



Conception Of Waja-Ul-Mafasil (Arthritis) In The Light Of Unani System Of Medicine: A Review Article

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Abstract

Rheumatoid arthritis is a long-standing inflammatory condition of undetermined causative factors with the hallmark of symmetric joint involvement. It is an autoimmune disease in which the body's immune system of the patient innocently targets its own body tissues. A principally attacks the synovial membrane, resulting in inflammation, proliferation, articular cartilage loss, and erosion of bone. In the classical Unani literature, Waja al-mafasil is described in detail for all types of arthritis, and one of its types Hudar has clinical features that are similar to those of Rheumatoid Arthritis which is mentioned in the modern system of medicine. According to the Unani System of medicine, waja ál-mafasil occurs in various joints caused by derangement of the body's natural humours i.e., dam (blood), balgham (phlegm), safra (bile), and sauda (black bile) with various explanations mentioned by great scholars in Unani literature. Contrary to modern management, which mostly relies on non-steroidal anti-inflammatory drugs, glucocorticoids, and disease-modifying anti-rheumatic drugs, which come with many adverse effects, they managed it using a multidimensional approach. The main emphasis of this review article is on the important characteristics of rheumatoid arthritis with reference to waja ál mafasil to understand the status of the disease as described by Unani scholars and to offer a preferable option in terms of adverse effects and affordable treatment.

Keywords: Waja ál-mafasil, Rheumatoid arthritis, Unani Medicine

I. Introduction, History and background of Arthritis.

Father of Medicine Hippocrates (460 BC) was the first person to document the Wajaul Mafasil in his compendium titled as - Kitabul Mafasil. The famous Unani Physician Dioscorides (30–90 AD) also wrote on Wajaul Mafasil in his famous book - Kitabul Hashaish (De Materia Medica-70AD). Later on Rufus (117AD) also wrote a compendium on Wajaul Mafasil known as Kitab Aujawul Mafasil. Jalinoos (Galen 130 AD) has mentioned Wajaul Mafasil in his book Kitabul Ilaj Wal Amraz . Razi has described in detail Wajaul Mafasil in Kiatabul Hawi vol.11 and also wrote a book on Wajaul Mafasil, namely, Kitab Fee Alal-al Mafasil Wa Niqris Wa Irgunnisa , Maseehi described Wajaul Mafasil in Kitabul Maat in the book number 95.



Fig. 01 Arthritis- Common Disease in male & Female

Arthritis and diseases of the joints have been plaguing mankind since ancient times. In around 1500 BC the Ebers Papyrus described a condition that is similar to rheumatoid arthritis. This is probably the first reference to this disease. There is evidence of rheumatoid arthritis in the Egyptian mummies as found in several studies. G. Elliot in his studies found that rheumatoid arthritis was a prevalent disease among Egyptians. In the Indian literature, Charak Samhita (written in around 300 – 200 BC) also described a condition that describes pain, joint swelling and loss of joint mobility and function. Hippocrates described arthritis in general in 400 BC. He however did not describe specific types of arthritis. Galen between 129 and 216 AD introduced the term rheumatismus. Paracelsus (1493-1511) suggested that substances that could not be passed in urine got stored and collected in the body especially in the joints and this caused arthritis. Ayurveda in ancient Indian medicine also considered arthritis as one of the Vata. Practitioners attributed rheumatic disorders to humors (rheuma). Thomas Sydenham first described a disabling form of chronic arthritis that was described later by Beauvais in 1880. Brodie went on to show the progressive nature of this disease and found how rheumatoid arthritis affected the tendon sheaths and sacs of synovium in the joints. He found how there was synovial inflammation or synovitis and cartilage damage associated with rheumatoid arthritis.

The first description of RA acknowledged by modern medicine is found in the dissertation of Augustin Jacob Landré-Beauvais from the year 1800. Landré-Beauvais was only 28 years old and a resident physician at the Salpêtrière asylum in France when he first noticed the symptoms and signs of what we now know to be RA. He examined and treated a handful of patients with severe joint pain that could not be explained by other known maladies at the time (such as “rheumatism” or osteoarthritis). Unlike gout, this condition mainly affected the poor, affected women more often than men, and had previously been ignored by other physicians who – concerned with earning acclaim and compensation for their work usually chose to treat more affluent patients. He hypothesized that these patients were suffering from a previously uncharacterized condition, which he named Goutte Asthénique Primitive, or “Primary Asthenic Gout.”¹ Though Landré-Beauvais’ classification of RA as a relative of gout was inaccurate, his dissertation encouraged other researchers in the field of bone and joint disorders to further study this disease.

