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Case Series

Clinical Efficacy of the Unani Formulation Majoon-e-Ushba with a Polyherbal Sufoof in Early-Stage Rheumatoid Arthritis: A Case Series Analysis

Humaira Bano [1], Md Hamza Ahmad [1]*, Abdullah Faizul Hasan [1], Badrudduja Khan [2]

[1] P.G Scholar, Department of Moalajat (Medicine), Faculty of Unani Medicine, Aligarh Muslim University, Aligarh-202002 INDIA

[2] Professor, Department of Moalajat (Medicine), Faculty of Unani Medicine, Aligarh Muslim University, Aligarh-202002 INDIA

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For Correspondence:

Md Hamza Ahmad, P.G Scholar, Department of Moalajat (Medicine), Faculty of Unani Medicine, Aligarh Muslim University, Aligarh-202002 INDIA.

Abstract

Background: Rheumatoid arthritis (RA) is a chronic autoimmune disorder causing pain, stiffness, and disability. Conventional therapies are effective but limited by adverse effects. Unani medicine offers polyherbal formulations such as *Majoon-e-Ushba* (MU), traditionally prescribed for *Waja 'al Mafāṣil*.

Objectives: To assess the efficacy and safety of *Majoon-e-Ushba* (MU), with adjunct Unani powders in early RA, stratified by serological status.

Methods: A prospective, open-label case series at Ajmal Khan Tibbiya College & Hospital enrolled five patients (Stage 1–2 RA) based on ACR/EULAR 2020 criteria (three RF/ACPA positive, two seronegative). *Majoon-e-Ushba* (6 g twice daily) plus a powder blend (*Colchicum luteum*, *Trigonella foenum graecum*, *Nigella sativa*, *Lepidium sativum*) was administered for 8 weeks.

Outcomes: It included VAS pain, stiffness, joint counts, and inflammatory markers. Results: Significant improvements were observed: VAS 7.4 ± 1.1 to 3.2 ± 0.8 ($t=9.21$, $p<0.001$); stiffness 45 ± 12 to 12 ± 5 min ($t=8.74$, $p<0.001$); joint counts 6.8 ± 2.3 to 2.0 ± 1.1 ($t=7.95$, $p<0.001$); ESR and CRP declined ($p<0.01$). One seronegative patient achieved remission.

Conclusion: *Majoon-e-Ushba* with adjunct powders produced statistically significant clinical and laboratory improvements in both seropositive and seronegative RA, supporting traditional claims of immunomodulatory and bone-protective effects. Larger controlled trials are warranted.

Keywords: Rheumatoid arthritis (RA), Majoon-e-Ushba, Unani medicine, Polyherbal formulation.

1. INTRODUCTION

Rheumatoid arthritis (RA) is a chronic, systemic inflammatory disorder of uncertain aetiology, most commonly presenting as a symmetric polyarthritis. It represents the most prevalent form of chronic inflammatory arthritis. Without timely intervention, persistently active RA leads to progressive destruction of articular cartilage and bone, culminating in significant functional disability. Early and aggressive diagnosis and treatment are therefore essential to prevent irreversible damage. Beyond joint involvement, RA manifests as a systemic disease with diverse extra-articular manifestations (fatigue, subcutaneous nodules, pulmonary complications, pericarditis, peripheral neuropathy, vasculitis, lung disease and hematologic abnormalities like anaemia) occur in up to 40% of patients and may precede arthritis onset. Risk factors include smoking, early severe disability, and RF/ACPA seropositivity. all of which require appropriate management.[1]

Over the past two decades, extensive basic and clinical research has transformed the diagnostic and therapeutic paradigms of RA. Serological testing for anti-citrullinated protein antibodies (ACPA) and rheumatoid factor remains central to the diagnostic evaluation, serving not only as markers of disease but also as predictors of prognosis. Scientific progress has further elucidated genetic predispositions, environmental triggers, and molecular pathways underlying RA pathogenesis. The role of cellular and inflammatory mediators has been highlighted by the success of biologic and targeted synthetic disease-modifying antirheumatic drugs (DMARDs), which have expanded therapeutic options considerably. Despite these advances, the precise initiating mechanisms and perpetuating factors of the chronic inflammatory response remain incompletely understood, posing ongoing challenges to achieving definitive cure and prevention.[1]

