



**ORIGINAL RESEARCH PAPER**

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**UNANI SYSTEM OF MEDICINE AND WAJA-UL-MAFASIL (ARTHRITIS): A REVIEW**

**KEY WORDS:** Waja-ul-Mafasil, Hijamat-Bila-Shurt, Cupping, Tadabeer

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**ABSTRACT**

In Unani system of medicine, Arthritis is described under a broad term Waja-ul-Mafasil which encompasses entire joint disorders like inflammatory, non-inflammatory, infectious, metabolic and other musculoskeletal disorders. Arthritis is one of the commonest joint disorder affecting millions of people worldwide with an estimated 15% (40 million) of Americans had some form of arthritis in 1995 and by the year 2020, an estimated 59.4 million will be affected. In India it affects 15% (180 million) people. On deep insight of Unani literature, arthritis can be correlated with various types of Waja-ul-Mafasil in resemblance to the predisposing factors, aggravating factors and pattern of joint involvement. According to Unani concept, the pathological changes in the joints are caused mainly by derangement of humoral temperament and accumulation of Mawad-e-Fasida (Morbid material) in the joint spaces. The derangement of humoral temperament may be simple, causing only functional disturbance of articular surfaces, or it may be compound in which organic disturbance and quantitative changes take place in the joints. The main principles of treatment in Unani system of medicine include Ilaj Bil Ghiza (Dieto-therapy), Ilaj Bit Tadbeer (Regiminal therapy) and Ilaj Bid Dawa (Pharmacotherapy). All the said principles are recommended for the treatment of Waja-ul-Mafasil. The principles of management of different varieties of Waja-ul-Mafasil differ from one another. The aim of treatment for patient with Waja-ul-Mafasil is to reduce morbidity and disability. The principle of treatment aims at restoring the normal temperament, and correcting the imbalance in the Khilt (humour) through Imala (Diversion of morbid material) and Istifraagh (Evacuation of morbid material).

**INTRODUCTION**

Waja-ul-Mafasil is an Arabic term, where Waja (plural Auja) literally means 'pain' and Mafasil (singular mafsal) means 'joints'. So the meaning of Waja-ul-Mafasil is pain in joints. It is a painful or inflammatory condition affecting joints, its surrounding muscle and ligaments [1] and may involve any joint viz; knee, hips, wrists, hands etc [2-4] with accumulation of mawade fuzooni (vitiated matter) in the joints as the causative factor liable for pain and inflammation [5, 6]. As per Unani literature in human body all bones are inter-related and inter-connected to form joints; articular surfaces of some joints are cartilaginous and possess some intervening spaces which helps them to perform different kinds of movements [7, 8]. These spaces are filled with rutubat (fluid) i.e. rutubate tajawif (synovial / interstitial fluid), which act as a lubricant and keep the joint surface consistently moist, so as to prevent from friction [5, 8]. While the articular surfaces of some joints are non-cartilaginous where consideration of this function is not necessary, a joint is created between two bones without any appendages or intervening space [5, 7, 8].

**History of Waja-ul-Mafasil:**

Waja-ul-Mafasil is one of the diseases that have been elaborated thoroughly in the Unani classical literature. The history of Waja-ul-Mafasil is as old as the history of human being. It is said that even dinosaurs were afflicted by this disorder, whose history dates back 100 million years. Great historical personalities like Alexander the great (356-323 BC), Charlemagne (742- 814), Henry VI (1165-1197) and Goethe (1749-1832) were also having this disorder. This disorder is well described in the old Egyptian, Unani and Roman classical medical literature [9]. Hippocrates presented the first compendium on the disease known as Kitab-ul-Mafasil, while as Dioscorides (70 AD) described the disease in detail in his book Kita-ul-Hashaish. Rufus (117 AD) prepared the next compendium on the disease having title Kitab Auja-ul-Mafasil, while as Galen (129-217 AD) discussed the disorder in his book Kitab-ul-Elal-wal-Amraz. Feel

