



Rheumatoid Arthritis (Waja-ul-Mafasil) – It's Concept & Understanding In Unani Medicine – *a Review*

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ABSTRACT

Rheumatoid arthritis (RA) is a chronic autoimmune disease that mostly affects joints. RA occurs when the immune system, which normally helps protect the body from infection and disease, attacks the lining of the joints, which damages the tissue that covers the ends of the bones in a joint. As per the conventional Unani system of medicine WajaulMafasil occur in different joints caused by derangement of body's natural humours. Many complications can follow such as permanent joint damage requiring arthroplasty, rheumatoid vasculitis when timely not diagnosed. As there is no cure for RA, the treatment goals are to reduce joint inflammation and pain, maximize joint function, and prevent joint destruction and deformity, palliative treatment is the only option. Treatment options in Modern medicine have various adverse effects, Unani medicine in its literature possess numerous treatment regimens for Rheumatoid arthritis.

KEYWORDS: Rheumatoid arthritis, WajaulMafasil, Unani Medicine

INTRODUCTION

Rheumatoid arthritis (RA) is a systemic autoimmune disease characterized by inflammatory arthritis and extra-articular involvement¹. It is a chronic inflammatory disorder caused in many cases by the interaction between genes and environmental factors that primarily involves synovial joints. It typically starts in small peripheral joints, is usually symmetric, and progress to involve proximal joints. If left untreated joint inflammation over time leads to the destruction of the joint with loss of cartilage and bone erosions². The worldwide prevalence of RA in the Global Burden of Disease 210 Study is about 0.24%. In 2019, 18million people worldwide were living with rheumatoid arthritis. About 70% of people living with rheumatoid arthritis are women, and 55% are older than 55years³. 13 million people with rheumatoid arthritis experience severity levels (moderate or severe) that could benefit from rehabilitation⁴. While rheumatoid arthritis is a systemic autoimmune disease that affects multiple body systems, the joints of hands, wrists, feet, ankles, knees, shoulders and elbows are most often affected⁵. Untreated RA can cause severe damage to the joints and their surrounding tissue. It can lead to heart, lung or nervous system problems. Common symptoms include chronic pain, stiffness, tenderness, heat and swelling in the joints. The etiology of RA has a significant basis in genetics. RA is more prone to occur in those who were born with specific genes, especially human leukocyte antigen [HLA] class II genotypes, such as HLA-DRB1. In comparison to the general population, first-degree relatives of patients are 2–10 times more likely to have RA. Risk factors include smoking, obesity and exposure to air pollution. Women and older people have a higher risk of developing RA¹. In most patients, pain, stiffness, and swelling in various joints develop slowly over a period of weeks to months². Joint stiffness in the early morning persists for more than an hour and is alleviated by physical activity. The small joints in the hands and feet, are often the first joints to be affected symmetrically. The wrists, metacarpophalangeal (MCP), and proximal interphalangeal (PIP) joints are the most affected joints¹. The goals of treatment for RA include minimizing joint pain and inflammation, preventing joint destruction and deformity, maintaining the quality of life, and controlling extraarticular manifestations. Treatment regimens comprise combinations of pharmaceuticals, weight-bearing exercise, educating patients about the disease, and rest. Drugs used in the conventional system of medicine like Non-steroidal anti-inflammatory drugs (NSAIDs), Corticosteroids (Methyl Prednisolone, Daflazocart), Disease-Modifying Antirheumatic Drugs (Methotrexate, Hydroxychloroquine, Sulfasalazine, Leflunomide), Biologics (Infliximab, Adalimumab) and Janus kinase (JAK) Inhibitors having a lot of adverse effects like gastritis, nephritis, osteoporosis, diabetes, hypertension, bone marrow suppression, leucopenia, hepatitis, rashes, etc. and in some condition to avoid permanent disabilities surgical interventions like arthroplasty and arthrodesis are advised. From the above description, it is the need of an hour to provide a safe and effective alternative treatment. If diagnosed timely, symptoms and disease progression can be controlled with pharmacological treatment methods like non-steroidal anti-inflammatory drugs (NSAIDs), corticosteroids, Disease modifying anti-rheumatic drugs (DMARDs), and biologics are effective.