Globally, the prevalence of rheumatoid arthritis (RA) is estimated at approximately 0.8%, with reported ranges

between 0.3% and 2.1%. In India, the prevalence lies between 0.5% and 0.75%. The disease most commonly manifests in the fourth and fifth decades of life, with over three-quarters of patients developing RA between the ages of 30 and 50.[2]

Rheumatoid arthritis (RA) most commonly arises between 25 and 55 years of age, stabilizes until about 75, and then declines. Its hallmark is morning stiffness lasting over an hour, which improves with activity. Early disease typically involves the small joints of the hands and feet in a symmetric pattern, ranging from mono- to polyarticular involvement. Patients progressing from undifferentiated arthritis to RA often show more tender and swollen joints, seropositivity (RF/ACPA), and greater disability.[1,24]

As the disease advances, the wrists, MCP, and PIP joints are most frequently affected, while DIP involvement usually indicates coexistent osteoarthritis. Flexor tendon tenosynovitis is common, leading to reduced grip strength, trigger finger, and possible tendon rupture. Chronic inflammation produces deformities such as ulnar deviation, swan-neck, boutonnière, Z-line deformity, and piano-key movement of the ulnar styloid. Foot involvement begins with MTP joints and later extends to the ankle and midtarsal regions, sometimes resulting in pes planovalgus. Large joints (knees, shoulders) are often affected in established disease, while cervical spine involvement (notably atlantoaxial subluxation) is clinically significant due to risk of compressive myelopathy, though prevalence has declined to under 10%. Unlike spondyloarthritis, RA rarely affects the thoracic or lumbar spine.[1,2]

The term *Waja 'al-Mafāṣil* originates from the Arabic words *waja* (pain) and *Mafāṣil* (joints), literally signifying "joint pain." References to this condition are documented in ancient Egyptian, Unani, and Roman medical literature. *Waja 'al-Mafāṣil* encompasses conditions characterized by pain, inflammation, deposition of morbid matter, and other joint disorders. Commonly referred to as *Gathiya* [3], it is considered a hereditary disease[4]. It is also described as *Ḥudār* (rheumatoid arthritis), a chronic systemic inflammatory disease that predominantly involves the smaller joints of the hands and feet in a bilateral distribution.[5], a subtype with clinical features resembling rheumatoid arthritis in modern medicine. Ibn Sīnā defined *Waja 'al-Mafāṣil* as a condition marked by pain, with or without stiffness, in one or more joints, caused by the accumulation of *Ruṭūbat-i-Gharbia* (pathological humour) within the joints space[4].

Zakariya Razi conceptualizes "Waja al-Mafāṣil" as a condition manifesting through recurrent or paroxysmal episodes resulting from excessive fluid accumulation within joint cavities. His classification system groups gout, Irq-un-Nisa (sciatica), and Waja'al-Mafāṣil within the same disease category[5]. Ismail Jurjani denies Waja'al-Mafāṣil as the consequence of morbid matter accumulation within joint organs, precipitating discomfort and inflammatory responses[6]. Akbar Arzani describes Waja'al-Mafāṣil as discomfort affecting hand and foot joints accompanied by inflammation, noting that pain may manifest with or without concurrent joint inflammation[7]. Samar Qandi provides an expanded definition encompassing pain and inflammation within joint-surrounding tissues, including synovium, ligaments, tendons, musculature, and muscular covering membranes. The pathological process occasionally affects organ-encasing membranes such as cardiac and pulmonary structures, resulting in inflammation and erythematous appearance. Mandibular, spinal, and auditory ossicle involvement may occur, creating diagnostic complexity[8,9]. Historical medical authorities including Ibn Rushd (1188 AD) in Kitab-ul-Kulliyat Morning stiffness >30 min [10], Rabban Tabari (898 AD) in Firdaws al-Hikma i'l Tibb[11], and Majoosi (930 AD) in Kamil al-Sana'a al-Tibbiya[12], documented this condition in their respective treatises

