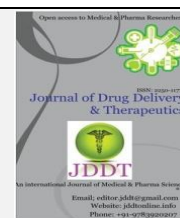


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Review Article

Concept and Management of *Waja'al-Mafasil* (Arthritis) in Unani System of Medicine

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ABSTRACT

Arthritis is described in Unani system of Medicine under a broad term *Waja'al-Mafasil* which covers entire joint disorders like inflammatory, non-inflammatory, infectious, metabolic and other musculoskeletal disorders. According to *Unani* concept, the pathological changes in the joints are caused mainly by derangement of humoral (*Akhlat*) temperament and accumulation of *Fasid madda* (Morbid material) in the joint spaces. The main principles of treatment in Unani system of Medicine include *Ilaj bi'l Ghidha* (Dieto-therapy), *Ilaj bi'l Tadbir* (Regimenal therapy) and *Ilaj bi'l Dawa* (Pharmacotherapy). All the said principles are recommended for the treatment of *Waja'al-Mafasil*. The aim of treatment for patient with *Waja'al-Mafasil* is to reduce morbidity and disability. In India it affects 15% (180 million) people. Ancient *Unani* scholars have elaborately described *Waja'al-Mafasil* and managed with multidimensional approach, whereas with the present day management of disease mainly with non-steroidal anti-inflammatory drugs (NSAIDs) which have large number of adverse effects. This review article highlight the salient features describing arthritis with reference to *Waja'al-Mafasil* for empathizing disease condition as enunciated by Unani scholars to provide a better alternative in terms of cost effective managements and side effects.

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INTRODUCTION

The term *Waja'al-Mafasil* consists of two words, "*Waja*" means pain and "*Mafasil*" means joints, hence *Waja'al-Mafasil* means pain in joints. In the classical *Unani* texts, *Waja'al-Mafasil* is broadly explained and its clinical findings closely resemble the findings of Rheumatoid Arthritis (RA) mentioned in modern system of medicine¹⁶. *Waja'al-Mafasil* is also known as *Gathiya*^{6,21} and this is one of the hereditary diseases⁴⁰ *Buqrāt* (Hippocrates), *Jālinūs* (Galen), *Rāzī* (Rhazes), *Ibn Sina* (Avicenna) and other Unani physicians described the painful joints of hands and feet under the term *Waja'al-Mafasil*. Involvement of other joints like hip, heel, back and toes are called in the name of *Waja'al-Khāsira*, *Waja'al-'Aqib*, *Waja'al-Qatan* and *Niqris* respectively⁴⁰.

The history of *Waja'al-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 to 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. *Waja'al-Mafasil* is one of the diseases that has been elaborated thoroughly in the Unani classical literature¹⁶.

Hippocrates presented the first compendium on the disease known as *Kitab-'al-Mafasil* while Dioscorides (70 AD) described the disease in detail in his book *Kitab-al-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-al-Elal-wal- Amraz*. Feil Gharyoos (465 AD) has written treatises with the name of *Risala Fee 'Irq al-Nasā* and *Risala Niqris*. Yuhana Bin Mas'waih (812 AD) in his books *Kitab-ul-Kamal wa Tama* and *Al Mushajjar ul Kabir*, and Thābit ibn Qurra (836 AD) in his books *Auja-'al-Mafasil* and *Kitab al-Dhakhira fi 'Ilm al-Tibb*, described the causation and line of treatment in detail. Hunain Bin Ishaq (838 AD) in his book