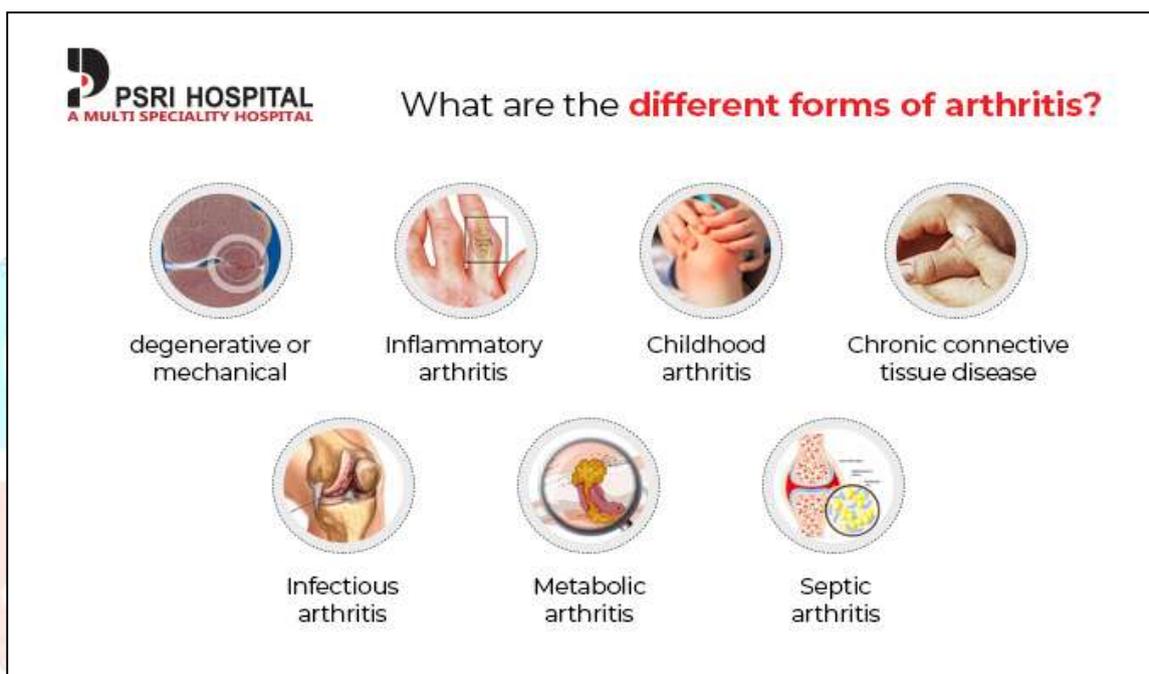


Fig. 02 Different types of Arthritis

Rheumatoid arthritis is derived from the Greek word rheuma (nominative), ‘rheumatosis’ (genitive) ("flow, current") The translation is joint inflammation resembling rheumatic fever due to the suffix "oid," which means "resembling". ‘Rheuma’ which translates to the watery discharge, may refer to the fact that the swollen joints or the disease are aggravated by the wet weather ^[1]. Rheumatoid arthritis is a long-lasting inflammatory condition of undetermined causative factors with the hallmark of symmetric joint involvement ^[1]. It is an autoimmune disorder characterized by the patient's immune system unintentionally attacking their own tissues in the body. Due to the synovial membrane being the primary target of RA, the synovium becomes inflamed and proliferates, articular cartilage is lost, and the bone is eroded ^[3]. However, aberrant systemic immunologic reactions are noticeable and may result in a number of extra-articular symptoms, including vasculitis, nodules, and accelerated atherosclerosis ^[2]. Combined, these conditions can shorten life expectancy by up to 10 years in severe cases ^[5]. It is a multifarious disorder due to its varying intensity, the unpredictable course of disease progression, and inconsistent therapeutic response. Even though the prevalence of RA varies geographically, this disease represents a significant global public health challenge. Mostly prevalent inflammatory arthritis, RA, affects 0.5% to 1% of persons globally ^[2]. The disease is also

highly prevalent in India with a prevalence rate of 0.3–0.7% and it occurs more often in women than in men (female: male, 3:1) [17]. Despite substantial study and modern medical advancements, there is no long-lasting healing for RA. The main therapy goals are to lessen disease activity, establish remission, prevent joint damage, and improve the functional ability and overall well-being of the patient. Standard methods of medication like nonsteroidal anti-inflammatory drugs, corticosteroids, Disease-modifying anti-rheumatic drugs, and biologics are effective but have a number of side effects. NSAIDs irritate the digestive tract, while long-term usage of corticosteroids can lead to peptic ulcers, osteoporosis, and delayed wound healing. The immune system is suppressed by biologics, which causes bacterial and fungal infections.