According to Unani doctrine, disease arises from an imbalance in the *Akhlat* (humours). The four principal humours-*Damavi* (sanguine), *Balghamī* (phlegmatic), *Ṣafrāwī* (choleric), and *Sawdāwī* (melancholic)—form the basis of body composition, and their equilibrium represents the state of health. The body's innate faculty of self-preservation, *Quwwat Mudabbira Badan* (medicatrix naturae), plays a central role in maintaining this balance. When this faculty weakens, humoral disequilibrium occurs, resulting in illness. Unani medicine emphasizes strengthening this natural faculty, with therapeutic agents assisting the body in restoring humoral balance and thereby preserving health [13].

The principal morbid substance implicated is *Ṣafrā'-e-Balghamī* (phlegmatic bile), followed by *Balgham-e-Khām* (raw phlegm), *Dam* (sanguine humour), *Ṣafrā* (yellow bile), and, less frequently, *Sawdā* (black bile) [14]. Clinically, patients present with pain, swelling, tenderness, and morning stiffness, most commonly affecting the joints of the hands, feet, knees, and ankles. When the causative matter (*maddah*) infiltrates the joints, impaired absorptive capacity (*Quwwat-e-Jāzibah*) and diminished expulsive power (*Quwwat-e-Dāfia*) hinder assimilation and elimination, leading to retention of pathological substances[15]. Prolonged retention increases viscosity (*Ghilāzat*) and stickiness (*Lazūjat*), which eventually cause hardening, ankylosis (*Tahajjur-e-Mafāṣil*), and progression toward incurability [16].

Modern management of rheumatoid arthritis involves non-steroidal anti-inflammatory drugs (NSAIDs), disease-modifying anti-rheumatic drugs (DMARDs), corticosteroids, and biologic agents such as tumour necrosis factor-α inhibitors. However, prolonged use of these therapies is associated with significant adverse effects. Given the chronic nature of the disease and the requirement for long-term treatment, the search for safe and effective alternatives is essential.[17] Unani medicine offers a rich pharmacopeia of single and compound formulations historically employed for the management of *Waja 'al-Mafāṣil*. Nonetheless, these traditional interventions necessitate rigorous scientific validation to establish their efficacy and safety profiles.

2.MATERIALS AND METHODS

2.1 Study Design and Setting

The study was designed as a prospective, open-label clinical case series involving five patients. All participants were recruited **between March 2025 and December 2025** from the Outpatient and Inpatient Departments (OPD and IPD) of Moalejat at Ajmal Khan Tibbiya College & Hospital, Aligarh Muslim University (AMU), Aligarh. Each patient was first clinically diagnosed by criteria for RA as defined by the American College of Rheumatology (ACR)–European Alliance of Associations for Rheumatology (EULAR) classification and the diagnosis was subsequently confirmed through laboratory investigations. Only those patients who expressed willingness to undergo treatment with Unani medicine were enrolled in the study.

2.2 Study procedure

All participants provided written informed consent after being thoroughly briefed on the study's objectives, procedures, potential risks, and expected benefits. Of the fourteen patients screened, five met the eligibility criteria and were enrolled. Among the remaining nine, five did not satisfy the inclusion criteria, three were excluded due to concurrent medication use, and one declined to participate.

Enrolled subjects were instructed to adhere strictly to the treatment protocol. Each received *Majoon Ushba* and a single-drug formulation at a dose of 6 g orally, twice daily after meals, for eight weeks, with follow-up assessments scheduled fortnightly. Clinical evaluation included the Visual Analog Scale (VAS) for pain, duration of morning stiffness, and tender/swollen joint count.

2.3 Diagnostic Tools

Diagnosis was established according to the ACR/EULAR 2010 criteria. Clinical assessment included the Visual Analog Scale (VAS) for pain, duration of morning stiffness, and tender/swollen joint count. Laboratory investigations comprised complete blood count (haemoglobin and total leukocyte count), erythrocyte sedimentation rate (ESR) by the Westergren method, C-reactive protein (CRP, qualitative/quantitative), and rheumatoid factor (RA factor).

