



Case Report

Evidence-Based Integrative Ayurvedic Management of Amavata (Rheumatoid Arthritis) Triggered by Post-COVID-19 Infection through a Novel Medicated Water Therapy – A Clinical Case Report

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Abstract

Background: Post-COVID-19 autoimmune complications, particularly rheumatoid arthritis (RA), represent emerging clinical challenges. *Amavata*, the Ayurvedic correlate of RA, arises from Ama and vitiated Vata dosha. Conventional disease-modifying antirheumatic drugs (DMARDs) carry long-term risks, necessitating integrative therapeutic alternatives. **Case Presentation:** A 41-year-old female bank cashier presented with a 4.5-year history of bilateral symmetrical joint pain and swelling involving metacarpophalangeal (MCP), proximal interphalangeal (PIP), and ankle joints, developing six months after confirmed COVID-19 infection (April 2020). Symptoms included morning stiffness (30–60 minutes), chronic fatigue, disturbed sleep, and gastrointestinal complaints. Laboratory investigations confirmed seropositive RA: rheumatoid factor 45.2 IU/ml, erythrocyte sedimentation rate (ESR) 112 mm/hr, and C-reactive protein (CRP) 6.90 mg/L. **Intervention:** An 11-week integrative Ayurvedic protocol was implemented alongside ongoing DMARD therapy. Sequential Shamana Chikitsa comprised *Amrutha Shadangam Kashayam*, *Hinguvastaka Churna*, *Indukanta Ghrita Snehapana*, *Trailokya Vijaya Vati*, and *Simhanada Guggulu*. A novel two-phase *Sausadham Jala* (medicated water) therapy utilised Phase I *Nagara Dhanyaka Siddha Jala* followed by Phase II *Laghu Panchamula Jala* with *Amalaki churna*. *Agnikarma*, *Sukshma Vyayama*, and Pathya-Apathya guidelines were concurrently applied. **Outcomes:** Rheumatoid factor normalised (18.4 IU/ml), ESR reduced markedly (18 mm/hr), and CRP declined (5.2 mg/L). Symptom severity improved from Grade 3 to Grade 1 across joint pain, swelling, and stiffness. Digestive weakness, appetite loss, and constipation resolved completely. No adverse effects were recorded. **Conclusion:** This evidence-based integrative Ayurvedic approach with novel *Sausadham Jala* therapy demonstrates significant therapeutic efficacy in post-COVID-19. *Amavata*, addressing inflammatory processes and underlying metabolic dysfunction. Larger randomised controlled trials are warranted to validate these findings.

Keywords: Amavata, Rheumatoid Arthritis, Post-COVID-19, Medicated Water Therapy, *Sukshma Vyayama*, Integrative Treatment

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Introduction

Rheumatoid arthritis (RA), classified under WHO-ICD-11 as FA20, represents one of the most economically burdensome autoimmune conditions globally, affecting approximately 17.6 million individuals worldwide as of 2020, with projections indicating an escalation to 31.7 million cases by 2050.⁽¹⁾ The

disease demonstrates significant geographical variations, with industrialised nations reporting higher prevalence and a pronounced female predominance (3:1 ratio). In India, RA prevalence ranges from 0.28% to 0.7% in the general population, with regional variations influenced by genetic predisposition, environmental factors, and rapid urbanisation. (2)

Contemporary lifestyle patterns characterised by prolonged sedentary behaviour, processed food consumption, and chronic stress have fundamentally altered the autoimmune disease landscape. These factors contribute to systemic inflammation, metabolic dysregulation, and immune dysfunction, creating a permissive environment for autoimmune manifestations. (3) The transition from traditional dietary patterns to Westernised diets

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rich in pro-inflammatory components has been particularly implicated in the rising incidence of RA in developing nations.

The COVID-19 pandemic has unveiled complex relationships between viral infections and subsequent autoimmune phenomena. Post-COVID-19 conditions, classified under WHO-ICD-11 as U09.9, encompass persistent musculoskeletal manifestations. SARS-CoV-2 infection can trigger autoimmune responses through molecular mimicry, epitope spreading, and immune dysregulation. (4) Emerging evidence suggests COVID-19 may precipitate or accelerate RA onset in genetically susceptible individuals through cytokine storms, immune complex formation, and cross-reactive antibody production. (5) Temporal associations between COVID-19 infection and subsequent autoimmune disease development range from weeks to months post-infection. (6)

Despite advances in conventional RA management—including DMARDs, biologics, and targeted synthetic DMARDs—significant therapeutic gaps persist. Long-term immunosuppression carries substantial risks including increased infection susceptibility, malignancy risk, and organ toxicity. (7) These limitations necessitate exploration of complementary therapeutic approaches that may offer safer long-term management while addressing underlying pathophysiological mechanisms.