Tarkeeb-al-Adwiya, Rabban Tabri (898 AD) in *Firdaws al-Hikma fi'l Tibb*, Majoosi (930 AD) in *Kamil al-Sana'a al-Tibbiyya*, Rāzī (930 AD) in *Kitab al-Hawi fi'l Tibb*, Nooh-ul-Qamar (990 AD) in his book *Ghena Muna*, Masihi (1010 AD) in *Kitab-ul-Miah* and Ibn Sīna (1037 AD) in *Al Qanoon* described that the disease is curable in initial stage, but on chronicity, it can only be relieved. Jurjani (1137 AD) in *Dhakhira Khawarizm Shahi*, Ibn Zuhr (1162 AD) in *Kitab-at-Taiseer*, Ibn Rushd (1188 AD) in *Kitab-ul- Kulliyat*, Mooosa Bin Maimoon (1214 AD) in *Al Fusool*, Samarqandi (1232 AD) in *Al-Asbab wa'l 'Alamat* and Nafees Bin Ewaz Kirmani (1500 AD) in *Sharh al-Asbab wa'l 'Alamat* discussed the etiology, pathogenesis and principles of treatment in detail ^{13, 22, 24, 31, 33, 34, 36, 39, 40, 41, 44}.

Ismail Jurjani, states that "When the morbid material is accumulated in the joints of organs and results in the inflammation and pain, it is called *Waja'al-Mafasil*." According to *Dawood Antaki*, most of the physicians call it *Marz-al-Malook* ¹³. Depending upon the joints involved *Waja'al-Mafasil* is named accordingly as *Niqris* (Gout), *Waja'al-Warik* (Pain of hip joint), *'Irq al-Nasā* (Sciatica) and *Waja'al Rukbah* (Knee pain) ^{8, 25}. Sometimes it also involves the jaws, ear ossicles and vertebrae and become complicated to diagnose ²⁵.

Rāzī (Rhazes) and *Ibn Sīna* (Avicenna) described the main causative factors of *Waja'al-Mafasil* (Rheumatoid Arthritis) as weakness of joints, impairment of temperament of whole body/single organ, such as joints⁴². Furthermore, they described the reason of *Waja'al-Mafasil* (rheumatoid arthritis) as *Qillat-i-Harārat Gharīziyya* (deficient innate heat), it has also been proved that temperature of the joints is less than other parts of the body. According to the Unani physicians, absorption of the morbid humours is slow at low temperature and it is a common reason for accumulation of wastages in the joints^{9, 36}. Vigorous exercise or hard physical work associated with improper or poor nutrition are also some important reasons of *Waja'al-Mafasil* (Rheumatoid Arthritis) ^{9, 36}.

Waja'al-Mafasil (Rheumatoid Arthritis) is the most common form of chronic inflammatory joint diseases. Besides *Sū'e-Mizāj* (derangement of temperament), there are several other concepts defining the disease. According to *Ibn Sīna* (Avicenna), the causative organism of the disease is *Ajsām-i-Khabīsa* (foul bodies) while another group says that *Hāmiz Labanī* (lactic acid) is the root cause which is produced by the derangement of digestive process and accumulates in the blood and joints and produces *Waja'al-Mafasil* (Rheumatoid Arthritis) ²⁴. Depending upon the *Mādda* affecting the joints, *Balgham* (phlegm) predominates, *Dam* (blood) and *Safra'* (bile) are next to it and quite rarely, *Sawdā'* (black bile) is involved. In some cases more than one *Khilt* (humour) is involved ²³.

According to *Ibn Sīna* (Avicenna) the greatest Unani physician of his time, *Waja'al-Mafasil* (Rheumatoid Arthritis) is a clinical condition of pain with or without stiffness in specific joint or more than one joint caused by accumulation of *Rutūbat Gharība* (foreign humour) in the joints ⁴⁰. *Waja'al-Mafasil* (Rheumatoid Arthritis) affects the people in the age group of 16-35 years. Indigestion, prolonged breast-feeding, poverty, cold climate, worry etc are its predisposing factors ²⁴.