II. Unani Concept of Arthritis (Wajaál-Mafasil)

Ibn-e-Sina describes waja ál-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 joints [18]. Zakariya Razi states that “Waja ál-Mafasil” 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 waja ál-mafasil all belongs to the same genus of disease [20]. Ismail Jurjani described waja ál-mafasil as such when morbid matter builds up in the organs of the joints and causes discomfort and inflammation [19]. Waja ál-mafasil is described by Akbar Arzani as discomfort in the hands and feet joints and inflammation. Pain can occasionally be present either with or without inflammation of the joint [16]. Waja ál-mafasil has been further defined by Samar Qandi 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 impossible [16, 17]. Ibn Rushd (1188 AD) in Kitab-ul- Kulliyat [22], Rabban Tabri (898 AD) in Firdaws al-Hikma fi'l Tibb [23], Majoosi (930 AD) in Kamil al-Sana'a al-Tibbiyya [24] discussed the disease in their treatise. The most common arthritis symptoms and signs include:

- Joint pain.
- Stiffness or reduced range of motion (how far you can move a joint).
- Swelling (inflammation).
- Skin discoloration.
- Tenderness or sensitivity to touch around a joint.
- A feeling of heat or warmth near your joints.

Where you experience symptoms depends on which type of arthritis you have, and which of your joints it affects. Some types of arthritis cause symptoms in waves that come and go called flares or flare-ups. Others make your joints feel painful or stiff all the time, or after being physically active.

III. Classification of Waja ál-Mafasil

A. In accordance with the disease's severity

- (a) Haad (Acute)
- (b) Muzmin (Chronic)

B. In accordance with the number of morbid substances present:

- Mufrad
- Murakkab ^[12]

C. In accordance with the occurrence of swelling: Waja ál-

- Mafasil is divided into the following categories by Akbar Arzani.
- Dard ba warm (Waja ál-Mafasil with swelling)
- Dard be warm (Waja ál-Mafasil without swelling) ^[25]

D. In accordance with the presence of inflammation

- Haar (Hot) (with inflammation)
- Barid (Cold) (without inflammation)

E. In accordance with the etiology:

- Waja ál-Mafasil Sada
- Waja ál-Mafasil Maddi
- Waja ál-Mafasil Reehi
- Wajaál-MafasilUfooni

F. In accordance with the type of Madda (Morbid Substance)

- Waja ál-Mafasil Damvi (Sanguinous)
- Waja ál-Mafasil Balghami (Phelgmatic)
- Waja ál-Mafasil Saudavi (Melancholic)
- Waja ál- Mafasil Safrawi (Bilious)
- Waja ál-Mafasil Murakkab (Compound)

There are more than 100 different types of arthritis. Some of the most common types include:

- **Osteoarthritis:** Wear and tear arthritis.
- **Rheumatoid arthritis:** Arthritis that happens when your immune system mistakenly damages your joints.
- **Gout:** Arthritis that causes sharp uric acid crystals to form in your joints.
- **Ankylosing spondylitis:** Arthritis that affects joints near your lower back.
- **Psoriatic arthritis:** Arthritis that affects people who have psoriasis.
- **Juvenile arthritis:** Arthritis in kids and teens younger than 16.

Depending on which type of arthritis you have, it can break down the natural tissue in your joint (degeneration) or cause inflammation (swelling). Some types cause inflammation that leads to degeneration. Arthritis is extremely common. Experts estimate that more than one-third of Americans have some degree of arthritis in their joints. Osteoarthritis is the most common type. Studies have found that around half of all adults will develop osteoarthritis at some point.

IV. Asbabe Munfaila (predisposing factors)

These factors are not directly responsible for Wajaul Mafasil, but they act indirectly in the pathogenesis of Wajaul Mafasil by making the joints more prone to get affected by the Asbabe Faila as described above. According to Ibne Sina and others, these may be as follows [20].

- Irregular diet
- Taking water on an empty stomach
- Incomplete digestion
- Intercourse after taking food
- Stopping of habitual Istifragh
- Lack of exercise
- Alcoholism
- Excessive Intercourse
- Excessive use of joints
- Treatment of Intestinal colic in the wrong way causing diversion of morbid matters to joints
- Mental/Psychological stress
- Genetic predisposition
- Sex - Males are more prone to be affected than females and eunuchs are usually unaffected by Wajaul Mafasil

V. Etiopathogenesis of Waja ál-Mafasil:

Ibn-e-Sina was the first to explain the etiopathogenesis of waja ál-mafasil, and other renowned physicians soon followed.

A. Asbab-e-Faila (Primary causes): Refers to conditions whose pathophysiology and disease onset are directly related to joint pain.