The treatment options in conventional medicine are NASIDS, DMRADS, immune suppressant's and Steroids have multiple side effects, such as hepato-renal damage, peptic ulcer bleeding, cardiovascular complications, infection and risk of carcinoma. Moreover, the use of these conventional drugs for treating RA may be conditioned during child bearing age, pregnancy and lactation. Thus, it is necessary and need of search for novel and safer therapeutic strategies. Therefore there is a intense need for exploring and finding new and safe treatment formulations for the management of RA. The great eminent Unani physicians have mentioned various number of single and compound formulations that are very effective and safe in RA.

Unani Concept of Wajaál-Mafasil:

Ibn-e-Sina describes wajaál-mafasil, as a clinical condition marked by pain and stiffness in one or more joints brought on by the accumulation of ratubat-e-ghariba (foreign humour) in the joints⁶.

Description of disease according to different Eminent Unani physicians

Zakariya Razi states that this is a condition that manifests itself as repeated or paroxysmal episodes and is brought on by the accumulation of exaggerated fluid within the joint. He considered that gout, Irq-un-nisa (sciatica), and wajaál-mafasil all belongs to the same genus of disease⁷

Ismail Jurjani described the disease condition as such when morbid matter builds up in the organs of the joints and causes discomfort and inflammation⁸.

Akbar Arzani describes the disease as discomfort in the hands and feet joints and inflammation. Pain can occasionally be present either with or without inflammation of the joint⁹.

Samar Qandi has been further defined Wajaál-mafasil as pain and inflammation in the tissues that surround joints, including the synovium, ligaments, tendons, muscles, and membranes that cover the muscles. Sometimes the disease's causative agent affects the membrane encasing internal organs such as the heart and lungs, causing them to become inflamed and appear reddish. Mandibles, spines, and auditory ossicles may occasionally be involved, and the problem grows so complex that a diagnosis is impossible¹⁰.

In Kitab-ul- Kulliyat, *IbnRushd* (1188 AD)¹¹, in Firdaws al-Hikmafi'ITibb, *RabbanTabri* (898 AD)¹², *Majoosi* (930 AD) in Kamil al-Sana'a al-Tibbiyya¹³ discussed the disease in their treatise.

Etiopathogenesis of Rheumatoid arthritis (RA)-Wajaál-Mafasil in Unani Medicine

- **Asbab-e-Faila (Primary causes):** Refers to conditions whose pathophysiology and disease onset are directly related to joint pain.
 - 1. Su-e-Mizaj (Derangement of temperament):** Su-eMizaj can either be sada (producing only functional alterations in the articular tissue without the participation of humours) or maddi (with humoral involvement leading to organic alterations in joints). mufrad or baseet (single), such as reeh, or murakkab (compound), made up of two, three, or four akhlat (humours), and it may affect a single vital organ, such as the heart, or the entire body. Su-eMizaj can be either haarmultahib (heat-producing and inflammatory), baridmunjamid (refrigerant and consolidate temperamental disorder), or yabismunqabiz (desiccant and dehydrating). Either su-e-mizajmustahkam (persistently unstable temperament) or su-emizajbarid (cold derangement) are the main causes of pain.
 - 2. FasidMadda (Morbid Substance):** Fasidmadda is dam (sanguine), dam-e-balghami

(phlegmatic sanguine), dame-şafrawi (bilious sanguine), dam-e-saudawi (melancholic sanguine), balgham (phlegm), sudda-e-balghamikhham (obstructive raw phlegmatic), mirra-emuftrat (simple bilious), safra-e-balghami (phlegmatic bile), middah (pus) and reeh-e-motashabika (pent up gas), ghairpukhtakhon (immature blood). Samarqandi claims that the disease's cause is thick white mucoid as the synovial membrane secretion is rich in white and mucoid fluid, while Ibn-e-Sina claims that the cause is similar to pus^{6,9,10}.