Classification of *Waja'al-Mafasil* (Description According to Unani)

Waja'al-Mafasil has been classified by the eminent Unani physicians on various criteria which are given below:

- Depending on the severity of clinical features and duration of disease
 - a. Haad (Acute)
 - b. Muzmin (Chronic)
- Depending on the humoral derangement
 - a. Hāar (Hot)
 - b. Bārid (Cold)
 - c. Yābis (Dry)
- Depending on etiology
 - a. *Waja'al-Mafasil Sāda*
 - b. *Waja'al-Mafasil Māddi*
 - c. *Waja'al-Mafasil Reehi*
 - d. *Waja'al-Mafasil Ufooni*
- Depending on the type of *Mādda* (Morbid material)
 - a. *Waja'al-Mafasil Dāmvi* (Sanguinous)
 - b. *Waja-ul- Mafasil Sāfrāwī* (Bilious)
 - c. *Waja'al-Mafasil Bālghami* (Phelgmatic)
 - d. *Waja'al-Mafasil Saudāwī* (Melancholic)
 - e. *Waja'al-Mafasil Murakkab* (Compound) ¹²
- *Waja'al-Mafasil* Murakkab is further divided into
 - a. *Waja'al-Mafasil Sāfrāwī Bālghami*
 - b. *Waja'al-Mafasil Sāfrāwī Saudāwī*
- Depending on number of morbid materials involved
 - a. *Mufrad* (Single due to a single material)
 - b. *Murakkab* (Compound due to more than one material)
- Depending upon the joint involved
 - a. *'Irq al-Nasā* (From hip radiating downwards)
 - b. *Niqris* (Gout)
 - c. *Waja'al-Zahr* (Backache)
 - d. *Waja'al-Warik* (Pain of Hip joint)
 - e. *Waja'al-Rukbah* (Knee joint)
 - f. *Waja'al- Khasira* (Low backache) ^{2, 3, 4, 5, 6, 12, 14, 16, 18, 20, 21, 25, 26, 27, 28, 32, 43}
 - g. *Waja'al-Saqain* (calf pain) ¹³
 - h. *Waja'al-Aqib* (heel pain) ¹³

Prevalence and *Asbabb-e-Mu'iddah* (Predisposing Factors)

- **Age:** Young adults are predominantly affected followed by elderly and children^{9, 14, 42}.
- **Sex:** Males are affected more than females and eunuchs are usually not affected^{38, 26}.
- **Season:** The incidence of *Waja'al-Mafasil* is more in *Rabi* (spring) followed by *Khareef* (autumn) ^{6, 12, 22, 23, 29, 45}
- **Hereditary:** *Waja'al-Mafasil* may have hereditary patterns usually of maternal origin^{15, 40, 43}.

- **Ethnicity:** *Waja'al-Mafasil* may vary in its susceptibility to develop among different ethnic groups ^{4,5,24}.
- **Over Exhaustion and Excessive Sunlight Exposure:** Over exhaustion, hard work, vigorous exercises, excessive exposure to sunlight and tiredness aggravate the disease, particularly when there is *Imtilā'* (congestion) ^{36,40,43}.
- **Diseases:** *Qaulanj* (Intestinal colic) if treated improperly may precipitate *Waja'al-Mafasil* as a result of *Imala'* (diversion) of *Mawad-e-Fasida* (morbid material) towards the joint spaces. Syphilis and Gonorrhoea, frequent *Tukhma* (dyspepsia) and excessive cold and catarrh also precipitates the disorder. *Waja'al-Mafasil* either precipitates or develops as a complication of *Hummiyāt* (fevers). The convalescent people and those who have suffered from chronic disorders with improper treatment are also vulnerable to the development of *Waja'al-Mafasil* ^{9,14,27,29}.
- **Sudden Cessation of *Mustafraghat-e-Mo'tada'*** (Habitual Evacuants): Sudden Cessation of *istifraghat* (evacuations) which were done habitually like purgation, vomiting, bleeding in the form of menstruation or bleeding of hemorrhoids; bloodletting e.g., in the form of *fasd* (Venesection), etc. can precipitate the disease. ^{6,27,28,43}.
- **Miscellaneous:** Besides the above factors, sedentary life style, *Tark-e-Riyadat* (cessation of physical exercise) or *Riyadat* (physical activity) on *Imtilā'* (congestion), overeating, excessive intake of sweets or cold and moist diet, excessive drinking and intake of water in the early morning on empty stomach, alcoholism and habitual of continuously being in a state of inebriation, excessive coitus or coitus on *Imtilā'* (congestion), exposure to cold, excessive bathing particularly *Hammam* (Turkish bath) on full stomach or at evening or night, excess of anger, Ham-wa-Gam (being in a state of depression or sadness). In addition, all those causes lead to the formation of *Mawad-al-Fasida* (Morbid materials) which include most of the above factors besides some particular diets like *Fawakihāt-e-Murattibā* (Juicy fruits) and various types of sweets in particular Halwa which is a type of sweet ^{1,6,9,10,11,20,21,23,28,35}.

