madda* (Sanguinous matter) is involved as a cause of the disease and needs elimination. Accordingly several places in human body are specified for application of Hijamah.

# Hijamat Bila Shart (Dry Cupping)

It is a technique through which vacuum is created by applying cups / horn / clay pot etc. by placing over muscular surface of the human body. This procedure can be carried out by two methods:

- 1. *Hijamat Bila Naar* (Cupping without fire)
- 2. Hijamat Bin Naar / Mehjama Nariya (Fire Cupping)

# Hijamat Bila Naar (Cupping without fire)

This procedure can be performed by several methods:

- 1. By placing horn and sucking orally
- 2. By placing cups and suctioned manually
- 3. By placing cups and sucked through suction machine <sup>5, 6</sup>

# *Hijamat Bin Naar / Mehjama Nariya* (Fire Cupping)

This procedure also can be done by different techniques.

- 1. Flamed alcohol soaked cotton at the base of brass / steel / ceramic / clay material
- 2. Flamed paper / cotton / cloth / wooden piece poured into the glass and applying
- 3. Flamed camphor / spirit soaked cotton kept over coin and placing glass / cups / clay material etc.<sup>5, 6,</sup>

### General Principles of Hijamat

*Ibne Sina* has discussed about *Hijāmat* be side its description in detail and has pointed out certain important principles which are as follows:

- 1. It should be carried out in the mid of lunar month because the humours are fully agitated at this time.
- 2. It should be done in after noon because this is the most moderate time of the day.
- 3. It should be done preferably in summer season because the consistency of the humours remains thin so it easily enters the microvasculature and can easily be eliminated through *Hijamat*.
- 4. It should be performed in those whose blood is less viscous.
- 5. The person should be given stomachic tonic and divergent beverages prior to *Hijāmat*.
- 6. It should be avoided in obese persons for the fear of *Kasrat-e-Tahallul* (excessive resolution).
- 7. It should be avoided below two years and above sixty years of the age since the humours are viscid in these age groups.
- 8. It should be avoided immediate after bath because the skin becomes thicker so it needs deeper incision to take out the blood, which causes severe pain and leads to weakness and the persons having viscid blood should be exempted as they need a deep incision.
- 9. It should be avoided after coitus.
- 10.It should be avoided after vigorous exercises for fear of dehydration and general weakness with the exception of thick blood (increased haematocrit).<sup>1,2</sup>

### METHOD / PROCEDURE

The patient is made comfortable as indicated position for Hijāmat (sitting or lying position) and the required area to be cupped are exposed.

If the area is hairy then shaving is required in order to fix the cups firmly on the body. Otherwise their adhesion with the skin will not be complete and air can infiltrate into the cups and adhesive force of cup fails.

Thereafter, the area is sponged with warm water to increase the blood circulation towards it. Then the piece of paper which is made in the form of cone is burned with the help of candle or lamp. After wards the burning paper is inserted into the cup and opening of the cup is placed on the skin of the particular area.

In turn, the burning paper will burn a big quantity of air inside the cup, as a negative pressure inside the cup will be created making firm adhesion of the cup over the area.

Ultimately there will be increased circulation locally making the area highly congested. The pulling effect over the skin and the increased temperature inside the cup is responsible for superficial vaso dilatation which in turn further increases the vascular circulation. Due to this plethora of blood cups tend to pull the skin for a while and prevents the assembled blood from I Indications mixing with the circulation to a certain degree.

After fifteen to twenty minutes cup is removed from the body. The cup is removed by holding its belly between the thumb and forefinger of one hand and simultaneously depressing the skin of adjacent area by the other hand.

This is the method of Hijāmat-e-NariyaBila-Shart, when its purpose is to increase the blood flow or to divert the humours towards the site of Hijāmat.

In case of Hijāmat-e-Nariya bil- Shartafter the above procedures, the area is disinfected with medical antiseptics.

Thereafter few nicks are given on the congested area of the skin by the edge of a sharp sterile blade and the cup is again fixed on the site quickly which starts sucking the blood.

Cups remain fixed until the process of sucking gets completed then the cup filled with blood is removed as mentioned above and area is properly cleaned with anti-septic and sterile dressing is done finally.

Hijāmat-e-Ghair-Nariyais also done in the same manner but the method of fixing and removing the cups is different.