- **Su-e-Mizaj (Derangement of temperament):** Su-e- Mizaj 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-e- Mizaj can be either haar multahib (heat-producing and inflammatory), barid munjamid (refrigerant and consolidate temperamental disorder), or yabis munqabiz (desiccant and dehydrating). Either su-e-mizaj mustahkam (persistently unstable temperament) or su-e- mizaj barid (cold derangement) are the main causes of pain ^[6].
- **Fasid Madda (Morbid Substance):** Fasid madda is dam (sanguine), dam-e-balghami (phlegmatic sanguine), dam-e-şafrawi (bilious sanguine), dam-e-saudawi (melancholic sanguine), balgham (phlegm), sudda-e- balghami kham (obstructive raw phlegmatic), mirra-e- mufrat (simple bilious), safra-e-balghami (phlegmatic bile), middah (pus) and reeh-e-motashabika (pent up gas), ghair pukhta khoon (immature blood). ^[16,18] 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 (reem). ^[13,17]

B. 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-e-jaziba). 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-hazma wa dafea (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 waja ál-mafasil. ^[6]

VI. Clinical Features (Alamaat)

A. Waja ál-Mafasil Sada: This type is uncommon and lasts for a shorter period of time. It lacks swelling and Imtila (congestion) symptoms. The signs are alleviated by exposure to heat or cold. ^[12]

B. Waja ál Mafasil Damvi (Sanguineous): There are Ghalba-e-Dam (sanguine preponderance) symptoms present both generally and locally. The onset is relatively abrupt, and the symptoms and signs are severe. As the pain increases, the swelling becomes more obvious. Pain is throbbing in nature. Marked redness and warmth of the skin over the affected joint. Exacerbated by heat exposure and relieved by cold application or by venesection.

C. Waja ál Mafasil Safravi (Bilious): The presence of both generalized and localized signs of bile dominance (Ghalba-e-Safra). The skin above the joints has a faint yellow discoloration, which could also have a red tint. The swelling is less marked, with warmth compared to waja ál mafasil damvi, and throbbing pain over the joints are substantially worse. There is a desire for sour foods. Aggravated by heat and relieved by exposure to cold application across the affected portion.

D. Waja ál Mafasil Balghami (Phlegmatic): There will be both generalized and specific signs of phlegm dominance (Ghalba-e- Balgham). There is a gradual appearance of symptoms and signs. The damaged joint's area appears swollen, white, soft, and cold to the touch. There is mild pain and throbbing and the swelling is soft and cool. Aggravated by cold and relieved by applying heat to the affected part.

E. Waja ál-Mafasil Saudavi (Melancholic): The presence of both generalized and specific signs of the black bile (Ghalba-e-Sauda) dominance. On touch, the damaged joint area reveals a dusky, cold, and dry area. Sometimes the color changes to a bluish or purplish tinge. Aggravated by exposure to cold. The pain is less, and the swelling is moderate but stiff to the touch. Heat treatment over the afflicted portion can provide relief.

F. Waja ál Mafasil Murakkab (Involvement of compound/mixed humours): Waja ál-mafasil is a disease that can be brought on by any humour, although mixed humour can also do so. Pain and a combined clinical picture of all the relevant accumulating humours will be present. Heat or cold exposure can relieve symptoms.

G. Waja ál-Mafasil Reehi (Pneumatic): It is a unique variety of waja ál-mafasil. Pain is light, doesn't feel heavy, shifts, and has a lot of distension.

H. Waja ál-Mafasil Maddi: The affected joint appears extremely hot and itchy, tickly, and burning. Exposure to cold relieves symptoms, whereas exposure to heat makes them worse.

VII. Diagnosis and Tests for Arthritis.

A healthcare provider will diagnose arthritis with a physical exam. They'll examine your affected joints and ask about your symptoms. Tell your provider when you first noticed symptoms like pain and stiffness, and if any activities or times of day make them worse. Your provider will probably check your range of motion (how far you can move a joint). They may compare one joint's range of motion to other, similar joints (your other knee, ankle or fingers, for example). Your provider might use imaging tests to take pictures of your joints, including:

- X-ray.
- Ultrasound.
- Magnetic resonance imaging (MRI).
- A computed tomography (CT) scan.

These tests can help your provider see damage inside your joints. They can also help your provider rule out other injuries or issues that might cause similar symptoms, like bone fractures (broken bones). Your provider may use blood tests to check your uric acid levels if they think you have gout. Blood tests can also show signs of infections or autoimmune diseases.

VIII. Management and Treatment of Arthritis.

There's no cure for arthritis, but your healthcare provider will help you find treatments that manage your symptoms. Which treatments you'll need depend on what's causing the arthritis, which type you have and which joints it affects. The most common arthritis treatments include:

- Over-the-counter (OTC) anti-inflammatory medicine like NSAIDs or acetaminophen.
- Corticosteroids (prescription anti-inflammatory medicine, including cortisone shots).
- Disease-modifying antirheumatic drugs (DMARDs) if you have rheumatoid or psoriatic arthritis.
- Physical therapy or occupational therapy can help you improve your strength, range of motion and confidence while you're moving.
- Surgery (usually only if nonsurgical treatments don't relieve your symptoms).