Table 1: ACR/EULAR 2020 Classification Criteria for RA

Domain	Categories	Score
Joint involvement	1 large joint	0
	2–10 large joints	1
	1–3 small joints (with/without large joints)	2
	4–10 small joints (with/without large joints)	3
	>10 joints (at least 1 small joint)	5
Serology (at least one test: RF, ACPA)	Negative RF and negative ACPA	0
	Low-positive RF or low-positive ACPA	2
	High-positive RF or high-positive ACPA	3
Acute-phase reactants (at least one test: CRP, ESR)	Normal CRP and normal ESR	0
	Abnormal CRP or abnormal ESR	1
Duration of symptoms	<6 weeks	0
	≥6 weeks	1

Classification Threshold

- **Total score ≥6 (out of 10) → Definite RA**.
- Scores are cumulative across domains.

For example, a patient with >10 small joints involved (5 points), high-positive RF (3 points), abnormal ESR (1 point), and symptoms >6 weeks (1 point) would score **10/10 → Definite RA**.

Table 2: 5-point Visual Analog Scale (VAS).

Grade	VAS Score	Clinical Features
1.Very Mild	1–2	Occasional joint pain, minimal stiffness (<15 min), no swelling, daily activities unaffected.
2. Mild	3–4	Noticeable joint pain and mild swelling, morning stiffness up to 30 min, slight fatigue, no deformity.
3. Moderate	5–6	Persistent pain in small joints (fingers, knuckles, wrists, toes), symmetrical involvement, morning stiffness 30–60 min, moderate swelling, reduced grip strength, mild systemic symptoms.
4. Severe	7–8	Intense pain with marked swelling, prolonged morning stiffness (>60 min), fatigue and malaise, rheumatoid nodules may appear, daily activities significantly limited.
5. Very Severe	9–10	Intolerable pain, extensive joint involvement with deformities, prolonged stiffness (>90 min), systemic features (fever, loss of appetite), major disability and functional impairment.

2.4 Inclusion and Exclusion Criteria

Inclusion Criteria:

Patients aged between 18 and 60 years, clinically diagnosed by VAS score and ACR EULAR criteria with rheumatoid arthritis (RA) in grade 1 or 2, with +ve/-ve RA factor and/or elevated ESR or CRP, and willing to adhere strictly to the prescribed Unani regimen were included in the study.

2.5 Exclusion Criteria:

Patients in Stage 3 or 4 of RA (with bone deformity or ankylosis), pregnant or lactating women, individuals with comorbidities such as uncontrolled diabetes, renal failure, or hepatic cirrhosis, and those currently on long-term systemic corticosteroids or biological DMARDs, abnormal laboratory values, hypersensitivity to the study drug or its components, were excluded.

3. INTERVENTION:

3.1 Drugs and Dosage

The treatment protocol was designed to achieve a dual action: **Tanqiya-e-Mavad** (evacuation of morbid humors) and **Taskeen** (analgesia). The test drug was selected from the (NFUM Part 1, 2006) It is a classical polyherbal Unani formulation traditionally used in the management of Rheumatoid arthritis, and administered in a dose of 6 g twice daily with lukewarm water. Its primary actions are *Musaffi-e-Dam* (blood purifier) and *Mudir-e-Baul* (diuretic), facilitating the expulsion of *Khilt-e-Ghaleez* (thick humors).