In Ayurvedic medicine, *Amavata* represents a complex pathological state arising from the interaction between *Ama* (undigested metabolic toxins) and vitiated *Vata dosha*. Classical texts describe *Amavata* as originating from *Viruddha Ahara* (incompatible food combinations) consumed in the presence of *Mandagni* (compromised digestive fire), leading to *Ama* formation and subsequent *Vata* vitiation. (8) The pathogenesis involves initial *Ama* production in the gastrointestinal tract, followed by systemic circulation and localisation in joints, particularly affecting *Madhyama Rogamarga*. (9)

The management of *Amavata* employs a sequential therapeutic approach: *Dipana* therapy to enhance digestive capacity, *Amapachana* to promote digestion of toxic metabolic products, *Shodhana* therapy for systemic detoxification, and *Shamana* therapy for palliative care and physiological balance restoration. (10) Modern understanding correlates *Amavata* pathophysiology with autoimmune inflammation, where *Ama* represents immune complexes and inflammatory mediators, while *Vata* vitiation corresponds to neurogenic inflammation and joint destruction. (11) The concept of medicated water therapy (*Sausadham Jala*) represents an innovative application of classical Ayurvedic principles designed to enhance bioavailability and therapeutic efficacy while minimising adverse effects.

This case report presents the successful management of post-COVID-19 *Amavata* using a novel integrative Ayurvedic approach in a 41-year-old female with seropositive RA. Primary objectives were to: (1) document the clinical efficacy of integrative Ayurvedic management in post-COVID-19 *Amavata*; (2) demonstrate the novel application of medicated water therapy in autoimmune conditions; (3) present evidence-based improvements in inflammatory markers and functional outcomes; and (4) contribute to the growing literature on complementary approaches to autoimmune disease management.

Case Report

Patient Demographics and Presentation

A 41-year-old female bank cashier presented to our *Ayurvedic* outpatient clinic in April 2025 with a 4.5-year history of bilateral

symmetrical joint pain and swelling involving metacarpophalangeal (MCP), proximal interphalangeal (PIP), and ankle joints. Primary symptoms included morning stiffness lasting 30–60 minutes, chronic fatigue, sleep disturbances, and gastrointestinal complaints of constipation and abdominal bloating, which had been present for the past six months. These symptoms significantly impaired her occupational performance and daily activities.

History of Present Illness

The patient reported a 4.5-year history of bilateral symmetrical joint pain and swelling affecting the small joints of the hands and feet, with an insidious onset characterised by deep aching and intermittent sharp pain. Joint swelling appeared approximately one month after symptom onset. Morning stiffness lasting 30–60 minutes limited movement and was unrelieved by analgesics. Symptoms were partially managed with antirheumatic medications, but frequent exacerbations persisted. Over the preceding nine months, chronic fatigue and generalised weakness developed. In the last six months, pain and stiffness caused fragmented sleep with frequent nocturnal awakenings, resulting in non-restorative sleep and worsened daytime fatigue. Gastrointestinal symptoms including constipation (bowel movements every 2–3 days), abdominal bloating and postprandial discomfort emerged and remained refractory. Progressive joint impairment reduced fine motor skills, adversely impacting occupational tasks such as cash handling and computer use, leading to absenteeism and reduced productivity.

Medical History and Current Medications

The disease timeline was as follows. In April 2020, the patient contracted COVID-19 infection confirmed by RT-PCR, managed with home quarantine. Initial joint symptoms appeared in October 2020, six months after COVID-19 recovery, and a formal diagnosis of seropositive rheumatoid arthritis was established in 2021. Continuous conventional DMARD therapy was maintained from 2021 to the time of presentation in 2025. Current ongoing medications included methotrexate 15 mg weekly (oral), hydroxychloroquine 200 mg daily, folic acid 5 mg weekly, and intermittent NSAIDs for symptom control.

Family, Past and Menstrual History

There was no significant family history of rheumatoid arthritis or autoimmune disorders. No personal history of diabetes mellitus, hypertension, or other chronic autoimmune conditions was elicited. The patient reported a regular menstrual cycle. She was a primigravida with one male child aged 16 years, born via full-term normal vaginal delivery.