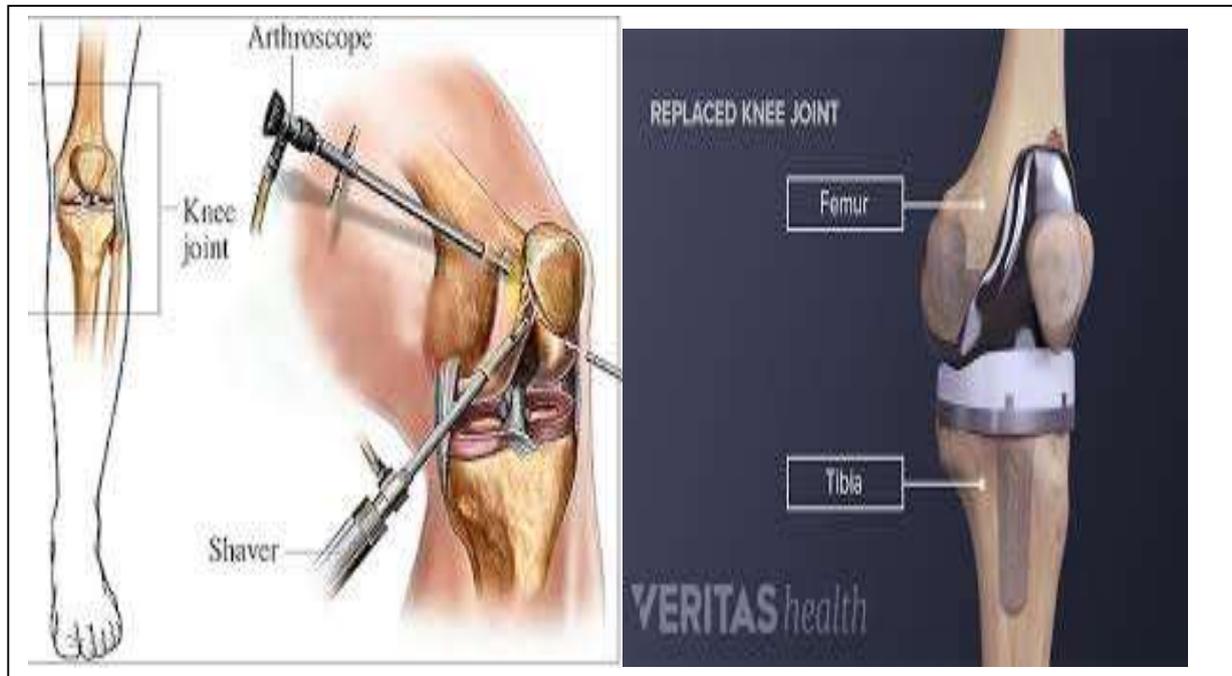


Fig. 03 Surgery of Arthritis in modern system

IX. Arthritis surgery

You may need surgery if you have severe arthritis and other treatments don't work. The two most common types of arthritis surgery are joint fusion and joint replacement. Joint fusion is exactly what it sounds like: surgically joining bones together. It's most common for bones in your spine (spinal fusion) or your ankle (ankle fusion). If your joints are damaged or you've experienced bone loss, you might need an arthroplasty (joint replacement). Your surgeon will remove your damaged natural joint and replace it with a prosthesis (artificial joint). You might need a partial or total joint replacement. Some forms of arthritis happen naturally or because of health conditions you can't change, so there's not always a way to prevent it. However, you can lower your chances of developing arthritis by:

- Avoiding tobacco products.
- Following a diet and exercise plan that's healthy for you.
- Doing low-impact exercise.
- Always wearing proper protective equipment for any activity that could damage your joints.

X. Unani Management (Usool-e-Ilaj):

According to Ibn-e-Sina, the management of waja ál-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), Ilaj bil Tadbeer (Regimenal therapy) Ilaj bil Dawa (pharmacotherapy) for the management of waja ál- mafasil (RA).

Single drugs: Several single drugs are used in the Unani system of medicine like Suranjan (Colchicum luteum L.), Asgandh (Withania somnifera L.), Bozidan (Tanacetum um- belliferum L.), Filfil Siyah (Piper nigrum L.), Turbud (Operculina terpepethum L.), Zanjabeel (Zingiber officinale L.), Sana Makki (Cassia augustifolia L.), Mako (Solanum nigrum L.), Halela 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 (*Saussurealappa* F.), Saqmonia (*Convolvulus scammonia* L.) and Shahatra (*Fumaria parviflora* L.) [27].