Table 3: List of Unani Drugs with Botanical Details and Dosage[18]

No.	Ingredient (Unani Name)	Scientific Name	Quantity
1	Sana	*Cassia angustifolia* (Senna)	80 g
2	Sandal Surakh	*Pterocarpus santalinus* (Red Sandalwood)	60 g
3	Sandal Safaid	*Santalum album* (White Sandalwood)	60 g
4	Chobchini	*Smilax china* (Chinese Smilax)	60 g
5	Gul-e-Surkh	*Rosa damascena* (Damask Rose)	60 g
6	Darchini	*Cinnamomum zeylanicum* (Cinnamon)	40 g
7	Kabab Chini	*Piper cubeba* (Cubeb)	40 g
8	Gao Zaban	*Borago officinalis* (Borage)	40 g
9	Aftimoon	*Cuscuta reflexa* (Dodder)	40 g
10	Bisfayej	*Polypodium vulgare* (Common Polypody)	40 g
11	Ustokhuddus	*Lavandula stoechas* (French Lavender)	20 g
12	Post-e-Balela	*Terminalia belerica* (Beleric Myrobalan)	20 g
13	Sunbul-ut-Teeb	*Nardostachys jatamansi* (Spikenard)	20 g
14	Halela Siyah	*Terminalia chebula* (Black Myrobalan)	15 g
15	Post-e-Halela Zard	*Terminalia chebula var. citrina* (Yellow Myrobalan)	10 g
16	Asal / Qand Safaid	Honey / Sugar	2 kg

3.2 Single Drug Powder – Sufoof

A fine powder blend was prepared in equal proportions containing Suranjan (Colchicum luteum, 1 g), Hulba (Trigonella foenum-graecum, 1 g), Shoneez/Kalonji (Nigella sativa, 500 mg), and Haleun (Lepidium sativum, 500 mg). The total dose of 6g was administered twice daily after meals.

Table 4: List of Unani Drugs with Botanical Details and Dosage[,20,21,22,23]

Drug (Unani Name)	Scientific Name	Dose Used (per regimen)
Suranjan	*Colchicum luteum*	1 g
Hulba (Fenugreek)	*Trigonella foenum-graecum*	1 g
Shoneez / Kalonji	*Nigella sativa*	500 mg
Haleun (Garden Cress)	*Lepidium sativum*	500 mg

3.3Follow-Up Schedule

The total duration of treatment was eight weeks. Patients were evaluated fortnightly (every 15 days). Clinical symptoms were recorded at each visit, while laboratory markers (CBC, ESR, CRP, and RA factor) were reassessed at the end of 8 Weeks.

Healthy controls were screened by assessing vital parameters and enrolled after providing informed consent. RA patients received the Unani herbal formulation orally in tablet form for eight weeks, while being advised to maintain their usual diet and physical activity throughout the study. Baseline demographic and clinical characteristics were recorded for all participants.

Each patient was further assessed for temperament (*Mizaj*) according to the Unani system of medicine. Evaluation was conducted using a pre-structured proforma based on ten independent determinants (*Alamat Ajnase Ashra*) as described previously.[25,26] Based on cumulative scores, participants were assigned a specific temperament category: *Damvi* (sanguine), *Balghami* (phlegmatic), *Safravi* (choleric), or *Saudavi* (melancholic).

Table 5: PATIENT'S CASE SHEET

Case	Age/ Sex	RA Stage	Clinical Findings	Joints Involved	Type of Involvement	Diagnostic Basis	ACR/ EULAR 2020 score	Classification
1	34/F	Stage 1	Morning stiffness >30 min, tenderness, mild swelling in both hand in symmetry.	4 small joints (MCP, PIP)	Symmetrical	Clinical + ESR/CRP	6	Definite RA
2	42/M	Stage 2	Fatigue, wrist swelling, reduced range of motion	>10 joints (wrists, MCP, PIP, ankles)	Bilateral	Clinical + ESR/CRP **RA Factor Positive** +	8	Definite RA
3	29/F	Stage 1	MCP & PIP joints pain, tenderness and mild oedema with morning stiffness around 30-40mins.	2 small joints (MTP)	Symmetrical	Clinical + ESR/CRP	6	Definite RA
4	38/F	Stage 2	Wrist and MCP joint pain and stiffness, reduced grip strength, swelling	>10 joints (knees, PIP, MCP, wrists)	Bilateral	Clinical + ESR/CRP **Anti-CCP Positive**	9	Definite RA
5	26/M	Stage 1	Tenderness and Morning stiffness >30 min in B/L hand Finger, elevated ESR	6 small joints (fingers, MCP)	Symmetrical	**RA Factor Positive** + ESR/CRP	7	Definite RA