With the advent of new techniques and tools, cups have become highly modified and sophisticated. Such modified cups are provided with a valve at the top and a hand operated pump. To fix the cup on an area its edges are kept over the skin and the air inside the cup is sucked out with the help of suction pump so as to create the vacuum. Similarly when the cup is needed to be removed the valve is simply pulled up with the help of thumb and fore finger. This pulling of valve will permit the air in the cup and it will be detached by itself.8,9

### **Essential Tools/Kit**

Glass cups, Vacuum pump, Medical antiseptics, Lamp or Candle, Small paper, Sterilized gloves, Sterilized medical scalpel, Cotton roll, Sterilized gauze, Micro pore tape, Razor to remove the hair of the site if needed.<sup>8,9</sup>

- To prevent the passing of food from stomach before digestion as in the case of Zalaq -ul-Am'ā, Hijamat is applied on epigastrium to aid the digestion.
- To divert the material from one place to another, as in case of menorrhagia where cups are applied below the bust line.
- When the abscess is deep and contains excessive pus and difficult to drain completely, cup is placed on the opening of the abscess to suck out the pus completely.
- When the swelling is in any important viscera thencups are applied on relatively less important organ to divert the morbid material from the visceral organ.

- When there is any indication to warm up any particular organ, which has become cold, in Mehjama -Nariya is preferable.
- When the air accumulates in any part of the body the application of *Hijāmat* on the same part is beneficial, in particular, *Hijāmat-e-Nariya* is more effective in intestinal colic due to flatulence.
- Hijāmat is also done to relieve severe pain in any part of the body. This purpose is achieved either due to the diversion of materials away from the site of pain or removal of trapped air. Therefore Hijāmatis indicated in sciatica on medial and dorsal aspect of thigh.
- Hijāmat is supportive in restoring the normal size of an atrophied organ
- Hijāmat is also helpful in restoring the normal size of hyper trophied organ. The purpose is achieved by applying the cups in the surrounding area which diverts the material to the site of the Hijāmat and leads to reduction in size of organ.<sup>1, 2, 8</sup>

# Utility of *Hijāmat* in the Treatment of Irqunnasa

Rāzi stated in his book, Al-Hāwi, under the treatment of *Irqunnasa* (Sciatica), and *Waja-ul Mafasil*(Arthritis) "In case of *Irqunnasa*' enema is more useful than purgation, but if thick humors are collected in hip joint then *Hijāmat* becomes mandatory and has a big advantage over other methods". In case of *Irqunnasa* 'Rāzi further states, "*Hijamat*-bil-Shart and *Hijāmat*-Bila-Shart will be done over hip when disease starts from the site of pain."

He further states, "If the humors become thick in the affected joint due to improper treatment *Hijāmat* (cupping) becomes very useful for this condition. <sup>10</sup>"

In Kaamil-us-Sana'a, pertaining to the treatment of *Irqunnas*a it is written, "When the disease becomes chronic and there is no relief in using the drug treatment, then it is essential to use *Hijāmat*-

e-*Nariya* as it sucks the material from the joints towards the skin". 11

Ibne Sina writes under the treatment of *Irqunnasa* that if the drug treatment is unable to treat the problem then Hijāmat (cupping) with and without scarification over the hip will be helpful.<sup>1</sup>"

Ismail Jurjani has elaborated *Hijāmat* under the treatment of *Waja-ul- Warik* and *Waja-ul-Aqab*. He states it is preferable to keep the patient on fast and advise him exercise after the general evacuation, if his lifestyle is sedentary. If these *Tadabeer* (measures) are unable to relieve the disease then only morbid humors are to be taken out towards the surface of affected area. This purpose is attained by *Hijamat-e- Nariya* (cupping with fire). Repeated attempts of *Hijāmat* by sucking of liberal amount of blood generally relieve the condition by eliminating morbid materials from the joints. <sup>12</sup>

In the management of Irqunnasa, Azamkhan quotes, "Lastly those Tadābeer(measures) should be carried out which have Muhallil (Anti-inflammatory) and Mulattif (Demulcent) effects and take out the deep seated materials to the body surface. Hijamat (Cupping), Muhammir (rubifacient) paste and the Tila of garlic, onion, Nargis, Baladur and Fig are included in these Tadābeer, but along with these, some laxative drugs should also be added otherwise there may be dryness inthe joints." 13

This reveals that Hijamah not only induce evacuation and diversion but it has anti-inflammatory and demulcent effect as well.