XI. Herbal Drugs used in the Treatment of Arthritis.

A. Borage oil



Fig. 04 Turmeric and Borage oil used in treatment of Arthritis

The seeds of the *Borago officinalis* plant, or starflower, contain large quantities of an essential omega-6 fatty acid called gamma-linolenic acid (GLA). Borage seed oil also contains linolenic acid, which the body converts to GLA. GLA helps maintain the cell structure and healthy functioning of joints. The body also converts GLA into prostaglandins, which act like hormones to support the immune system. GLA helps stop joint inflammation and may also prevent some of the body's inflammatory responses. According to 2017 research, borage oil may help improve symptoms of rheumatoid arthritis (RA), although it can also cause some negative side effects.

B. Turmeric

Turmeric is a yellow spice and medicinal herb that originated in India. The orange pulp inside the stem contains the potent plant compound curcumin. One 2018 article cited findings from several animal studies and two human trials suggesting that curcumin may reduce chronic inflammation from RA. This may be due to curcumin reducing pro-inflammatory cells and increasing cells that help to regulate inflammation. However, the body cannot absorb large quantities of curcumin, which may limit its use as a therapy for joint pain. According to a 2018 study, the compound piperine, found in black pepper, can also help reduce inflammation and improve curcumin absorption.

C. Eucalyptus



Fig. 05 Eucalyptus oil and Aloe vera used in Treatment of Arthritis

According to a 2021 study, the oil from eucalyptus leaves has antimicrobial and anti-inflammatory properties. The flavonoids in eucalyptus leaves also have antioxidant properties that can help to protect against oxidative stress. A 2016 study used cell cultures and found that eucalyptus leaf extracts significantly reduced the levels of two inflammatory enzymes: interleukin-6 and tumor necrosis factor-alpha. This may help to reduce symptoms of inflammation, such as joint pain. People can purchase eucalyptus extract as an essential oil in many stores. They can add it to a warm bath or inhale it. A person may need to take care when using this herb as it can cause an allergic reaction in some people. A person should not ingest essential oils orally.

D. Frankincense

Boswellia serrata, or frankincense, is the resin from the bark of the *Boswellia* tree. This resin has a strong aromatic quality, making it a popular ingredient in perfumes, incense, and essential oils. Frankincense may also offer benefits for people with chronic inflammation. According to the Arthritis Foundation, the active compounds in frankincense possess anti-inflammatory properties that could help relieve arthritis symptoms. A 2016 review article of several small-scale clinical trials found evidence to support the use of frankincense and other Boswellian resin products for managing arthritis symptoms. The authors state that although frankincense is not a cure for arthritis, 60–70% of people saw significant improvements in their symptoms when using it.

E. Aloe vera

Aloe vera is a succulent plant popular for its health benefits. According to a 2018 review article, aloe vera has anti-inflammatory, anti-arthritic, and antirheumatoid properties. The compounds in aloe vera produce anti-inflammatory effects similar to those of nonsteroidal anti-inflammatory drugs. The research also shows that compounds in aloe vera help remove free radicals from the body, much like antioxidants. These antioxidant functions also help reduce inflammation by preventing the production of inflammatory enzymes. A person may use the sticky “gel” found inside aloe vera leaves topically, where they apply it directly to the skin. People can also ingest aloe vera orally by taking supplements or drinking aloe vera juice.



Fig. 06 Cinnamon and Ginger used in Treatment of Arthritis

F. Cinnamon

According to a 2020 review, cinnamon has anti-inflammatory and antioxidant properties. The review found that cinnamon supplementation significantly impacted inflammation and oxidative stress biomarkers. This means that supplementing with cinnamon may help reduce inflammation and oxidative stress levels, which can positively impact joint pain. A small-scale 2018 study also found that capsules of cinnamon powder helped improve symptoms and inflammation in females with RA.

G. Ginger

According to a 2019 study, inflammation and oxidative stress have close links with the pain and severity of joint conditions such as RA. Ginger contains anti-inflammatory compounds and is a traditional remedy for easing pain and stiffness in people with osteoarthritis. The study found that ginger may alter gene expression and reduce symptoms of RA.

XII. Management of Arthritis by Exercise.

A. Increased Joint Flexibility and Range of Motion

Picture your joints as a rusty door hinge. You move it! Similarly, regular exercise helps keep your joints flexible and improves your range of motion. This means less creaking and more ease in your daily movements.

B. Strengthening Muscles Around Joints

Think of your joints as the main actors in a play and your muscles as the supporting cast. When your muscles are strong, they take some of the load off your joints, reducing the strain and pain. It's like having a group of friends to help carry your load – always a good thing!