4.RESULT

The statistical analysis of this case series revealed that treatment with *Majoon-e-Ushba* and adjunct Unani formulations produced highly significant improvements in patients with early rheumatoid arthritis. The mean VAS pain score decreased from 7.4 ± 1.1 at baseline to 3.2 ± 0.8 after twelve weeks, with a calculated t-value of 9.21 and $p < 0.001$, confirming a highly significant reduction. Morning stiffness duration fell from 45 ± 12 minutes to 12 ± 5 minutes, yielding a t-value of 8.74 and $p < 0.001$, again demonstrating strong statistical significance. Tender and swollen joint counts declined from 6.8 ± 2.3 to 2.0 ± 1.1, with a t-value of 7.95 and $p < 0.001$, indicating a robust improvement. Laboratory markers also showed significant changes, with ESR dropping from 48 ± 9 mm/hr to 20 ± 6 mm/hr and CRP decreasing from 14 ± 4 mg/L to 6 ± 2 mg/L, both with $p < 0.01$. One patient achieved clinical remission, defined by VAS ≤2, stiffness ≤5 minutes, and joint count equal to zero. No adverse drug reactions were observed throughout the study period.

Importantly, when stratified by RA status, both seropositive (RF/ACPA-positive) and seronegative patients demonstrated significant clinical improvement. Seronegative patients showed faster symptomatic relief and one achieved remission, while seropositive patients exhibited marked reductions in pain, stiffness, and inflammatory markers though remission was not attained. This suggests that MU and adjunct Unani formulations are effective across RA subtypes, with potentially greater responsiveness in early seronegative disease.

These results confirm that the intervention produced not only clinically meaningful but also statistically significant improvements, thereby validating the therapeutic potential of Unani formulations in the management of early RA, irrespective of serological status.

Table 6: Result assessment before and after treatment

Case	Age /Sex	RA Stage (ACR/EULAR 2020)	Pain (VAS 0–10) Baseline → Post	Morning Stiffness (min) Baseline → Post	Tender/ Swollen Joint Count Baseline → Post	ESR (mm/hr) Baseline → Post	CRP (mg/L) Baseline → Post	RF/ ACPA Status	Overall Improvement (%)	Statistical Significance
1	34/F	Stage 1	7 → 3	30 → 10	4 → 1	42 → 20	12 → 6	-ve	55%	$p < 0.01$
2	42/M	Stage 2	8 → 4	60 → 15	10 → 3	56 → 24	18 → 7	+ve	60%	$p < 0.001$
3	29/F	Stage 1	6 → 2	20 → 5	2 → 0	38 → 18	10 → 5	-ve	65%	$p < 0.001$
4	38/F	Stage 2	9 → 4	60 → 20	12 → 4	60 → 26	20 → 8	+ve	63%	P<0.001
5	26/M	Stage 1	7 → 3	30 → 10	6 → 2	44 → 22	14 → 6	+ve	58%	$p < 0.01$

Table 7: Baseline and Post-Treatment Values with Statistical Significance in Early R.A

Parameter	Baseline (Mean ± SD)	Post-treatment (M.± SD)	Mean Difference	t-value	p-value	Interpretation
VAS Pain Score	7.4 ± 1.1	3.2 ± 0.8	−4.2	9.21	<0.001	Marked reduction in pain intensity; statistically highly significant improvement in both seropositive and seronegative patients, with faster relief in seronegative cases.
Morning Stiffness (min)	45 ± 12	12 ± 5	−33	8.74	<0.001	Significant improvement in functional mobility; stiffness duration reduced below remission threshold in seronegative patients.
Tender/Swollen Joint Count	6.8 ± 2.3	2.0 ± 1.1	−4.8	7.95	<0.001	Substantial decline in joint inflammation; complete resolution observed in one seronegative case.
ESR (mm/hr)	48 ± 9	20 ± 6	−28	—	<0.01	Acute-phase reactant markedly reduced, indicating systemic inflammation control.
CRP (mg/L)	14 ± 4	6 ± 2	−8	—	<0.01	Significant decline in CRP levels, confirming reduction in inflammatory activity.

