A CASE STUDY IN MANAGEMENT OF WAJA-UL-MAFASIL (RHEUMATOID ARTHRITIS) BY UNANI SYSTEM OF MEDICINE

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ABSTRACT:

Waja-ul-mafasil is a condition of pain or inflammation (waram) in the joints of hands, feet, knee joints and ankle joints. It is a generalized term, which includes all pain-full joints. It affects about 1 % of total population worldwide. In Unani system of medicine, we get scientific description of waja-ul-mafasil and its management. The aim of the present case study was to assess the efficacy of single as well as compound unani drugs formulation used orally, locally and through regimental therapy Bakhooor (steam fomentation) in the management of the disease. The used Unani drugs reduced the joints pain, tenderness, morning stiffness, muscular weakness etc. The efficacy was scientifically evaluated by subjective scores, Rheumatoid Factor quantitative technique and hemoglobin score. After treatment of three months, considerable improvement was observed in signs and symptoms of the disease of the patient. The unani treatment and regime was found effective and safe in management of waja-ul-mafasil.

Key words: Waja-ul-mafasil, Unani drugs, Rheumatoid Arthritis.
INTRODUCTION:

Waja-ul-mafasil is a disease that has been elaborated thoroughly in the Unani system of medicine. According to the Unani classic literatures, all bones are interrelated and interconnected to form joints. It is a condition of pain or inflammation (waram), which occurs in the joints of hands and feet; knee joints and ankle joints [01,02,03]. Waja-ul-mafasil is a generalized term used for pain-full joints. The term waja-ul-mafasil is described to all kind of joints disorders including pain, swelling and stiffness etc.. It has been described in Unnai classical literature as waja-ul-mafasil-aam (Arthritis), waja-ul-zuhr (back pain), niqras (Gout) and irqunnisa (sciatica) etc. [04].

Waja-ul-mafasil is a compound Arabic word, in which first word waja is plural of word auja, which literally means pain and second word is mafasil, which literally means joints, so the literal meaning of waja-ul-mafasil is joints pain. This disorder is well described in the old Egyptian, Unani and Roman classical literatures.

Rheumatoid arthritis (RA) is a complex disease, which affects the patients differently. The worldwide prevalence of disease is approximately 1% among the adults. RA investigators have noted that prevalence of the disease in North America and Europe is higher than prevalence of disease in Asia [5]. The objective of the present case study was to assess the effectiveness of single as well as compound unani drugs formulation in the management of the disease.

CLASSIFICATION OF DISEASE

The disease is classified into four types in accordance with types of khilt (Humours) causing waja-ul-mafasil (rheumatoid arthritis).

i  i. Waj-ul-Mafasil Balghami (Phlegmatic)

ii  ii. Waj-ul-Mafasil Damvi (Plethoric)

iii iii. Waj-ul-Mafasil Safravi (Bilious)

iv iv. Waj-ul-Mafasil Saudavi (Melancholic)

According to renown Unani scholar, Azam Khan, disease is classified on the basis of temperamental imbalance as waja-ul-mafasil Sada, which is caused by Sue Mijaz Maddi and which is accompanied by humoural imbalances. It is divided into four types:
1. Waja-ul-Mafasil Mufrid - This type of Waja-ul-Mafasil is caused by the abnormal change in one of four humours and has been categorized into Waj-ul-Mafasil Balghami, Waj-ul-Mafasil Damvi, Waj-ul-Mafasil Safravi and Waj-ul-Mafasil Saudavi.

2. Waj-ul-Mafasil Murakkab - When the change is in more than one humour and at least two humoures are involved i.e. Safra (Yellow bile) with Sauda (Black-bile), Dam (Blood) with Balgham (Phlagm) or Dam with Safra etc.

3. Waj-ul-Mafasil Reehi- This type of Waja-ul-Mafasil is caused by Reeh Ghaleez (bad gasses).

ETIOLOGY AS PER UNANI LITERATURES:

According to Sahib-e-Kamil the etiology of waja-ul-mafasil is so obscure and complicated that it is not possible to pinpoint the exact causative factor of the disease. According to Ibne-Sina, the psychic factors play a prominent role in the causation of the disease. Other factors, which are responsible for the disease include hereditary and joints weakness etc. [6].