Personal History

The patient followed a predominantly vegetarian diet with irregular meal timings and reported reduced appetite. Bowel habits were constipated, with movements every 2–3 days. Bladder habits were normal. Sleep was disturbed due to pain and stiffness with frequent nocturnal awakenings. She denied tobacco use or alcohol consumption and reported no known drug or food allergies. She was married and had worked as a bank cashier for 12 years in an air-conditioned environment involving prolonged standing and repetitive hand movements. Her socioeconomic status was middle class. A sedentary lifestyle with limited physical activity due to progressive joint symptoms was noted.

Clinical Examination

General Examination

The patient was conscious, alert, and well-oriented. Vital signs were stable: blood pressure 126/80 mmHg, heart rate 74 bpm, respiratory rate 18 breaths/minute, temperature 37°C. Body mass index was 20.7 kg/m². No lymphadenopathy, pallor, icterus, cyanosis, clubbing, or extra-articular manifestations were detected.

Ayurvedic Assessment: Ashta Vidha Pariksha (Eightfold Examination)

Traditional Ayurvedic diagnostic examination (Ashta Vidha Pariksha) revealed the following findings. Nadi (pulse) was 74 beats per minute with *Vata-Kapha* predominance. *Mala* (stool) examination showed *Vibandha* (constipation). *Mutra* (urine) was *Prakrita* (normal). *Jihva* (tongue) exhibited *Sama* coating, indicative of *Ama* accumulation. *Shabda* (voice) was *Prakrita* (normal). *Drik* (eyes) were *Prakrita* (normal). *Akriti* (built) was assessed as *Krishna* (lean and thin).

Systemic Examination

Chronic fatigue and generalised weakness limiting daily activities had persisted for four months. Sleep was fragmented with frequent nocturnal awakenings due to joint pain and stiffness for three months, resulting in non-restorative sleep. Gastrointestinal assessment revealed constipation (movements every 2–3 days), abdominal bloating, postprandial discomfort, and reduced appetite over three months. Cardiovascular examination showed heart rate of 74 bpm, regular rhythm, and no murmurs. Respiratory examination revealed a respiratory rate of 18 breaths per minute with clear lung fields on auscultation. Neurological assessment showed no focal deficits or cognitive impairment.

Local Examination – Joint Assessment

On inspection, posture was normal. Bilateral symmetrical involvement of metacarpophalangeal, proximal interphalangeal, and ankle joints was observed. No joint deformities were present. Visible swelling was noted in bilateral MCP, PIP, and ankle joints. Movements were restricted. Muscle wasting was absent.

On palpation, joint tenderness was present at MCP, PIP, and ankle joints bilaterally. Palpable effusion was detected in bilateral ankle joints. Increased warmth was noted in all affected joints. Both active and passive range of motion were restricted across MCP, PIP, and ankle joints. Synovial thickening was palpable. Joint crepitus was absent. Muscle tone was normal.

Investigations

Laboratory investigations at baseline revealed the following: Rheumatoid Factor (RF) 45.2 IU/ml (positive); C-Reactive Protein (CRP) 6.90 mg/L (elevated); Erythrocyte Sedimentation Rate (ESR) 112 mm/hr (markedly elevated); Serum Uric Acid 5.9 mg/dl (within normal range); Haemoglobin 11.9 g/dl (borderline anaemia); Neutrophils 78% (elevated); and Lymphocytes 16% (low).

Differential Diagnosis

From an Ayurvedic perspective, the differential diagnoses considered were *Amavata* (12), *Vatarakta* (corresponding approximately to gout) (13), and *Sandhigataavata* (analogous to osteoarthritis) (14). The involvement of both small and large joints bilaterally and the absence of symptoms related to *Rakta* vitiation led to the exclusion of *Vatarakta*. Additionally, the absence of

Vatapurna Druti Sparsha, a characteristic Ayurvedic feature, helped rule out *Sandhigataavata*.

From a conventional perspective, psoriatic arthritis and systemic lupus erythematosus were considered but excluded due to the absence of psoriatic skin lesions and the absence of serological and systemic features characteristic of lupus. The clinical presentation of bilateral small and large joint involvement, prolonged morning stiffness, and a positive rheumatoid factor was consistent with rheumatoid arthritis and its Ayurvedic correlate, *Amavata*.