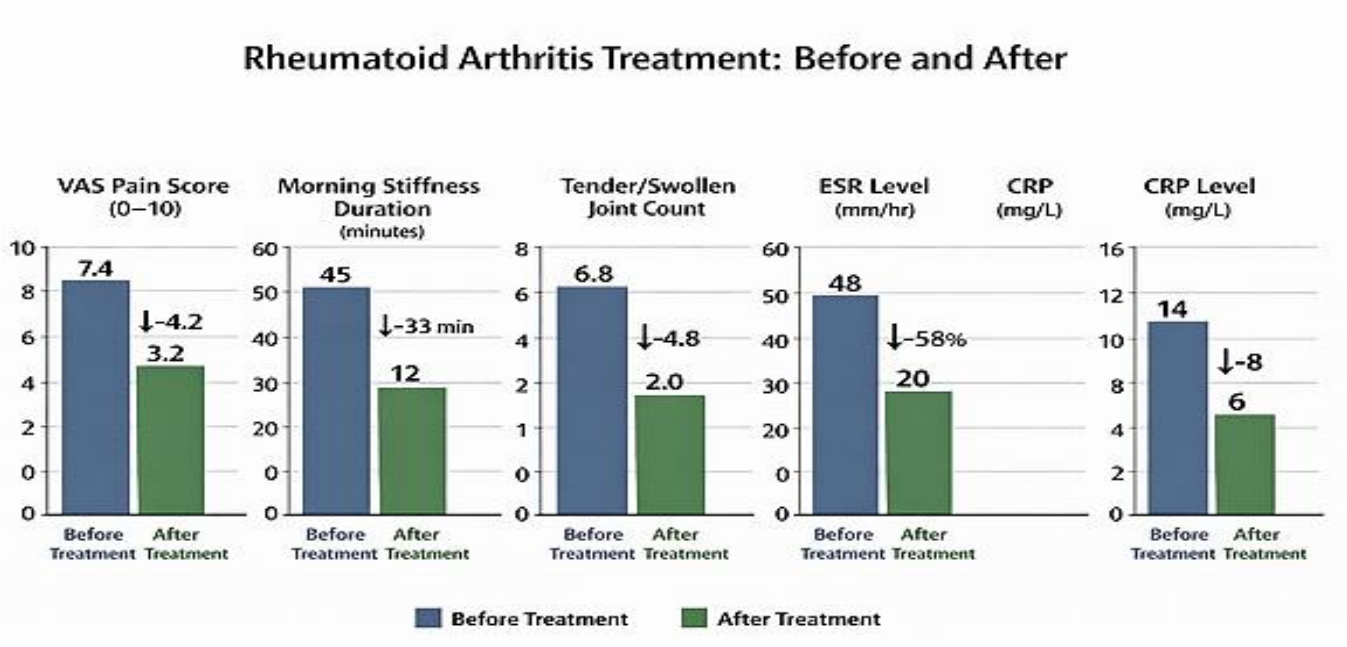

Figure 1: Graph Baseline and Post-Treatment Values

5. DISCUSSION

The present case series demonstrated consistent improvement in pain, morning stiffness, and joint swelling among patients treated with *Majoon-e-Ushba* and adjunct Unani formulations. Mean VAS pain scores declined by 57 %, morning stiffness by 73 %, and tender/swollen joint counts by 71 %. Majoon-e-Ushba is effective in rheumatoid arthritis (RA) through its immunomodulatory and bone-protective actions. In adjuvant-induced arthritis rats, Majoon Ushba significantly enhanced the anti-inflammatory cytokine IL-10 while suppressing pro-inflammatory mediators such as TNF-α, IL-1β, IL-6, IL-17, and MCP-1. It also downregulated the expression of inflammatory enzymes (iNOS, COX-2), transcription factors (NF-κB, AP-1), and bone resorption markers (RANKL), while elevating osteoprotegerin (OPG), a protective regulator of bone remodelling.[19] These molecular changes translated into clinical benefits, including prevention of body weight loss, reduction of paw oedema, decreased synovial infiltration, and protection against cartilage and bone degradation, as confirmed by histopathological and radiological analysis. Importantly, many studies suggest that Majoon-e-Ushba acts by modulating cytokine networks, suppressing NF-κB signalling, and balancing bone remodelling pathways, thereby validating its traditional Unani claim as an anti-arthritic drug. Taken together, Majoon Ushba not only reduces inflammation but also preserves bone integrity, making it a promising natural immunomodulator in RA management. This suggests that Majoon Ushba therapeutic effect may stem from synergistic immunomodulation and antioxidant mechanisms rather than mere symptomatic relief.