Etiopathogenesis of *Waja'al-Mafasil*

Ibn Sinā was the first to give detailed description regarding the etiopathogenesis of *Waja'al-Mafasil* followed by other eminent physicians. He mentioned in his treatise the following basic causes of *Waja'al-Mafasil*-

- *Asbab-e-Fa'ilāh*, are the factors which directly produce the pathology of articular region and result in pain.
- *Asbab-e-Munfa'ilāh*, 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 in functional changes of the joints. ^{14,15,19,24,25,26,27,28}

Asbab-e-Fa'ilāh are classified as:

- *Su'-i-Mizāj* (derangement of temperament) which maybe *Sadā* or *Mā'ddi*
- *Mawad-al-Fasidā* (Morbid material)

a. *Su'-i-Mizāj* (derangement of temperament)

It may be of a particular vital organ like heart or generalized. *Su'-i-Mizāj* may be *Mufrād* (single), *Balghāmi Khām* (immature phlegmatic), *Khalis Khooni* (pure sanguine), rarely *Khālis Sāfrā* (pure bilious) and *Khālis Riyāh* (pure gaseous or windy) and very rarely of *Khālis Sāwdā* (pure black bile). *Murakkab* may be *Balghām* and *Sāfrā* (phlegm and bile) or *Sāwdā* and *Sāfrā* (black bile and bile) or *Khoon-e-Sāfrāwi* (bilious blood) or *Khoon-e-Balghāmi* (phlegmatic blood) or *Khoon-e-Sāudāwi* (Melancholic blood). The *Su'-i-Mizāj* maybe either *Hāar Multāhib* (inflammatory and heat producing), *Bārid Munjāmid* (refrigerant and consolidate derangement of temperament) or *Yābis Muqābiz* (desiccant and astringent derangement of temperament) ^{3,6,11,20,21,25,28,32}.

b. *Mawad-al-Fāsida* (Morbid material)

The *Mawad-al-Fāsida* (morbid material) may be *Sāda* (without involvement of humours, causing only functional changes of articular tissue) or *Mā'adi* (with humoral involvement resulting in organic changes in joints), *Mufrād* or *Bāseet* (single) like *Reeh* or *Murakkab* (compound) composed of two, three or four *Akhlat* (humours). The *Ma'dda-al-Fāsida* (morbid material) may be *Dam-e-Mufrād* (simple sanguine), *Dam-e-Balghāmi* (phlegmatic sanguine), *Dam-e-Sāfrāwi* (bilious sanguine), *Dam-e-Sāudāwi* (Melancholic sanguine), *Balghāmi Mufrad* (simple phlegmatic), *Sudda-e-Balghāmi Kham* (obstructive raw phlegmatic), *Murra-e-Mufrāt* (simple bilious), *Sāfrā-e-Balghāmi* (phlegmatic bile) *Middah* (pus) and *Reeh-e-Motashābika* (pent up gas). Out of these, the most common form of morbid material is *Sāfrā-e-Balghāmi* (phlegmatic bile), then *Balghāmi-e-Khām* (raw phlegmatic), then *Dam* (sanguine), then *Sāfrā* (bilious) and rarely by *Sāwdā* (black bile) ^{3,6,11,20,21,25,28,32}

Asbāb-e-Munfa'ilāh

These are the causes which are related to the structure of the organ, affecting them indirectly with a consequence of susceptibility to the disease. These are:

- Dilatation of the natural passage which may be either congenital or acquired.
- Development of a new unnatural passage due to movement, *Tahāllul* (dissolution) and *Takhālkhu* (rarefaction) which may be congenital or acquired.

