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## **ROLE OF UNANI MEDICINE IN THE MANAGEMENT OF WAJA-UL-MAFASIL BA'RID (CHRONIC OSTEOARTHRITIS)**

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### **ABSTRACT**

#### **Keywords:**

*Waja-ul-Mafasil, Mizaj,  
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*Waja-ul-Mafasil* is a broad term which encompasses almost all the painful conditions of joints. Clinically, its subtype closely resembles chronic primary generalized Osteoarthritis. As per humoral concept of Unani medicine, it may be caused by *Su-e-Mizaj Sada* and *Su-e-Mizaj Maddi* (improper temperament) due to involvement of abnormal *Akhalat* (morbid humours). According to WHO, osteoarthritis is the second commonest musculoskeletal problem in the world population after back pain, and has been projected as the 4<sup>th</sup> most important cause of disability in women and 8<sup>th</sup> in men. Although, the aetiology of the osteoarthritis is still not known; but female, age, obesity, occupational joint bending, physical labour and chondrocalcinosis etc, are the main risk factors, which are strongly associated with its pathogenesis. In conventional medicine, the mainstay of treatment is NSAIDs, aspirin, colchicines, Cox-2 inhibitors, intra-articular steroids etc, which provide symptomatic relief but also produce various adverse effects like nausea, dyspepsia, epigastric pain, gastritis and gastrointestinal bleeding. In Unani system of medicine, *Waja-ul-Mafasil* has been managed through a number of single and compound drugs both for oral and local use, and through special regimes of *Ilaj bit Tadbeer* (regimenal therapy). A considerable number of studies have been conducted in this respect, and other studies are being carried out to prove the potential role of Unani medicine in the management of *Waja-ul-Mafasil*. In this paper, the role of Unani medicine in the prevention and management of osteoarthritis has been thoroughly discussed.

## INTRODUCTION

*Waja-ul-Mafasil* (arthritis) is a generalized term which includes almost all the painful conditions of joints. Clinically, its subtype *Waja-ul-Mafasil Baarid* (OA having cold temperament) closely resembles to the primary generalized Osteoarthritis. According to WHO, osteoarthritis is the second commonest musculoskeletal problem in the world population (30%) after back pain (50%).<sup>1</sup> In India, the prevalence of osteoarthritis is about 5.78 %.<sup>1</sup> Among elderly, knee osteoarthritis is much common as compared to other form of arthritis,<sup>1,2</sup> causing pain and disability, hence WHO projected it as the 4<sup>th</sup> most important cause of disability in women and 8<sup>th</sup> in men.<sup>3</sup> Because of morbidity and disability related to osteoarthritis, it has become one of the most searched for disease to modulate the disease pathogenesis as well as make patients able to carry out their daily chorus.

OA is defined as hyaline cartilage loss, increased thickness and sclerosis of the subchondral bony plate, outgrowth of osteophytes at the joint margins, stretching of articular cartilage, mild synovitis, and meniscal degeneration.<sup>4,5,6,7,8</sup> The clinical picture of osteoarthritis strongly simulate with *Waja-ul-Mafasil Baarid*, which has been extensively elaborated by Unani physicians in greater details. Raban Tabri has defined it as the pain occurring in legs is due to *Buroodat* (coldness) and insensitivity, and is *Balghami* (phlegmatic) in temperament, which may become chronic later on.<sup>9</sup> Razi has further delineated it, according to him, *Niqris* (Gout), *Irqunnasa* (Sciatica), and *Waja-ul-Mafasil* belong to the same entity of pain occurring in the joints, but based on the affected joint, it has been given the separate names; thus the pain occurring in joints, except *Niqris*, and *Irqunnasa* is called *Waja-ul-Mafasil*.<sup>10</sup> Ismail Jurjani maintains that the pain arising in the joints of hands and legs due to deposition of morbid substances is “*Waja-ul-Mafasil Khaas*” (arthritis proper); although any painful joint of the body is called *Waja-ul-Mafasil* in general, but it is the common practice of the physicians that they only include painful joints of hands and legs in *Waja-ul-Mafasil*, and in Hindi, it is named as “Gathiya”.<sup>11</sup> According to Samarqandi, *Waja-ul-Mafasil* is a *waram* (inflammatory process) or pain which arises in *Mafasil* (joints), *Azlaat* (muscles) surrounding the joints, and *Ribatat* (ligaments).<sup>12</sup> Thus, *Waja-ul-Mafasil* is the pain and *waram* which arises in the *Mafasil*, *Azlaat*, and *Ribatat* of hands and legs.