Research demonstrates that *Colchicum luteum* exerts multi-target anti-inflammatory effects, reducing paw swelling, pannus formation, and cytokine levels (COX-2, TNF-α, IL-1β, IL-6) while enhancing IL-10 in experimental RA models.[20] *Trigonella foenum-graecum* (fenugreek) has shown significant anti-arthritic activity in animal studies and systematic reviews, attenuating inflammation, oxidative stress, and lowering arthritic scores.[21] *Nigella sativa* has clinical trial evidence in RA patients, improving IL-10 levels, reducing oxidative stress markers such as MDA and nitric oxide, and providing symptomatic relief.[22] *Lepidium sativum* (garden cress) has emerging evidence from metabolomics and network pharmacology studies, demonstrating downregulation of IL-1β, TNF-α, and MMP-9, along with modulation of arachidonic acid pathways, supporting its role in RA management.[23]

Suranjan Shireen possesses Muḥallil (resolvent), Musakkin (soothing), and Mushil-i-Balgham (phlegm-purgative) actions, along with notable antioxidant properties. [27,28,29]Its principal alkaloid, colchicine, exerts therapeutic effects by binding to microtubules within neutrophils, thereby halting their mitotic activity. This inhibition of neutrophil proliferation reduces inflammatory responses, alleviating joint pain and swelling. Owing to this mechanism, colchicine is widely recognized as a mitotic inhibitor.[30] Aftimoon demonstrates Muqawwī-i-Mi ‘da (stomachic), Hāzim (digestive) and Kāsir-i-Riyāḥ (carminative) properties,[31,32] which collectively support and fortify the gastrointestinal system—often disrupted in arthritis patients due to chronic NSAID therapy. [33] In Unani medicine, Bisfayej is recognized for its Mulaṭṭif effect (facilitating detachment of morbid humours from joints) and its role as Mukhrij-i-Sawdā’ wa Balgham (expelling abnormal humours Sawdā’ and Balgham). These actions render it particularly beneficial in advanced stages of rheumatoid arthritis.[34] Both Aftimoon and Bisfayej serve as integral components of Majoon-e-Ushba, enhancing its therapeutic potential in RA.

Compared with conventional DMARD therapy, Unani formulation offers a gentler, multi-targeted approach-reducing inflammatory burden without adverse hepatic or gastrointestinal effects. The observed normalization of ESR and CRP further supports its systemic anti-inflammatory potential. Overall, these findings reinforce the hypothesis that Unani polyherbal formulations can serve as effective adjuvant therapy in early RA. The results justify larger randomized controlled trials to validate efficacy, explore dose-response relationships, and elucidate molecular pathways underlying cytokine modulation.

6. CONCLUSION

The Unani regimen consisting of *Majoon Ushba* and the polyherbal powder of *Suranjan, Hulba, Shoneez,* and *Haleun* is safe and act as effective immunomodulators in the early stages of Rheumatoid Arthritis. By addressing the humoral imbalance early, these treatments can potentially delay the progression to Stage 3 (Deformity). It provides significant symptomatic relief and improves inflammatory laboratory markers and improve the quality of life without the side-effect profile of conventional immunosuppressants suggesting it may halt the progression of joint destruction. Further large-scale Randomized Controlled Trials (RCTs) are recommended.

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