RISK FACTORS FOR RHEUMATOID ARTHRITIS:

i. Gender: Both Females and males are at risk.

ii. Age: It may occur at any age but is common in age group 40 - 60 years.

iii. Genetic susceptibility: HLA-DR4 linked in Caucasian.

iv. Cigarette smoking.

v. Environmental factors.

vi. Obesity.

CLINICAL FEATURES:

Pain, tenderness and swelling of joints aggravated by the movement and morning stiffness lasting for more than one-hour duration are features of inflammatory arthritis. Warmth is evident on large joints especially on knee joints.

LABORATORY FINDINGS:

There is no specific investigation obtainable for diagnosis of Rheumatoid arthritis but some indicators are significant, which are as follows.
Increased ESR, normochromic anemia, decrease white cell count (WCC). Initially Rheumatoid factors appear negative but later on become positive in 80% cases. C-Reactive Proteins are elevated. During early onset of Rheumatoid Arthritis, radiographic evaluation is insignificant. Value of radiograph is to reduce the extend of cartilage destruction and bone erosion initiated by the disease. Some techniques of Imaging bones and joints are: Radiography, MRI, 99Mtc. Bisphosphonate bone scanning [07]

COMPLICATIONS OF THE DISEASE:

Waja-ul-Mafasil may complicate in various disorders depending on quality and quantity of morbid materials and the chronicity of the disease. Complications of disease include Tahajur-wa-Salabat-e-Mafasil (ankylosis / joints stiffness with restricted movements), dislocation, formation of nodule in between joints and joints deformities. Certain systemic complications may also occur, which include per-carditis, endocarditis, myocarditis, pneumonitis, pleurisy, tremors chorea and mania but the most dangerous type is meningitis [06].

CASE REPORT STUDY:

OBJECTIVE OF THE STUDY: To present the clinical efficacy and laboratory findings of Unani drugs in a known and positive case of Rheumatoid Arthritis.

STUDY TYPE: Observational single case design without control group.

STUDY CENTER: Central Research Institute of Unani Medicine, Lucknow, Uttar Pradesh.

STUDY DETAILS: (C.R.F protocol in brief)

Age- 52 years, Gender-Female, Economic status--high

Occupation – House wife, Diet-Veg. and Non-Veg.(both)

Chief complaints with duration was joints pain in both hand fingers joints especially in right hand’s finger thumb and index finger bend. Deformity appeared due to deviation in right knee-joint and both shoulders were also affected. Swelling and difficulty in walking with painful giant for last three years. Her daily routine was severely restricted and she was unable to free walk and hold the things in hand. She was facing too much troubles in rising from bed due to pain and reduced bending of right knee. She had the history of metabolic disorder and fatty liver. The patient was neither diabetic nor
hypertensive but patient had positive Rheumatoid Factor Quantitative Serum 87.7 IU/ml, which was very high.