Gharyoos (465 AD) has written treatises with the name of Risala Fee Irqun Nisa and Risala Niqras. Yuhana Bin Mas'waih (812 AD) in his books Kitab-ul-Kamal wa Tama and Al Mushajjar ul Kabir, and Sabit Bin Qarrah (836 AD) in his books Auja-ul-Mafasil and Kitabul Dhakheera Fee Ilm-ut-Tib described the causation and line of treatment in detail. Hunain Bin Ishaq (838AD) in his book Tarkeeb-ul-Advia, Rabban Tabari (898 AD) in Firdaus-ul-Hikmat, Majoosi (930 AD) in Kamilus-Sina'ah, Razi (930 AD) in Kitab-ul-Hawi, Nooh-ul-Qamar (990 AD) in his book Ghena Muna, Masihi (1010 AD) in Kitab-ul-Miah and Ibne Sena (1037 AD) in Al Qanoon described the disease is curable in initial stage, but on chronicity, it can only be relieved. Jurjani (1137 AD) in Zakheera Khwarzam Shahi, Ibn Zuhr (1162 AD) in Kitab-at-Taiseer, Ibn Rushd (1188 AD) in Kitab-ul- Kulliyat, Moosa Bin Maimoon (1214 AD) in Al Fusool, Samarqandi (1232 AD) in Al-Asbab-wal-Alamat and Nafeen Bin Ewaz Kirmani (1500 AD) in Sharah Asbabwal-Alamat discussed the etiology, pathogenesis and principles of treatment in detail [10- 20].

**Definition and Classification of Waja-ul-Mafasil :**

Definition According to Ibne Sena, "Waja-ul-Mafasi" is the pain of joints which includes Niqras (Gout), Irq-un-Nisa (Sciatica) and other types of joint pains [15]. Zakariya Rhazi adds to this definition that, Waja-ul-Mafasil is one of those disorders which occur in the form of recurrent or paroxysmal attacks. He further adds that this disease is caused by the accumulation of excessive fluid (Ratubat) [10, 21]. According to Alama Najeed-ud-Din Samarqandi, Waja-ul-Mafasil is that pain and inflammation which is developed in the joints of the organs. Alama Nafees elaborates this statement that this condition occurs in the surrounding structures of joints like synovial membrane, cartilage, ligaments, tendons and muscles [18]. Ismail Jurjani states, when the morbid material is accumulated in the joints of organs and results in the inflammation and pain, it is called Waja-ul-Mafasil.

**Classification of Waja-ul-Mafasil:**

Waja-ul-Mafasil has been classified by the eminent Unani

scholars and physicians on various criteria, which are given under:-

According to the severity of clinical features and duration of disease [3, 4, 6, 22]

- Haad (Acute)
- Muzmin (Chronic)

According to Mizaj, Akbar Arzani has classified Waja-ul-Mafasil into 2 types [6]:

- Non inflammatory due sue mizaj sada
- Inflammatory due to sue mizaj maddi

According to simple altered temperament: In this condition, there is no morbid material involved, there is alteration in kaefiyat only, it may be divided into three types [3, 4, 6, 22]:

- Haar multahib (inflammatory)
- Barid munjamid (consolidant)
- Yabis munqabiz (astringent)

According to humours (khilt): Consideration of the types of Khilt (Humours) causing Waja-ul-Mafasil (Arthritis) leads to its division into four types [3, 4, 6, 22, 23]:

- Waja-ul-Mafasil Balghami (Phlegmatic)
- Waja-ul-Mafasil Damvi (Plethoric)
- Waja-ul-Mafasil Safravi (bilious)
- Waja-ul-Mafasil Saudavi (Melancholic)

**Classification based on involvement of joint:** Waja-ul-Mafasil is a general term used either for painful joints of body or specially hands and feet but it can affect wrist, elbow, hip, ankle and knee [22]. Specific name of its various types based on the involvement of joints are [1-8, 23-31]:

- Irqunasa (sciatica)
- Niqris (gout)
- Waja ur rakba (knee joint pain)
- Waja uz zahr (low Back pain)
- Waja ul warik (hip joint pain)
- Wala ul khasera (buttock pain)
- Wajs us saqain (calf pain)
- Waja ul aqib (heel pain)