- **Asbab-e- Munfailah (Secondary causes):** Factors that have an indirect impact on the joints and make them more prone to absorbing the morbid substance with their eventual collection, which causes alterations to the joints' structure and functionality. These factors are also indicated by Jurjani, Baghdadi, and Arzani. Jurjani has claimed that the joints contain characteristics that draw the fluid (rutubat) to themselves. The movement of the joint generates heat, which attracts fluid, causing it to flow toward the joint. According to the Unani concept, the joints cannot absorb energy (quwat-ejaziba). The ability to absorb fluid is influenced by the heat and the cold and dry temperament of the bones, cartilage, and ligaments that make up the joint. As a result, fluid penetrates the joint but cannot be fully absorbed to collect in the joint spaces. Additionally, there is a theory that weakened joint quwat-e-hazmawadafa (digestive and excretory powers) causes an accumulation of decomposing matter and, in turn, disturbs joint function. The resulting liquid is putrified into dangerous components that cause wajaál-mafasil¹⁴

Classification of Wajaál-Mafasil

Renowned Unani specialists have categorized wajaál-mafasil based on a number of factors, some of which are listed below:

- According to disease severity (a) Haad (Acute) (b) Muzmin (Chronic)
 - According to the presence of inflammation (a) Haar (Hot) (with inflammation)
- (b) Barid (Cold) (without inflammation)
- According to the causative factors: (a) Wajaál-MafasilSada (b) Wajaál-MafasilMaddi
- (c) Wajaál-Mafasil Reehi (d) Wajaál-MafasilUfooni
- In accordance with the type of Madda (Morbid Substance) involved
- (a) Wajaál-Mafasil Damvi (Sanguinous) (b) Wajaál- MafasilSafrawi (Bilious)
- (c) Wajaál-Mafasil Balghami (Phelgmatic)(d) Wajaál-MafasilSaudavi (Melancholic)
- (e) Wajaál-Mafasil Murakkab (Compound)

It is Further divided into two types

- (a) Wajaál-Mafasil Safrawi Balghami (b) Wajaál-Mafasil Safrawi Saudavi
- According to the number of morbid substances present: (a) Mufrad (b) Murakkab¹⁵
 - Akbar Arzani further classified Wajaál- Mafasil in accordance with the occurrence of swelling: (a) Dardba warm (Wajaál-Mafasil with swelling)
- (b) Dard be warm (Wajaál-Mafasil without swelling)¹³

- In accordance with the accumulation of excessive abnormal fluids (Akhlata-e-fasidah) building up in the joint spaces, or it may just be a simple wajaál-mafasil (without accumulation of Akhlata-e-fasidah). Thus, wajaálmafasil (especially of the chronic type) may be divided into two sorts according to the situation as follows:

(a) Hudar-e-Zulali (Synovial type)

(b) Hudar-e-Azali (Muscular type)

(a) Hudar-e-Zulali (Synovial type) which is also known as Istisqa-e-Mafasil, is characterized by an excessive accumulation of ratubat-e-zulali (synovial fluid) in the joint spaces, resulting in swelling, discomfort, and restricted joint movement.

(b) Hudar-e-Azali (Muscular type) is characterized by inflammation of the muscles that surround the joints without apparent fluid accumulation, causing the muscles to thicken, harden, and contract, resulting in painful joints¹⁰.

In accordance with the joint involved (a) Irq-un-Nisa (b) Niqras (c) Wajaál-Zahr (d) WajaálWarik (e) Wajaál-Rukbah (f) Wajaál- Khasira (g) WajaálSaqain (h) Waja ál-Aqib^{16,17}

Unani Management (Usool-e-Ilaj): According to Ibn-e-Sina, the management of wajaál-mafasil should be diversion (Imala-e-Mawad) and evacuation (Istefragh) of morbid humours, Munzij-wa-Mushil (Concoctive and Purgative) therapy, strengthening of joints and its Quwa helps in restoring the joint in normal condition and prevent disabilities. In the Unani system of medicine, the main principles of management are, Ilaj-bil-Ghiza (Dietotherapy), IlajbilTadbeer (Regimenal therapy) IlajbilDawa (pharmacotherapy) for the management of wajaálmafasil (RA).

Ilaj-bil-Ghiza (Dietotherapy):

ZakariaRazi suggests that fish and poultry are favorable for wajaál-mafasil patients. Other foods that are advised include, particularly Bengal gram, Indian Millet, Big beans, French beans, Palak (Spinaciaolearacea L.), Pyaz (Allium Cepa L.), Chuqandar (Beta vulgaris L.), Carrot (Daucuscarota L.), Chilly (Capsicum annum L.), black pepper (Piper nigrum L.), Injeer (Ficuscarica L.), Badam (Prunusamygdalus L.), Akhrot (Juglansregia), Khajoor (Phoenix dactylifera L.), Apricot, Angoor (Vitisvinifera L.), Aaloo, Pure ghee, Methi (Trigonellafoenum L.), Shaljam (Brassica rapa L.), Seb (Malussylvestris L.), Makka (Zea Mays L.), Pineapple, Strawberry, andPapita (Carica papaya L.)¹⁷

Ilaj-bil-Tadbeer (Regimenal therapy)

A wide variety of regimens are available for treatment of RA like Hijama (Cupping): Dry cupping (Hijama-bila-Shart) is used for Imala-e-mawad (diversion of morbid material) while wet cupping (Hijama-bil-Shart) is used for istifragh (evacuation of morbid material). Nutool (Irrigation): Takmeed (Hot fomentation): Dalk (Massage): Bukhoor (Steam fomentation)²⁰.