The affected organ becomes the cause of occurrence of the *Waja'al-Mafasil* due to following factors:

- Stable derangement of temperament particularly *Barid* (cold derangement)
- *Du'fal Udwu* (weakness)
- *Du'fal Udwu Khilqi* (congenital weakness) which is not related to the temperament.
- Intensive absorption of heat particularly when it is supported by movement, other types of pains and external factors.
- As a result of the organ being normally situated lower than other organs, the morbid materials move actively towards it that is the cause of its great incidence in legs and the hip. ^{6,9,20,21,28,32,35}

Clinical Features

The onset of *Waja'al-Mafasil* is usually insidious but in some cases, although rare, acute onset is also mentioned.

Depending on the type of etiology, clinical features vary among different types of *Waja'al-Mafasil*, which are summarized below:

a. *Waja'al-Mafasil Sadā*

This type of *Waja'al-Mafasil* is found rarely and is of less duration. It is diagnosed by the absence of the symptoms of *Imtil'a* (congestion) and swelling. The symptoms are relieved by cold or heat exposure.^{3, 4, 5, 9, 40}

b. *Waja'al-Mafasil Dāmvī*

Generalized and localized symptoms of *Ghalba-e-Dam* (sanguine predominance) are present. Affected part will be reddish, edematous and tender; and symptoms are relieved by cold exposure and venesection.^{4, 5, 10, 19, 27, 45}

c. *Waja'al-Mafasil Safrāwī*

Generalized and localized symptoms of *Ghalba-e-Sāfrā* (bilious predominance) are present as yellow discoloration with a red tinge. Joint swelling is smaller as compared to *Waja'al-Mafasil Dāmvī*, while as pain, throbbing and inflammation are more in magnitude. Symptoms are relieved by cold exposure. Besides, there is craving for sour things.^{10, 19, 45}

d. *Waja'al-Mafasil Balghāmī*

Generalized and localized symptoms of *Ghalba-e-Balghām* (phlegmatic predominance) are present. Affected site will be whitish in color, swollen and cold on touch. Pain and throbbing are minimal. Symptoms are relieved on hot exposure.^{4, 5, 9, 27, 31}

e. *Waja'al-Mafasil Saudāwī*

Generalized and localized symptoms of *Ghalba -e-Sāwdā* (melancholic predominance) are present. Affected joint is dusky, hard and cold on touch. Sometimes the color changes to bluish or purplish tinge. Splenomegaly and increased sexual desire may also be found. Symptoms are relieved on heat and wet (moist) exposure.^{1, 2, 3, 9, 23}

f. *Waja'al-Mafasil Reehī*

Joint swelling is nominal with lightness in affected organ. Pain is fleeting and shifting in nature.^{3, 9, 27}

g. *Waja'al-Mafasil Mīddī*

Affected joint is extremely hot with having itching, tickling and burning sensation. Symptoms are relieved by cold exposure and worsened by heat exposure.^{9, 22}

h. *Waja'al-Mafasil Murakkab*

Combined clinical picture of the different accumulated humors involved will be present with pain. Symptoms are relieved by either by heat or cold exposure.^{19, 22, 24}

Complications and Fate of Disease

Waja'al-Mafasil may complicate in various disorders depending on quality and quantity of morbid materials and the chronicity of the disease. Complications include *Taḥajjur wa Ṣalāba al-Mafasil* (ankylosis/ joint stiffness with restricted movements), dislocation, formation of nodule in between joints, joint deformities. Certain systemic complications may also occur though rarely which include pericarditis, endocarditis, myocarditis, pneumonitis, pleurisy, tremors, chorea and mania but the most dangerous type is meningitis.^{33, 36, 40}

Line of Treatment

Principle line of treatment in *Waja'al-Mafasil* can be set forth in the following manner:

I. To relieve symptoms and signs

- Analgesia: Oral as well as local use of analgesic and sedative drugs.
- Anti-inflammatory drugs and measures.