Zakariya Razi considered Waja-ul-Mafasil, Niqras and Irqun-Nisa, as a disease of the same genus [31]. Ali ibn Abbas Majoosi and other Unani scholars believe that Waja-ul-Mafasil can also occur in intervertebral, temporo-mandibular and joints of auditory ossicles [23, 26]. Thus, if all the above information is taken into consideration, there is more comprehensive mention of all the types of the Arthritis in the Unani literature and in those days of life when the avenues were very much less the physicians were able to differentiate the different types of arthritis. There has been very little addition to the types of arthritis in today's modern era when the sophisticated machinery is involved, lot investigations take place and we have modern tools of diagnosis.

#### **Aetiology (Asbaab) of Waja-ul-Mafasil :**

According to Sahibe Kamil, the etiology of Waja-ul-Mafasil is so obscure and complicated that it is not possible to pinpoint the exact causative factor. According to Ibne Sina, the psychic factors play a prominent role in the causation of this disease. Other factors, which are responsible for the disease, include hereditary & joint weakness etc. Ibne Sina categorized the etiology of Waja-ul-Mafasil into two types [3, 4, 6, 10] viz.

Asbabe fa'ilah (primary causes) and Asbabe munfa'ilah (secondary causes) while another eminent Unani scholar Ismail Jurjani in his treatise "Zakhirae khuwarezam Shahi" classified as "Asbabe asli" and "Asbabe a'rzi [5]."

Asbabe fa'ilah or primary causes Asbab-e-Fa'ilah, are the factors which directly produce the pathology of articular region and result in pain. These are responsible for the initiation of Waja-ul-Mafasil such as Sue mizaj (Maltemperament)

and Mawade fasidah (vitiated humours/morbid) [26]. According to Samarqandi, the madda (substance) which is responsible for the cause of Waja-ul-Mafasil is of a very thick consistency and white in colour, whereas Ibne Sina states that this madda almost resembles to pus (Reem). The humours responsible for the development of Waja-ul-Mafasil may be one or more of the following: Balgham (Phlegm), Dam (Blood), Safra (Yellow Bile) or Sauda (Sanguine or Black bile). Ibne Sina also mentioned that Waja-ul-Mafasil is caused by phlegm, blood, yellow bile and black bile in the decreasing order of frequency as follows [25]:

- Waja-ul-Mafasil Balghami is more common.
- Waja-ul-Mafasil Damvi is common.
- Waja-ul-Mafasil Safravi is less common.
- Waja-ul-Mafasil Saudavi is rare.

The Madda (Substance) causing Waja-ul-Mafasil accumulates in the joints due to the weakness of the joint called as zauf-e-mafasil [33]. Waja-ul-Mafasil is caused by accumulation of Mawad-e-Fasida (Literally meaning Toxic Substances) in the joint which happens due to following factors:

- Joint movement
- Joint space
- Joint fluid

The feature of the joint is that it attracts the fluid (Ratubat) towards itself. The joint movement is responsible for this. The Mawad moves towards the joint by the movement of the joint and the heat produced by the joint movement. The feature of the heat is that it attracts the fluid towards itself. The joints of the body have no power of absorption (Quwat-e-Jaziba) and as the absorption of the fluid according to Unani Physicians depends on the heat and as the bones, cartilage, ligaments, etc. which are the major constituents of the joint are having cold and dry temperament, so the Khilt which enters the joint cannot be reabsorbed and thus gets lodged in the joint. Since, the joints does not have the excretory power (Quwat-e-Dafe'ah) as well so the bad matter which needs to be excreted gets lodged in the joints and thus leading to disturbances in the joint. The Khilt in the joint gets putrefied and gets converted into the harmful products which then induce Wajaul-Mafasil [34], Asbabe Arzi or Secondary/Precipitating Factors These are the factors which indirectly affect the articular region and make the joints vulnerable to accept the morbid material with their subsequent accumulation, that result in organic as well as functional changes of the joints. There are total of 7 aggravating factors mentioned in the Unani classics:

- Giving up the exercise (Tarke Riyazat) [27],
- Weakness of stomach (Zaufe M'ada) leading to the absorption of impaired matter [27],
- Derangement (Su-e-Tarteeb) [2],
- Sedentary life style [2],
- Regular and excessive use of alcohol [2, 27],
- Excessive coitus and exercise after meals [2, 27],
- Cold and catarrh [2]

Other causes of accumulation of bad humours in the joint are as follows [2, 27]: Giving up the voluntary habitual excretion (Tarke Istefragh-e-Aadati) e.g. vomiting, purgation, venesection etc.; Cessation of normal involuntary excretion e.g. menstruation, piles etc.; Intestinal colic, Drinking of water on empty stomach; Anxiety, depression, insomnia etc. 4. Pathogenesis (Mahiyate marz) Joints get easily affected with various morbid matters, for the following reasons: Wide joint space as compared to other organs of body [1, 5]; Hypersensitivity due to nerve innervations [1, 2]; Barid yabis Mizaj (cold and dry temperament) of joints [5]; Zaeef hararat (Feeble heat) of joint [1]; Improper resolution of morbid matter (tahlil of mawad) in joint cavity [1]; Due to upright and dependent position of the organ as it lies in relation to the other organs [1, 3, 10]; Joints are covered with ligaments, tendons and muscles, hence the accumulated morbid matter are not easily removed through skin pores [1]; Weak quwate hazema wa dafea (digestive and excretory powers) [1,5].

Accumulation of mawade fuзooni (vitiated matter) in joints will produce pain and inflammation. Following factors are responsible for the collection of mawade fasidah within the joint spaces [5]; Weakness of joints increases susceptibility to accumulation of mawad [6]. When vigorous physical movements occur, it stimulates the mawad (matter) and produce heat in the joint cavity, which has the property of absorbing and attracting fluids or mawad (matter). During the movements, the morbid matters which are stagnated in the interstitial spaces starts migrating and gets collected in the joint cavity, since it has adequate space to receive. Besides this the temperament of the contents of joint like bone, cartilage, tendons and ligaments is sard wa khushk (cold and dry), due to this prime reason the joint fails to perform its digestion. Thus the morbid matter collected in the joint spaces is not eliminated properly, which gradually affects the joints [1,8].

**Diagnosis (Tashkhees)**

The diagnosis of Waja-ul-Mafasil due to Sue mizaj sada or maddi can be made through following points [25, 26]:

- Presence or absence of swelling, inflammation, heaviness.
- Pain in or over the joint.
- Color change over affected joint.

Onset of pain either sudden or gradual, if onset is gradual, without heaviness, inflammation or swelling and no change in skin color of affected joint, then it is considered to be due to sue mizaj sada, but Waja-ul-Mafasil is rarely found in sue mizaj sada. Change in tactile sensation, pulse, urine and other Unani diagnostic parameter are helpful in knowing the nature of sue mizaj. If pain is mild, absence of heaviness, shifting in nature, with severe distension, indicates due to Riyah. Presence of marked swelling or inflammation, color changes, sudden onset of disease, or pain with heaviness is considered due to khilti madda.

General principles of Treatment The treatment of Waja-ul-Mafasil in Unani system of medicine is carried out by using one of three modes or with combination viz [7, 32].

Ilaj bit Tadbeer wa Ilaj bit taghzia (Regimnal therapy and Dietotherapy)

Ilaj bid Dawa (pharmacotherapy)

Ilaj bil Yad (surgical therapy) The principle of treatment aims at restoring the normal temperament in case of Waja-ul-Mafasil Sada, and correcting the imbalance in the Khilt (humour) through Imala (Diversion) and Istifraagh (evacuation) in case of Maddi Waja-ul-Mafasil, The treatment modalities consist of internal administration of drugs for correction of deranged temperament, elimination of morbid humours (In case of Waja-ul-Mafasil Maddi), anti-inflammatory, analgesic drugs and strengthening of muscles and nerves. In addition, a proper regime regarding diet should be followed besides the abstinence from food which precipitates the disease. Zakariya Razi advised that all the kinds of meat are harmful for the Waja-ul-Mafasil patients and recommended the vegetables. Exercises are recommended and oil massaging is also recommended [38]. Ibne Sena in his book Al Qanoon writes, treatment of Waja-ul-Mafasil is easy in its initial stages, while it becomes difficult to treat when it becomes chronic [15].