Ilaj-bil-Dawa (Pharmacotherapy):^{18,19}.

List of Single and Compound formulations widely used in Unani System of Medicine.

Single Drugs	Compound formulations
Suranjan (<i>Colchicum luteum</i> L.),	Majoon Suranjan,
Asgandh (<i>Withaniasomnifera</i> L.),	Majoon Jograj Gugul,
Bozidan (<i>Tanacetum um- belliferum</i> L.)	Safuf Suranjan
Filfil Siyah (<i>Piper nigrum</i> L.),	Habb-e Suranjan
Turbud (<i>Operculinaterpethum</i> L.),	Habb-e-Gul-e-Aakh
Zanjabeel (<i>Zingiberofficinale</i> L.),	Habb-e-Asgandh
Sana Makki (<i>Cassia augustifolia</i> L.),	Habb-e-Muntan, Tiryaaq-e- Arba'
Mako (<i>Solanumnigrum</i> L.)	Habb-e-Azaraqi,
Halela Siyah (<i>Terminaliachebula</i> L.),	Habb-e-Najah
Saqmonia (<i>Convolvulus scammonia</i> L.)	Habb-e-Sheetraj, Qurs Mafasil
Qust (<i>Saussurealappa</i> F.	Habb-e-Mafasil, Majoon Ushba
Shahatra (<i>Fumariaparviflora</i> L.)	Habb-e-Kuchla,
Lufah (<i>Atropabelladona</i> L.	Iyarij Faeqra, Tiryaaq-e-Kabir
Muqil (<i>Commiphoramukul</i> L.	Jawarish Jalinoos
Qunturyoon (<i>Centauriacentaurium</i> L.	Jawarish Safarjali, Majoon Safarjali
Kasni (<i>Chicoriumintybus</i> L	Majoon Azaraqi
Badiyan (<i>Foeniculumvulgare</i> L.)	Majoon Chobchini
Gul-e Surkh (<i>Rosa Damascus</i> L.	Majoon Najah
Elva/ Sibr (<i>Aloe barbadensis</i> L.)	Tiryaaq-e-Farooque

Widely used topical/Local Application in RA

Roghan-e-Malkangani,	Roghan-e-Qust
Roghan-e-Suranjan	Roghan-e-Marzanjosh,
Roghan-e-ChaharBarg	Roghan-e-Baboona,
Roghan-e-Haft Barg	Roghan-e-Zaitoon,
Roghan-e-Surkh	RoghanBadam,
Roghan-e-Mafasil	Roghan-e-Auja,
Roghan Hakeem Ajmal Khan	Roghan-e-Chobchini,
Roghan-e-Balsan,	Roghan-e-Dhatura,
Roghan-e-Satawri,	Roghan-e-Jundaebedastar,
Roghan-e-Gule-Aakh,	Roghan-e-Kuchla,
Roghan Mom, Roghan-e-Sosan	Roghan-e-Hanzal

Conclusion:

Rheumatoid arthritis is autoimmune disease of unknown etiology; involving joints of body and affect 0.3-1% of population most often females are involved. Disease progression varies from patient to patient long standing has high morbidity rate, resulting in disturbance of daily activity. There is no specific cure for rheumatoid arthritis palliative treatment is the only option, but in advance stage of disease surgical interventions are possible alternative to improve the function of severely deformed joint . Modern medicine like NSAIDS, DMARDS, Steroids, and Anti-cytokine agents are given having deleterious effect on human body. Different approach of treatment in Unani system of medicine like regimental therapies (Ilaj bil tadbeer) and orally medications which aid to correct the derangement of humours and temperament of human body. Unani medicine offers a wide range of treatment regimens with minimal side effects and this could be a very good alternative treatment in the management of RA.

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