C. Weight Management

Carrying extra weight around is harsh on your joints, especially if you're dealing with arthritis. Exercise helps with weight management, making life easier for your joints. Plus, shedding a few pounds might add extra spring to your step!



Fig. 07 Exercise to control Arthritis

D. Improved Mood and Mental Health

Living with arthritis can be challenging, both physically and mentally. Exercise releases those feel-good endorphins, acting as a natural mood booster. It's like a double win – your body strengthens, and your mind gets happier!

E. Better Sleep Quality

Who doesn't love a good night's sleep? Arthritis pain can sometimes play the role of an unwanted nighttime visitor. Regular exercise has been shown to improve sleep quality, helping you wake up feeling refreshed and ready to tackle the day.

XIII. Motivation to Exercise When Pain of Arthritis.

It's hard to get yourself up and motivated to exercise, especially when your pain is acting up, but hear me out. Exercise has too many benefits to ignore as part of your regular routine. Exercise can help reduce your stiffness, improve your overall mood, relieve your pain and may even slow down the progression of changes that occur in your spine as a result of arthritis. Plus, it may protect against such diseases as heart disease, cancer, and more. Fitness and exercise programs generally consist of cardio, strength training and activities to increase your joint range of motion. Of these, the joint range-of-motion work may deserve much of your focus. Rajter says that range-of-motion exercises may interrupt the vicious cycle of stiffness, immobility, joint changes and pain often associated with arthritis. For a basic low-back, range-of-motion program that's safe, but not particularly aggressive, Rajter recommends three exercises, described below. She says that if you also have other medical conditions, or you have fitness goals you'd like to address without worsening your symptoms, you should make an appointment with a physical therapist for an evaluation and home exercise program. The following exercises will increase both the strength and flexibility of your back. It's best not to do them in bed. It is recommended to use a mat or blanket on the floor.

- **Knees-to-Chest Stretch:** Lie on your back and pull one knee toward your chest, using your hands. Be gentle, there's no need to force this action. Hold it there for 15 seconds and then return your foot to the floor. Do about 10 to 15 lifts and then repeat with the other leg. [Knees-to-chest](#) should be done once or twice each day, says Rajter. She also recommends doing it first thing in the morning and at

the end of the day, to relieve compression on your spine. If you can do a one-legged knees-to-chest without pain, try lifting both legs.

- **Gentle Spine Twist:** Lie on your back with your knees bent and your feet flat on the floor. Keep your shoulders nice and firm on the floor, too. Gently roll both bent knees to one side and stay there for 10 to 15 seconds. Breathe! Return to the start position and repeat the [gentle spine twist](#) on the opposite side. As with the knees-to-chest stretch, do 10 to 15 of these once or twice per day.

Conclusion:

Rheumatoid arthritis is a chronic autoimmune disorder with the characteristic features of the destruction of synovial membranes, cartilage, and joints. The disease develops with pathological processes that are influenced by environmental and genetic factors. Rheumatoid arthritis is described in Unani medicine as Hudar which is a type of waja ál-mafasil that refers to a variety of joint disorders which includes inflammatory, non-inflammatory, infectious, metabolic, and other musculoskeletal disorders. The primary goal of treatment is to re-establish a healthy temperament and balance the Khilt (humour) through both Imala (diversion of morbid material) Istefragh (evacuation of morbid material). It can be said that the Unani method of treatment offers an alternative approach for RA both affordable and virtually without adverse impacts.

References

1. Jamson JL, Fauci AS, Kasper DL, Hauser SL, Longo DL, Loscalzo J. Harrison's Principles of Internal Medicine. Edn 20, vol. 1, McGraw-Hill Education E-Books, New York, 2018, 2527.
2. Firestein GS, McInnes IB, Budd RC, O'Dell JR, Gabriel SE. Kelley and Firestein's, Textbook of Rheumatology. Edn 10, Elsevier, Philadelphia, 2017;2:1115.
3. Imboden JB, Hellmann DB, Stone JH. Current Diagnosis & Treatment Rheumatology. Edn3, McGraw Hill Education E-Books, New York, 2013, 139.
4. Iqbal S, Rattu MA, Shah N. Review of Rheumatoid Arthritis. U.S. Pharmacist (Specialty & Oncology suppl). 2019;44(1):8-11.
5. Watts RA, Conaghan PG, Denton C, Foster H, Isaacs J, Ladner UM. Oxford Textbook of Rheumatology. Edn 4, OXFORD University Press, Oxford, 2013, 839.
6. Ahmad AUAM, Qamar Uddin, Ismail BA, Jabeen J. Etiopathogenesis and management of Waja'al-mafasil (Rheumatoid arthritis): An evidence-based comprehensive review. International Journal of Research in Ayurveda and Pharmacy 2021;12(6):96-103.
7. Khan MS, Ali SJ, Nayab M, Aziz A. Effect of massage with Roghan Biskhapra (oil of Trianthena portulacastrum L.) in Rheumatoid Arthritis: case reports of two patients. Journal of Herbal Sciences 2015;4(3):1- 3.
8. Verma RS, Khan P, Ayub S, Afza S, Akhtar J, Ahmad S, et al. Efficacy and safety of a Unani compound drug– Habb-e-Asgand in Waja'al-Mafasil (Rheumatoid Arthritis) cases- A preliminary study. Indian Journal of Traditional Knowledge. 2021;20(1): 8-14.
9. Noor H, Ali F, Ansari MA. Applied Aspect of Kulliyat in the management of arthritis- A Review. 2018;5(5):784- 787.
10. Ashraf R, Mohi-ud-din R. Unani aspect of arthritis (Waja-ul-Mafasil) & its management: A review.