II. *Ta'deel-e-Mizāj* (correction of deranged temperament)

Tanqiya-e-Maddā / Istifrāghāt-e-Maddā (evacuation of morbid material) via *Fasd* (venesection), *Hijamā* (cupping), *Mundij-wa-Mus'hil* therapy (concoction and purgatives), *Mo'arriqat* (diaphoretics), *Muddirāt* (diuretics) and *Muqqiyāt* (emetics).

III. Strengthening of *Quwat-e-Mudabbira-e-Badān* (medeatix nature)

- Tābreed* (cold sponging)
- Nutool* (Pouring of decoction of drugs)
- Bukhoor* (Vaporization)
- Abzān* (Sit's bath)
- Riyadāt* (Exercises).^{4, 5, 12, 15, 27, 37}

Management

The main principles of treatment in Unani system of medicine include '*Ilaj bi'l Ghidha*' (dieto-therapy), '*Ilaj bi'l Tadbir*' (Regimenal therapy) and '*Ilaj bi'l Dawa*' (pharmacotherapy). All the said principles are recommended for the treatment of *Waja'al-Mafasil*. The principles of management of different varieties of *Waja'al-Mafasil* differ from one another. The aim of treatment for patient with *Waja'al-Mafasil* is to reduce morbidity and disability. The principle of treatment aims at restoring the normal temperament in case of *Waja'al-Mafasil Sāda* and correcting the imbalance in the *Khīlt* (humour) through *Imal'ā* (Diversion) and *Istifrāgh* (evacuation) if *Waja'al-Mafasil Māddi*. The treatment modalities consist of internal administration of drugs for correction of deranged temperament, elimination of morbid humours (in case of *Waja'al-Mafasil Māddi*), 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. *Zakāriyā Rāzi* advised that all kinds of meat are harmful for the *Waja'al-Mafasil* patients and recommended vegetables. Exercises and oil massages are also recommended.^{4, 5, 12, 15, 27, 37}

Ibn Sinā in his book *Al Qānoon* writes, treatment of *Waja'al-Mafasil* is easy in its initial stages, while it becomes difficult to treat when it becomes chronic. Various measures of treatment mentioned in *Unani literature* for the management of *Waja'al-Mafasil* can be summarized as under:

- Diversion of morbid material in opposite direction (*Imal'ā-e-Mawād*)
- Evacuation (*Istifrāgh*) of morbid material.
- Toning of *Quwwat* of affected joints.
- In case of *Dāmvī* (Sanguineous) type of *Waja'al-Mafasil*, Venesection (*Fāsd*) should be performed followed by emesis (*Qāi*) and purgation (*Is'hal*).