According to *Kabeeruddin* "The treatment of *Irqunnasa*' is similar to that of *Waja-ul-Mafasil* and *Waja-ul-Warik* in few aspects, thus the *Hijāmat* and *Tāleeq* can also be regarded useful in the treatment of *Waja-ul-Mafasil*." The above quotation reveals that *Hijāmat* is useful in the treatment of *Irqunnasa*, *Waja-ul-Mafasil* as well as *Waja-ul-Warik*. 14

### **DISCUSSION**

Though Hijamah has been in practice since centuries to treat various types of pain in Unani medicine, this review paper is a concerted attempt to bring it to medical domain for the larger benefit. In our study which has been carried out in the National Institute of Unani medicine, India as part of M.D(Unani) thesis, scientific validation of the regimen "Mehjama Nariya and Hijamat Bila Shart was undertaken in cases of Irqunnasa. The study has revealed that both the regimen are equally effective in alleviating the symptoms of Irqunnasa with statistical significance (p>0.001)<sup>8</sup>.

Various theories are put forth as to the benefits of the *Hijamat Bila Shart*; one theory suggests that with the increase in circulation over the area of procedure, the morbid matter is eliminated from the desired area.

Another theory which is proposed is the Unani concept of Imaale mawaad (diversion of matter) from one place to other.

Placebo effect of cupping is also proposed by some physicists.

From a biophysical point, the negative pressure created by physical stimulation in the cup triggers local metabolism, promotes phagocytosis resulting in pain alleviation.

The site of cupping not only improves circulation but also provide nutrition.<sup>5, 6, 15</sup>

Cupping without bloodletting works on the principal of *Imaale-mawaad*.i.e. diversion of morbid humours from one site to another.

In case of *Mehjama Nariya*, due to combustion of air inside the cups, the air becomes warm, and helps in retracting the muscular surface, causing pulling of the area beneath the cups immediately after its application resulting in relief of pain. <sup>16</sup>

Blood cupping has a neuro modulating input into central nervous system activating CNS multiple analgesia systems and stimulating pain modulation system to release neuro transmitters such as endogenous opioids.  $^{17}$  These substances including  $\beta$ -endorphin pain signals in the spinal cord and

emotional aspect pain by acting on the limbic system. 18

Another possible mechanism that may explain the analgesic effect of cupping therapy is that vigorous sensory stimulation can produce a sharp decrease in pain for varying periods of time due to blocking of messages from sensory nerves carrying pain impulses by faster moving impulses, this mechanisms is called "gate control theory. 19 Bloodletting cupping might exert effects on inflammation in that injury to the skin leads to release of  $\beta$ -endorphin and adreno cortical hormone into circulation. Both are helpful in blocking the inflammation in arthritis. 20

The physiological mechanism through which wet cupping might function remains unknown. It has been suggested that the effects of wet-cupping can be divided into several components, including neural, hematological, immune and psychological effects. In particular, the "pain suppression" mechanism of wet-cupping might be through influence on three neurological systems: (a) the "analgesia" system in the brain and spinal cord (including the periaqueductal gray periventricular areas, the Raphamagmus nucleus, the Nucleus reticularis and Paragigantocellularis); (b) the brain's opiate system (endorphins and enkephalins), and (c) most influential, through inhibition of pain transmission by simultaneous tactile sensory signals. Moreover, diffuse noxious inhibitory controls (DNICs) might contribute partially to the pain-relieving effect witnessed.<sup>21, 22</sup> An alternate hypothesis also plausible is that wet cupping may function in a manner similar to acupuncture.

Finally very few studies have been carried out on these procedures, hence the need to analyze thoroughly the literary aspect of the regimen to explore new vistas.

### **CONCLUSION**

Hijamat plays a vital role in the management of Irqunnasa provided the regimen is judiciously used with all the given facts taken in to

consideration. **Besides** the fundamental importance of this therapeutic methodology there is a problem of lack of uniform standard operative procedures. It therefore apparently seems essential to standardize it and to develop certain scientific parameters for evaluation of the efficacy of this therapy as it is cost effective, user friendly devoid of adverse effects. Hence scientific studies are being under taken to validate this age old regimen in different Unani research institutions of India so that the benefits may be reaped by large section of society. This therapy must also be evaluated for prophylactic use so that some of the impending attacks / bouts of disease can be averted.

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