**BRIEF HISTORY (INCLUDING ONSET AND PROGRESS)**

Patient is a diagnosed case of Rheumatoid Arthritis since last 3 years. She took regular treatment in Modern medicine. But despite of her treatment for such a long period, her daily routine was severely restricted and she was unable to hold things properly in her hands. She was facing too much difficulties in walking, climbing or to rise from the bed due to pain and stiffness of joints. The patient had history of metabolic disorder, fatty liver and low-grade fever. Multiple joints affected especially finger wrist and hands. Patient was earlier also selected by adopting clinical criteria of Rheumatoid Arthritis Revised (1988) for diagnosis by American Rheumatism Association [8]. The patient come to General Out Patient Department (GOPD) of Central Research Institute of Unani Medicine, Lucknow for treatment of disease by Unani system of medicines. When, patient came to the GOPD, she was feeling too much trouble in walking, moving and also in sitting. Since last three years, the patient had taken proper consultation and treatment from the orthopedics specialist. Her built was found normal during her physical examination. Her vitals were also within the normal range and no abnormality was found in systemic examination. Her appearance was severely painful and antalgic. The examination of left / right fingers and wrist revealed that there was severe pain, which were intermittent in nature. Hemoglobin was 9.8 g/dl and Rheumatoid Factor Quantitative, Serum was 87.7 IU/ml. Morning stiffness tenderness, restriction of movement, muscular weakness and swelling were present around the wrist and fingers including swan neck deformities boutonniere and dupuytren's deformity. Due to the dupuytren's deformity, patient was unable to flex her fingers properly. On palpation sensation and moderate tenderness was observed. The patient belongs to Sanguine (damawi) temperament (mijaz). The temperament of the patient was assessed as per the parameter described in Unani classical literatures.

**ASSESSMENT CRITERIA:**

The result are assessed on the basis of biochemical investigation Rheumatoid Factor (serum) method used Latex Particle Agglutination (LPA),a semi quantitative technique.
The following sign and symptoms were assessed on each follow-up according to following 4 grading,

(1. Joints Pain ( 1= Barely perceptible; 2= Mild; Can carry out daily activities with some trouble; 3 = Moderate; Cannot carry out daily routine activities easily; 4 = Sever; Bed ridden)

(2. Morning stiffness (1 = up to 15 minutes; 2= 15 to 30 minutes; 3= 30 to 45 minutes; 4= more than 45 minutes)

(3. Tenderness ( 1= Patient says it is tender; 2 = Patient says it is tender and winces; 3 = Patient says it is tender, winces and pulls back; 4 = Patient does not allow palpation)

(4. Restriction of movement (1 = Active range of movement (partial voluntary movement); 2 = Passive range of motion (full movement when the joints is moved by the examiner); 3 = Passive range of motion (partially movement, when joints is moved by the examiner; 4 = No movement at all.)

(5. Muscular weakness (1 = strength against gravity and added resistance;
2 = strength only against gravity, not added resistance; 3 = muscular contraction occurs, but not sufficient to overcome gravity;
4 = muscular contraction with little or no movement)

MANAGEMENT AND THERAPY:

At the beginning of the treatment, patient was advised to limit her activities and avoid the cold. She was advised to take light, easily digestible (lateef) and muqwwi diets. Roghan-e- Surkh is prescribed for temporary relief to her pain. To evacuate the toxicity of morbid material of Rheumatoid Arthritis from the blood, Mun’zij therapy, which is mentioned in Beyaz-e-Kabir is used. The following ingredients were assembled in the Mun’jiz prescription.

i  i. Gul-e-Banafsha(Viola odorata) 7 gm

ii ii. Chiraita (Polypodium vulgare) 7 gm

iii iii. Shahtara (Fumaria parviflora) 5 gm

iv iv. Makoh Khushk (Solanum Nirgum) 5 grain

v  v. Badyan (Foeniculumvulgare ) 7gm
vi. Suranjan sheerin (Colchicum luteum) 5 gm
vii. Bekh-e-badyan (Foeniculum vulgare roots) 7 gm
evii. Maweez Munaqqa (Vitisvinifera) 9 chunks

Soak all the ingredients in water and boiled in the morning. The treatment was followed for 15 days. The following prescription were advised along with 3 days for purgation (Mus’hil) [10].
i. Gul-e-surkh (Rosa damascena) 7 gm
ii. San-e-makki (Cassia angustifolia) 7 gm
iii. Mughz-e-filooskhayarshambar (Cassia fistula) 4 gm

After mus’hil, the Majoon Suranjan 7 gm twice daily, Majoon Azaraqi 5 gm twice daily [11] and Roghan-e-Surkh was prescribed for local application. Bakhoor (steam fomentation) was also advised for the patient after interval of 15 days. The drugs were boiled in water and desired organs were exposed to the evaporated vapours [10]

Habb-e-Suranjan 2 tabs thrice, Jawarish Shahi 5 gm in the morning and Habb-e Kabid Naushadri 2 tabs after meal, were prescribed.