**CLASSIFICATION OF WAJA-UL-MAFASIL (ARTHRITIS)**

Unani physicians have categorised it broadly in seven entities based on *Mizaj* (temperament) and *Akhlat* (humours) involved. *Su-e-Mizaj Sada* (simple immoderate temperament): there is no involvement of morbid material, or alteration in the normal *Khilt* (humour). It can be *Haar* (hot), *Baarid* (cold), or *Yaabis* (dry).<sup>13, 14</sup>

*Su-e-Mizaj Maddi*: (humoral immoderate temperament): there is involvement of morbid material, or alteration in the normal *Khilt* (humour), and it may be following types:

- 1) *Waja-ul-Mafasil Damvi* (sanguineous arthritis): it results due to excess blood.<sup>12,13,14</sup>
- 2) *Waja-ul-Mafasil Safravi* (bilious arthritis): it is produced by pure *Safra* (yellow bile), or *Dam-e-Safravi* (yellow bile mixed blood).<sup>12, 13, 14</sup>
- 3) *Waja- ul-Mafasil Balghami* (phlegmatic arthritis): here the causative factor is *Balgham* (abnormal phlegm), which contributes to its causation.<sup>12, 13, 14</sup>
- 4) *Waja-ul-Mafasil Saudavi* (black bilious arthritis): *Khilt-e-Sauda* (black bile) produces the knee pain.<sup>12, 13, 14</sup>
- 5) *Waja-ul-Mafasil Rihi* (pneumatic arthritis): *Madda-e-Rihi* causes *Waja-ul-Mafasil*.<sup>12,13,14</sup>
- 6) *Waja-ul-Mafasil Murakkab* (polyarthritis arthritis): it occurs due to mixture of two or more than two *Khilt*, and leads to the knee pain.<sup>12, 13, 14</sup>
- 7) If *Waja-ul-Mafasil* lasts for a longer duration, the morbid material gets solidified in the joints, leading to *Salaabat* (hardness) of joints,<sup>14</sup> or *Tahajjur-e-Mafasil* (stony arthritis).<sup>10</sup>

**Signs and Symptoms**

OA usually manifests unilaterally at the onset but becomes bilateral over a period of time.<sup>5</sup> It is characterized by painful joint, tenderness, decreased range of motion, crepitation, occasional effusion, and often inflammation of varying degrees. Initial symptoms are generally minimal, given the gradual and insidious onset of the condition.<sup>15</sup> Physical findings may include:<sup>4, 5, 8, 15, 16, 17, 18</sup> jerky, asymmetric (antalgic) gait with decreased weight-bearing time on the painful side, varus and/or fixed flexion deformity, joint-line and/or periarticular tenderness (secondary anserine bursitis and medial ligament), weakness and wasting of the quadriceps muscle, decreased joint flexion /extension secondary to pain with coarse crepitus, bony swelling around the joint line, mediolateral instability, and usually local temperature is not raised.

Based on the above mentioned clinical features of OA, it substantially simulates with those of *Waja-ul-Mafasil Baarid* either *Balghami* or *Saudavi*. *Waja-ul-Mafasil Balghami* is manifested by increased heaviness with least swelling, deep mild to moderate pain, but without warmth and burning. *Waram* is soft, small but equally expanded, and similar to colour of skin.<sup>11, 12, 13</sup> Razi has described that “*Tafarqo*”; a sound from the knee joint – clear description of crepitation– denotes the presence of *Rutubaat* (fluid).<sup>10</sup> So far the “*Varus*” is concerned; Samarqandi says that in case of *Waja-ul-Mafasil*, legs get bowed like those of goat due to deposition and solidification of morbid matter in the joints. By this, it can be easily inferred that the gait is also affected.<sup>12</sup> Jurjani writes in his voluminous book “*Zakhira Khawarzm Shahi*” that there is production of foreign bodies like callus and stone in the joints, which may be now better correlated with the presence of loose bodies in the joints, or with outgrowths of osteophytes.<sup>11</sup> From the above detailed descriptions, we come to this conclusion that chronic primary OA is similar to that of *Waja-ul-Mafasil Baarid*, especially *Balghami*. *Waja-ul-Mafasil Saudavi* is presented by mild pain and heaviness, comparatively smaller but harder *waram* of *baarid* (cold) temperament, cold on palpation,<sup>11, 12, 13, 19</sup> and slightly bluish or blackish in colour,<sup>11, 13</sup> and the affected site is very dry.<sup>12</sup> Symptoms get aggravated by intake of *Sauda* (black bile) producing substances, and are relieved by *Haar Ratab* (hot and wet) measures.<sup>12, 13</sup> Patient has *Saudi* temperament.<sup>12</sup>