- In cases of *Waja'al-Mafāsīl Balghāmi* and *Waja'al-Mafāsīl Saudāwī* evacuation of morbid material (*Tānqiya e mawād*) should be preceded by concoction (*Nuzj*).
- *Mundij* (Concoctive) and *Mushil* (Purgative) therapy especially in *Waja'al-Mafāsīl Balghāmi* and *Waja'al-Mafāsīl Safrāwī*.
- Diuresis (*Idrār*) should be performed in *Waja'al-Mafāsīl Muzmin*.
- Emesis (*Qāi*) is very helpful in *Waja'al-Wārik* (hip joint pain).
- Analgesics (*Mussākināt*) should be used both locally as well as systemically for pain relief.
- *Hijāma* (Cupping) is done for pain relief whereas wet cupping can be used for both pain relief and evacuation of morbid material.
- *Hijāma* (cupping) and *Irsal-i-'Alāq* (leeching) are recommended for *'Irq al-Nasā* and if not relieved, *amāl-e-Kāi* (cauterization) should be performed at the affected site. *Hijāma* is used for the treatment of *Waja'al-Wārik* (hip joint pain) in the initial course of disease. Besides *Hijāma bi'l Nār* (Fire cupping) is beneficial in *Waja'al-Zāhr* (backache)².
- In case of acute inflammation, venesection (*Fāsd*) should be done in *Waja'al-Mafāsīl Dāmvi*, whereas *Mundij* and *Mushil* therapy should be given in *Waja'al-Mafāsīl Safrāwī*. In cases of chronic inflammations only *Mundij* and *Mushil* should be given.
- Suranjan (*Colchicum luteum* L.) is a drug of choice and highly beneficial in all types of *Waja'al-Mafāsīl* and can be used both locally as well as internally. It gives relief from pain, strengthens the joints and clears the morbid materials, narrows the vessels and cavities of joints which in turn prevents the drainage of morbid materials.^{4, 5, 24, 27}
- *Adwiya-e-Harrā* (hot temperament drugs) and *Adwiya-e-Mukhaddirā* (anesthetic drugs) should not be prescribed in the initial course of disease, as they can attract or divert morbid material towards the affected site.^{40, 22}
- *Amāl-e-Kāi* (cauterization) is beneficial for the *Waja'al-Mafāsīl Bārid* because it is helpful in drying up the *Ratubāt* and *Barudāt* (coldness and fluids).³⁶
- When the *Waja'al-Mafāsīl* becomes chronic, *Munfitāt* (vesicant) drugs are prescribed.³⁶

'Ilaj bi'l Ghidha' (Dieto therapy)

According to *Rāzi*, bird meat and fish are beneficial in *Waja'al-Mafāsīl*. Other dietary items recommended are wheat, pulses especially Bengal gram, Indian Millet, Big beans, French beans, Palak (*Spinacia olearacea* L.), Pyaz (*Allium Cepa* L.), Chuqandar (*Beta vulgaris* L.), Carrot (*Daucus carota* L.), red chilly (*Capsicum annum* L.), black pepper (*Piper nigrum* L.), Injeer (*Ficus carica* L.), Badam (*Prunus amygdalus* L.), Akhrot, Khajoor (*Phoenix dactylifera* L.), Apricot, Angoor (*Vitis vinifera* L.), Aaloo, Pure ghee, Methi (*Trigonella Foenum* L.), Shaljam (*Brassica rapa* L.), Seb (*Malus sylvestris* L.), Makka (*Zea Mays* L.) and Papita (*Carica papaya* L.)^{1-5, 7, 9, 10, 12, 14, 15, 18}.

'Ilaj bi'l Dawa' (Pharmacotherapy)

A large number of drugs, single and compound formulations, have been mentioned in the context of the treatment of

Waja'al-Mafāsīl. Most commonly used drugs are given as under:

Single drugs (Mufradat)

Oral Administration

Suranjan (*Colchicum luteum* L.), Asgandh (*Withania somnifera* L.), Bozidan (*Tanacetum belliferum* L.), Filfil Siyah (*Piper nigrum* L.), Turbud (*Operculina terpeum* L.), Zanjabeel (*Zingiber officinale* L.), Sana Maki (*Cassia augustifolia* L.), Mako (*Solanum nigrum* L.), Haleela Siyah (*Terminalia chebula* L.), Kasni (*Chicorium intybus* L.), Badiyan (*Foeniculum vulgare* L.), Gul-e Surkh (*Rosa Damascus* L.), Elva/ Sibr (*Aloe barbadensis* L.), Lufah/ (*Atropa belladonna* L.), Muqil (*Commiphora mukul* L.), Qunturyoon (*Centauria centaurium* L.), Qust (*Saussurea lappa* F.), Saqmonia (*Convolvulus scammonia* L.) and Shahatra (*Fumaria parviflora* L.)^{1-5, 7, 9, 10, 12, 14, 15, 18, 19, 25-27, 30, 32, 35, 37, 38, 42, 45}.