**Principles of Management in Waja-ul-Mafasil:**

It can manage in following manner:

1. To relieve symptoms and signs: Oral as well as local use of analgesic and sedative drugs. Anti-inflammatory drugs and measures.
2. Treating the root cause i.e. Ta'deel- e- Mizaj (correction of deranged temperament) Tanqiya- e- Madda/ Istafraq- e- Madda (evacuation of morbid material) via Fasad (venesection), Hijamah (cupping), Munzij- wa- Mus'hil therapy (concoction and purgatives), Mo'ariqat (diaphoretics), Muddirat (diuretics) and Muqqiyyat (emetics).

3. Strengthening of Quwat- e- Mudabbira- e- Badan (medatrix naturae), so that it can combat the disease).
4. Tabreed (cold sponging)
5. Nutool (pouring of decoction of drugs)
6. Bukhoor (Vaporization)
7. Aabzan (feet bath)
8. Riyazat (exercises)
9. Dalak wa Massages
10. Fasad (Venesection)
11. Irsal-e-Alaq (Leech Therapy)
12. Hijama (Cupping)

Roghaniyat (Oils) used for Waja-ul-Mafasil: Roghane Baboona, Roghane Dhatura, Roghane Surkh, Roghane Suranjan, Roghane Gule Aak, Roghane Malkangni, Roghane Hifte Barg, Roghane Kuchlal, Roghane Hina, Roghane Zanjabil, Roghane Shubit, Roghane Qust [1]. Zakariya Razi, quotes Al Yahudi as, "In case of sanguinous sciatica, Qai (emesis) is more beneficial than Ishal (purgation) and when the Ishal (purgation) is to be done, it should be preceded by Qai (emesis) and followed by Huqna (enema) with oils, Hijamah without scarification over both thighs and application of Roghan-e-Hanzal (colocynth oil) on the affected site [2]." According to Shama'un, "In case of Irq-un-Nisa (sciatica) Hijamah (cupping) will be done over the site of pain, in order to achieve the benefit [3]. According to Bolas, In case of Irqun-Nisa (sciatica), Hijamah (cupping) with both scarification and without scarification will be done over hip in the beginning of the disease" [4]. Ismail Jurjani has mentioned Hijamah under the treatment of Waja-ul-Warik and Irq-un-Nisa. According to him, if the treatment does not relieve disease, then Hijamat-e-Nariyah (Fire cupping), Sitz bath in sulfur containing water and Zamad-e-Munfil (vesicant poultice) should be operated to drain morbid humours from deep inside the joints towards the surface of affected area . Repeated attempts of Hijamah by suck of liberal amount of blood generally relieve the condition by eliminating morbid materials from the joints." Azam Khan has mentioned the Hijamah (cupping) under the management of Waja-ul-Mafasil Damvi. He writes, "Lastly those Tadabeer (regimens) should be carried out which have Muhalil (anti-inflammatory) and Mulattif effect and drain the deep seated morbid materials towards the body surface. According to Samaqandi, "The treatment of Irq-un-Nisa (Sciatica) resembles to that of Waja-ul-Mafasil and is similar in few aspects to that of Waja-ul-Warik. So the Hijamah and Taleeq can also be regarded as beneficial in its treatment." From above cited quotations it is clear that the Hijamah is the best method for local evacuation from the joints. Hijamah (cupping) not only induce Istafraq (evacuation) and Imala (diversion), but has also antiinflammatory and demulcent effect. The above quotation reveals that Hijamah is useful in the treatment of Irq-un-Nisa, Waja-ul-Mafasil as well as Waja-ul-Warik. Hijamah-bilaShart (Dry Cupping) is done for Imala (Diversion of morbid material) and pain relief, whereas Hijamah-bish-Shart (Wet cupping) can be used for both pain relief and (Istafraq) evacuation of morbid material. At present Hijamah is used widely in form or another.