### **Pathophysiology**

As per Unani texts, this disease generally occurs due to weakness of the joint involved, followed by penetration of any morbid material into the same. The material gets accumulated in the affected joint, tendons become tense, and ligaments attached to the bones, also turn tout, and the pain ensues.<sup>19</sup> The pathogenic humours are produced from the waste of second and third digestion.<sup>11</sup> Occasionally, the morbid humour turns stony and solidified like lime, especially *Balgham-e-Khaam* (raw phlegm), and gets deeply penetrated into the joint, and become hard.<sup>11</sup> The accumulation of pathogenic humours in the joints results due to two important causes: (1) *Asli* (primary) and (2) *Aarzi* (secondary). *Asli Asbab* (primary causes) are three in number: joints are provided with spacious gap and *Rutubat* (fluid) to perform the movements easily as to ensure the non-collision and non-

friction of opposing bones and prevent the joint structures from drying. That's why excessive movements of joints lead to increased *Hararat* (hotness) of joints, and resultantly dry-up of the joint fluid is ensued. Further, joints lack *Quwwat-e-Hazima* (digestive faculty), which act through *Hararat* and *Rutubat*; joints composed of cartilage, ligaments and tendons, have *Barid Yabis* (cold and dry) temperament, and that's why the morbid matter being deposited, is not digested.<sup>11,13,19</sup>

*Aarzi Asbab* (secondary causes)-seven in number- basically serve the role of predisposing factors such as least physical activity, weak stomach that could not digest food,<sup>13</sup> meal intake at odd times in unorganized fashion and less nutritious diet,<sup>13</sup> excess indulgence, alcohol intake at breakfast,<sup>13</sup> coitus and exercise just after meal,<sup>13</sup> flow of catarrhal secretion into joints.<sup>13</sup> Occasionally, it may result from stoppage of any habitual *Istifragh* (evacuation) such as emesis, purgation, amenorrhea, and pent up of haemorrhoidal blood.  
11, 13, 19

### **Prevention and Management**

Currently, no known therapy including physical, pharmacological, and surgical, is available for the treatment of OA in conventional medicine that may inhibit cartilage degradation or enhance its synthesis, hence main focus is on prevention.<sup>4,5,6,16,21</sup> On critically analyzing the predisposing factors of OA, there are several factors which have been described in conventional medicine, and are equally shared by Unani medicine. At present, the major factors for developing OA include age, joint location, obesity, genetic predisposition, joint malalignment, trauma, and female gender.<sup>22</sup> In Unani text under the heading of *Waja-ul-Mafasil Barid*, there are detailed description of preventive measures, as Unani physicians maintain that intake of meat and *Halwa* (sweets), *Ratab Fawakeh* (wet fruits), hardly digestible *Galiz* (heavy) diets, excess use of *Sharab* (wine), and lack of exercise, sedentary life, having excess coitus especially followed by meal, and taking heavy meals at full stomach are the main predisposing factors of *waja-ul-mafasil*.<sup>10, 12, 14, 19</sup> Occasionally, it occurs due to excess anxiety, sorrow and grief, and wakefulness.<sup>12</sup> Hence, avoiding these factors will help in preventing the disease.

In *Barid* type of *Waja-ul-Mafasil*, green leafy vegetables and fresh fruits should be advised in diet. Milk and fresh cheese is good for the patients. Meat is also not suitable to be taken

by the patients, even in the *baarid* type of pain, meat is prohibited. If satiety not achieved, then meat of birds, rabbit and deer that produce less *Fuzlaat* (waste matter) can be used but in least amount.<sup>14</sup> Easily digestible diets should be encouraged, and in case of fruits, only *Mawiz* (dried grapes) and dried *Injir* (fig) may be advocated, but not in excess.<sup>19</sup>

In *Su-e-Mizaj Baarid* (cold immoderate temperament), especially *Balgham*, measures should include those of *Haar Yaabis* (hot and dry) like meats of desert and hilly animals, cooked in hot spices like mustard, black pepper, *Zira* (cumin), and *Saatar* (*Origanum syriacum*).<sup>19</sup> Razi says that *Galiz* (heavy) salty meats, beetroot, chard, carrot, pepper mint, cucumber, and water melon are to avoided.<sup>10</sup> Obesity is a potent risk factor of *Waja-ul-Mafasil*, and purgatives should be started in these patients as exercise is not possible to be undertaken,<sup>10</sup> as well as exercise should not be done just before and after the meal;<sup>14</sup> it should be done before or after complete digestion of meal and 1 hour of bath.<sup>19</sup>

*Hammam* (Turkish bath), if needed, should be done with stream water, but *Hammam Yabis* (dry bath) is more beneficial; but in case of *Waja-ul-Mafasil* associated with gross *Waram*, *Hammam* are to avoided, exercises like brisk walking and horse riding should be adopted. Anger is no good for the patients and it also should be contained.<sup>10</sup>