Local Application

Nakhoona (*Astragalus hamosus* L.), Baboona (*Matricaria chamomilla* L.), Khardal (*Brassica nigra* L.) and Marzanjosh (*Origanum majorana* L.)

Compound Unani Formulations (Murakkabat)

Oral Administration

Ma'jun Jograj Gugul, Ma'jun Suranjan, Safuf Suranjan, Habb-e-Suranjan, Habb-e-Gul-i Akh, Habb-e-Asgandh, Habb-e-Azraqi, Habb-e-Muntan, Habb-e-Najah, Habb-e-Sheetraj, Habb-e-Mafasil, Habb-e-Kuchla, Iyarij Faeqra, Jawarish Jalinoos, Jawarish Safarjali, Ma'jun Azraqi, Ma'jun Chobchini, Ma'jun Najah, Ma'jun Safarjali, Ma'jun Ushba, Qurs Mafasil, Tiryaaq-e-Kabir, Tiryaaq-e-Arba' and Tiryaaq-e-Farooque^{7, 11, 18, 26, 30, 31, 33, 34, 36, 40}

Local Application

Roghan-e-Malkangani, Roghan-e-Suranjan, Roghan-e-Chahar Barg, Roghan-e Haft Barg, Roghan-e-Surkh, 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 and Roghan-e-Sosan.^{7, 11, 15, 19, 22, 24, 30, 31, 33, 34, 36, 37, 40, 44, 45}

'Ilaj bi'l Tadbir (Regimenal therapy)

'Ilaj bi'l Tadbir is basically application of certain special techniques or physical methods of treatment to improve the constitution of body by removing waste materials and improving the defense mechanism of the body. Some therapies are effective in *Waja'al-Mafāsīl* like:

➤ Hijāma (Cupping)

Hijāma is literally derived from an Arabic word '*hajm*' which stands for volume but technically used for "to suck". It is a technique in which a cup is applied over the surface of skin by creating vacuum and it is known as dry cupping (*Hijāmat bilā Shart*). Sometimes, scarification is done at the location of cupping to draw blood from the body part to relieve internal congestion and this process is known as wet cupping for evacuation of morbid matter from affected joint/joints^{7, 11, 15, 19, 22}.

➤ Fasd (Bloodletting)

Fasd is a method of absolute elimination (*Istifrāgh Kullī*), used to remove the excess of humours or to get rid of morbid matter (*Mawād Fāsida*) from the body. In this

procedure, an incision is given to the superficial veins and blood is allowed to flow^{7, 11, 15, 19, 22}.

➤ **Nutool** (Irrigation)

Nutool is a novel method in which water, oil, or medicated decoction is poured from a height over specific sites of body in certain diseases. It also enhances the local absorption of medicines thus helps in getting the desired action of medicine locally^{7, 11, 15, 19, 22}.

➤ **Tākmeed** (Hot fomentation)

Takmeed is the process which keeps the body or parts of the body warm. It is a therapeutic application which is basically used to relieve pain and stiffness^{7, 11, 15, 19, 22}.

CONCLUSION

Arthritis is described as such in Unani system of medicine but comes under a broad term *Waja'al-Mafāsīl* which encompasses entire joint disorders like inflammatory, non-inflammatory, infectious, metabolic and other musculoskeletal disorders. On deep insight, arthritis can be correlated with various types of *Waja'al-Mafāsīl* in resemblance to the predisposing factors, aggravating factors and pattern of joint involvement. The aim of treatment for patient with *Waja'al-Mafāsīl* 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). 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.

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