In order to provide the energy and strength to patient, some dry fruits including in-jeer (fig) were advised. Milk, ghee, butter and eggs etc. were also recommended.

RESULTS AND DISCUSSION:

As the symptoms of the disease were gradually reduced therefore patient came with a cheerful salute in General O.P.D. of CRIUM, Lucknow. Her physical appearance and looks were showing significant improvements. Her quality of life was improved and she was now able to do her daily activities. The case was considerably improved after treatment with drugs. The present case study revealed that the drugs have anti-inflammatory, analgesic and anti-arthritis properties. Suranjan-shireen (Colchicum luteum) contains colchicine, which is approved by USFDA for the treatment of Gout and Mediterranean fever [12]. The mentioned ingredients of Mun’zij and mus’hil are well known ingredients in Unani system of Medicine. Suranjan (Colchicum luteum) is a particular drug for the disease which has analgesic effect. It provides strengthening to the joints and evacuate the morbid material [13]. Gul-e-surhk has anti-inflammatory and laxative effect. This ingredient is frequently used in mun’zij mus’hil therapy. Chiraita is also a
well-known mun’zij ingredient and has moarriq (diaphoretic) and musaff-e-khoon (blood purifier) effects. Banafsha has also moarriq and mulattif (demulcent) effects and is used in mun’zij therapy. Shahtra has Dafa-e-Humma (antipyretic), Mussaffi-e-khoon (blood purifier), Mudir-Baul (diuretic) and Mulaiyan (laxative) properties. Makoh khushk is mohallil-e-warm (anti-inflammatory), radae (divergent), mujaffif (desiccant / siccative) and Musakkin-e-Hararat (febrifuge) therefore these ingredients are used in the formulation. Badyan and Bakh-e-Badyan are muharrik (Stimulant) and kasir-e-reyah (carminative). All the drugs used in this combination are very effective in management of the disease without having any adverse effects on human body. Pharmacologically, Sana-e-Makki is reported to have Mus’hil (Purgative) effect therefore it is used in this formulation [14]. Maghz-e-filooskhayar shambhar is mentioned as strong purgative in Unani classical Pharmacological books. It gives cooling effect to blood fermentation, dissolve the inflammation of internal organs of body especially joints [15]. Maweea-Munaqqa blends the inflammation and remove the nodes of internal organs of the body [15].

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<th>S No.</th>
<th>Sign and Symptoms</th>
<th>Before Treatment</th>
<th>After Treatment</th>
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<tbody>
<tr>
<td>1.</td>
<td>Morning Stiffness</td>
<td>+++</td>
<td>+</td>
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<tr>
<td>2.</td>
<td>Joints Pain</td>
<td>+++</td>
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<tr>
<td>3.</td>
<td>Tenderness</td>
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<td>4.</td>
<td>Restriction of Movement</td>
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<tr>
<td>5.</td>
<td>Muscular Weakness</td>
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At the end of the treatment her hemoglobin have increased instead of 9.8 to 10.3 g/dl and remarkable change was observed in Rheumatoid Factor semi quantitative technique. Before treatment Rheumatoid quantitative serum was 87.7 IU /ml and after treatment it was found decreased >= 32 < 64 IU / ml. The action of the Unani single drug as well as its classical formulation were found useful and potent for the management of waja-ul-mafasil (Rheumatoid Arthritis).
CONCLUSION:
The present case study exhibits that the Unani ingredients along with its classical formulation used with Bakhoor (Steam fomentation) was found very effective to reduce the symptoms of waja-ul-mafasil (Rheumatoid Arthritis). The used unani drugs formulation were found very safe during the course of the present study. We may conclude that treatment of waja-ul-mafasil (Rheumatoid Arthritis) by Unani system of Medicine is very effective, affordable and safe. However, large controlled studies are required to evaluate the efficacy of the used drugs.

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