In *Baarid* (cold) type, *Musakh-khin* (warm) regimens and drugs are advised. *Balgham* may be evacuated with the help of enema and *Matbukh* (decoction of hot tempered drugs). In case of excess *Yuboosat* (dryness) either due to *Balgham* or *Sauda*, it can be treated with *Roghan Badam* (almond oil), *Roghan Kaddu* (gourd oil), and *Roghan Gul* (rose oil).<sup>13</sup>

***Waja-ul-Mafasil Balghami***: it is treated on the lines of *Qai* (emesis), *Munzij*, *Mus'hil* (purgative), and local application of analgesic drugs. Emetic drugs like *Shibbat* and *Methi* with honey are administered to induce and expel *Balghami* matter.<sup>12,13,14,20</sup> Emesis is adopted in summer season.<sup>11</sup> *Munzij-e-Balgham* () drugs are *Baadyan* (*Foeniculum vulgare*), *Gul-e-Surkh* (*Rosa bourboriana*), and *Asl-u-soos* (*Glycyrrhiza glabra*),<sup>13</sup> and *Mus'hil-e-Balgham* (phlegmatic purgative) are *Shahm-e-Hanzal* (*Citrullus colocynthis*), *Buzidan* (*Pyrethrum indicum*), and *Suranjan* (*Cholcium luteum*).<sup>12</sup> If needed, *Fasd* (bloodletting) also may be advised to lessen the morbid matter and induce dryness.<sup>13</sup> After evacuation of morbid matter, *Haar Mudirrat* (hot diuretics) is started such as *Badyan* (*Foeniculum vulgare*) and *Tukhm-e-Kharpa* (*Cucumis melo*) to expel the remaining



morbid matter.<sup>11,13</sup> After evacuation, *Muhallil Zimad* (anti-inflammatory solution) should be advised like *Baabuna* (*Matricaria chamomilla*), *Nakhuna* (*Melilotus alba*), *Shibt* (*Anethum sowa*), *Khatmi* (*Althaea officinalis*), *Murmakki* (*Commiphora molmol*), *Farfiyun* (*Euphorbia resinifera*), *Methi* (*Trigonella foenum-graecum*) and *Alsi* (*Linum usitassimum*).<sup>12</sup>

For malalignment of joint known as *Muaqqaf* (bend knees), *Haar Roghan* (hot tempered oils) is applied such as *Roghan Arandi* (castor oil), *Roghan Sumbul* (oil of *Nardostachys jatamansi*), *Roghan Qust* (oil of *Saussurea lappa*), and *Roghan Badam Talkh* (almond oil),<sup>12</sup> as these oils dissolve *Galiz Maadda* (thick morbid matter).<sup>12</sup>

**Waja-ul-Mafasil Saudavi:** at first *Fasd* is done to evacuate morbid *Sauda*. After complete *Nuzj* (concoction), *Mus'hil-e-Sauda* (purgatives of black bile) is started followed by *Muhallil Zimad* such as *Baabuna*, *Methi*, *Alsi*, and *Injir*.<sup>12</sup> In oils, *Roghan Arandi* and *Roghan Baabuna* is useful.<sup>12</sup> For *Is'haal* (purgation), *Matbukh Aftimun* (decoction of *Cuscuta epythimum*) is given.<sup>12</sup> Besides this, *Jawarish Kamuni* and *Majun Aftimun* may also be prescribed.<sup>12</sup> *Ibn Sina* has advised to correct the functions of spleen in *Waja-ul-Mafasil Saudavi*.<sup>14</sup>

*Suranjan* (*Cholchium luteum*) is the drug of choice for the management of *Waja-ul-Mafasil*, and it consists of two important constituents: (1) *Mus'hil* (purgative): with the help of *Tabiyat* (physis), *Suranjan* at first releases its *Latif* (demulcent) and *Mus'hil Jauhar* (active constituent) which evacuates the accumulated matter in joints layer by layer by *Tahlil* (resolvent action) and *Jazb* (absorption)<sup>11,12,13,14</sup> (2) *Qaabiz* (astringent): it acts as astringent of organs and their passages, and renders them cold; thus they become stronger enough to not let the morbid matter deposit in the joints.<sup>11,12,13,14</sup>

## CONCLUSION

It may be concluded that OA is nothing but *Waja-ul-Mafasil Baarid*, and in the classical literature of Unani Medicine there are immense material on both preventive as well as therapeutic aspects of *Waja-ul-Mafasil*. By adopting these measures in common practice, disease burden may be squarely lessened particularly in those people who are susceptible to be suffered from OA, and those individuals who have compromised their daily activities due to disability of this ailment, can be managed using varied types of abundantly available regimes and formulations with tremendous results, in Unani medicine.

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