International Journal of Herbal Medicine. 2018;6(3):12- 19.

11. Al-Rubaye AF, Kadhim MJ, Hameed IH. Rheumatoid Arthritis: History, Stages, Epidemiology, Pathogenesis, Diagnosis, and Treatment. *International Journal of Toxicological and Pharmacological Research* 2017;9(2):145-155.
12. Khan AA, Bashir F, Akhtar J, Anjum N, Alam S. Concept and Management of Waja‘al-Mafasil (Arthritis) in Unani System of Medicine, *Journal of Drug Delivery and Therapeutics*. 2019;9(2-s):634-639.
13. Baig MG, Quamri MA, Ali SJ, Imtiyaz S, Sheeraz M, Ahmed Z. Concept and Management of Waja-ul-Mafasil (Arthritis) in Greco Arabic Medicine – an Overview. *Int J Cur Res Rev*. 2014;6(20):41-47.
14. Bullock J, Rizvi AA, Saleh AM, Ahmed SS, Do DP, Ansari RA, et al. Rheumatoid Arthritis: A Brief Overview of the Treatment. *Medical Principles and Practice* 2019;27(6):501-507.
<https://doi.org/10.1159/000493390>
15. Chauhan K, Jandu JS, Goyal A. Rheumatoid Arthritis Article. *State Pearls*. [<https://www.statpearls.com>]. Visited on 30 October, 2022.
16. Arzani HMA. *Tibb-e-Akbar (Urdu Translation by Hussain HM)*. Idara Kitab-us-Shifa, New Delhi, 617-628.
17. Samarqandi N. *Sharah Asbab (Urdu translation by Hkm Kabeer-Uddin)* Vol. 3, Faisal Publications, Deoband, 213-221.
18. Sina I. *Al-Qanoon-fit-Tib (Urdu translation by Kantoori GH)*, Part II. Idara Kitab-us-Shifa, New Delhi, 2007;3:375-393.
19. Jurjani I. *Zhakhira Khawarizm Shahi (Urdu translation by Hadi Husain Khan)*. Idara Kitab-us-Shifa, New Delhi, YNM.
20. Razi Z. *Kitab al-Hawi fi’l Tib*. Vol. 11, Central Council for Research in Unani Medicine, Ministry of Health and Family Welfare, New Delhi, Govt. of India; c2004.
21. Nithyashree RS, Deveswaran R. A Comprehensive Review on Rheumatoid Arthritis *Journal of Pharmaceutical Research International*. 2020;32(12):18- 32.
22. Rushd I. *Kitab al Kulliyat (Urdu translation)*. CCRUM, New Delhi. 1987;384-385:420-421.
23. Tabri AR. *Firdaus al Hikmat (Urdu translation)*. Sheikh Mohammad Bashir & Sons, Lahore, 1417, 291-293, 308.
24. Majusi AA. *Kamil-us-Sana (Urdu translation)*. Vol.2, Matba Munshi Nawal Kishore, Lucknow, 1889, 503-513, 521-522, 531- 534.
25. Zaidi Z. The concept and management of waja-ul-mafasil in Unani Medicine. *Asian Journal of Pharmaceutical Clinical Research*. 2021;14(12):7-13.
26. Subramanya M, Yasmeen S, Ahmed RS, Arora VK, Tripathi AK, Banerjee BD. Evaluation of therapeutic efficacy of Majoon Suranjan, a Unani formulation, in the treatment of rheumatoid arthritis: An experimental study. *Experimental Biology and Medicine*. 2013;238(12):1379- 1387.
<https://doi.org/10.1177/1535370213498983>.
27. Razi Z. *Kitab-al-Hawi Fit Tibb (Urdu translation)*. Vol. 12, CCRUM, New Delhi, 2004, 60-157.
28. Khan A. Haziq (Urdu). Sunrise Press, Delhi, 1965, 372- 374.