- Ilaj bid Dawa (Pharmacological Treatment) A large number of drugs, single and compound formulations, have been mentioned in the context of the treatment of Wajaul-Mafasil. Most commonly used drugs are given as under:
- **Single drugs (Mufradat):** Suranjan (Colchicum luteum Baker), Bozidan (Tanacetum umbelliferum), Asgandh (Withania somnifera), Filfil Siyah (Piper nigrum), Turbud (Operculina terpehum), Khardal (Brassica nigra Linn), Zanjabil (Zingiber officinale), Sana Maki (Cassia augustifolia), Mako (Solanum nigrum), Haleela Siyah (Terminalia chebula), Kasni (Chicorium intybus Linn), Badiyan (Foeniculum vulgare), Gul-e-surukh (Rosa damascus), Baboona (Matricaria chamomilla), Elva/ Sibr

(Aloe barabdensis), Lufah/ Yabrooj-us-Sanam (Atropa belladonna), Marzanjosh (Origanum majorana), Muqil (Commiphora muqil), Nakhona (Astragalus hamosus), Qunturyoon (Centauria centaurium), Qust (Saussurea lappa), Saqmonia (Convolvulus scammonia), Shahatra (Fumaria parviflora) [10,21,38].

• **Compound Unani Formulations (Murakkabat):**

Habb- e- Suranjan, Habb- e- Asgandh, Habb- e- Azraqi, Habb-eMuntan, Habb-e- Najah, Habb-e-Sheetraj, Habb- e- Mafasil, Habb- e- Kuchla, Iyarij Faeqra, Jawarish Jalinoos, Jawarish Safarjali, Majoon Azraqi, Majoon Chobchini, Majoon Najah, Majoon Safarjali, Majoon Suranjan, Majoon Ushba, Qurs Mafasil, Tiryayq- e- Kabir, Tiryayq- e- Arba', Tiryayq-e-Farooque [2-4, 6-7.]. Unani formulations used for local application Roghan- e- Suranjan, Roghan- e- Surukh, Roghan- e- Mafasil Hakeem Ajmal Khan, Roghan-e-Qust, Roghan-e-Marzanjosh, Roghan- e- Baboona, Roghan- e- Zaitun, Roghan- e- Badam, Roghan- e- Auja, Roghan- e- Chobchini, Roghan- e- Dhatura, Roghan- e- Balsan, Roghan- e- Satawri, Roghan- e- Jundaebedastar, Roghan- e- Gul- e- Aakh, Roghan- e- Kuchla, Roghan- e- Mom, Roghan- e- Hanzal, Roghan- e- Sosan [2-7, 9-10,30,35-40].

**CONCLUSION**

Arthritis comes under a broad term Waja-ul-Mafasil which encompasses entire joint disorders like inflammatory, noninflammatory, infectious, metabolic and other musculoskeletal disorders. On deep insight, arthritis can be correlated with various types of Waja-ul-Mafasil in resemblance to the predisposing factors, aggravating factors and pattern of joint involvement. The principle of treatment aims at restoring the normal temperament, and correcting the imbalance in the Khilt (humour) through Imala (Diversion of morbid material) and Istifraagh (Evacuation of morbid material). These objectives are fulfilled by adapting both non pharmacological and pharmacological methods of treatment in Unani system of medicine. Keeping in view side effects of current treatment modalities of arthritis, it can be concluded that Unani mode of treatment provides an alternative method of treatment, being both economical and free of side effects to a maximum level. Of late scientific studies with different Unani formulations are being carried out by different research institutions to validate these claims. As an adjuvant therapy Hijamah provides significant improvement in pain and has a marked effect in improving the quality of life. Hence the objective of this review would be fully accomplished if it reaches a larger section of medical domain and ultimately benefit the humanity.

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