Diagnosis

The patient was diagnosed with rheumatoid arthritis based on the 2010 ACR/EULAR classification criteria (score: 7/10) (15) supported by a positive rheumatoid factor (45.2 IU/ml), elevated ESR (112 mm/hr) and CRP (6.90 mg/L), and clinical features including bilateral joint pain, swelling, and morning stiffness lasting 30–60 minutes. From an Ayurvedic perspective, the diagnosis of *Amavata* was confirmed based on the presence of *Pratyatma Lakshanas* (*Sandhi Shoola*, *Sandhi Shotha*, and *Sthambha*) and *Samanya Lakshanas* (*Vibandha*, *Daurbalya*, and *Aruchi*). *Ashta Vidha Pariksha* revealed *Vata-Kapha* predominant *Nadi*, *Sama Jihva* (coated tongue indicating *Ama*), and *Mala Vibandha*, collectively supporting *Amavata* due to *Vata-Kapha* imbalance and *Ama* accumulation.

Table 1: Subjective Parameters for Assessing Disease Severity

Parameter	Description	Score
Joint Pain (<i>Sandhi Shoola</i>)	No pain (VAS 0)	0
	Occasional, bearable pain (VAS 1–3)	1
	Moderate pain with difficulty in joint movement, frequent episodes, requiring pain-relief measures (VAS 4–6)	2
	Daily or severe pain, may awaken the patient at night, marked difficulty in joint movement (VAS 7–10)	3
Affected Joints (ACR 2010)	One large joint (shoulder, elbow, hip, knee, or ankle)	0
	Two to ten large joints	1
	One to three small joints	2
	Four to ten small joints	3
Joint Stiffness (<i>Sandhi Graha</i> ; ACR 2010)	More than ten joints	4
	No stiffness or stiffness lasting less than 5 minutes	0
	Stiffness lasting 5 minutes to 2 hours	1
	Stiffness lasting 2 to 8 hours	2
Joint Tenderness (<i>Sparshasahatwa</i> ; ACR 2010)	Stiffness lasting more than 8 hours	3
	No tenderness on palpation	0
	Patient reports tenderness verbally	1
	Wincing of face on direct pressure	2
Joint Swelling (<i>Sandhi Shotha</i>)	Wincing of face and withdrawal of the affected part on pressure	3
	No swelling	0
	Mild swelling: barely perceptible soft-tissue swelling without loss of bony landmarks	1
	Moderate swelling: definite soft-tissue swelling with partial obliteration of bony landmarks	2
	Severe swelling: pronounced, tense soft-tissue swelling with complete obliteration of bony landmarks and visible distension of the joint capsule	3

Therapeutic Intervention

Based on the *Samprapti* (pathogenesis) of *Amavata* involving *Vata-Kapha* imbalance and *Ama* accumulation, *Shamana Chikitsa* (palliative management) was initiated on an outpatient basis alongside ongoing conventional DMARD therapy (16). The treatment aimed to enhance *Agni*, reduce *Ama*, and alleviate joint symptoms, complemented by *Agnikarma* (therapeutic cauterisation) and *Sukshma Vyayama* (gentle exercises) (17).

The sequential administration of multiple formulations was guided by specific therapeutic objectives. Phase 1 (days 1–10) employed *Amrutha Shadangam Kashayam* and *Hinguvastaka Churna* to

achieve *Agnideepana* (enhancement of digestive fire) and initial *Amapachana* (metabolisation of toxins) prior to oleation — administering oleation before reducing *Ama* risks translocating it to deeper tissues and worsening joint pathology. Phase 2 (days 11–15) used *Indukanta Ghrita* for *Snehapana* (internal oleation) to lubricate channels, nourish depleted *Dhatus*, and prepare tissues for deeper pharmacological intervention. Phase 3 (weeks 3–11) utilised the remaining formulations concurrently to sustain *Amapachana*, restore *Tridosha* balance, and provide anti-inflammatory and immunomodulatory effects. This staged approach reflects classical *Amavata* management principles as described in Chakradatta (16).

Table 2: Shamana Chikitsa – Medicines with Dose, Anupana and Duration

S.No.	Date	Medicine	Dose	Anupana	Frequency	Duration
1	19/04/2025–28/04/2025	<i>Amrutha Shadangam Kashayam</i>	15 ml	45 ml lukewarm water	Twice daily	10 days
2	19/04/2025–28/04/2025	<i>Hinguvastaka Churna</i>	1 g (¼ tsp)	5 ml honey	Twice daily	10 days
3	29/04/2025–03/05/2025	<i>Indukanta Ghrita (Snehapana)</i>	15 ml (day 1), 30 ml (day 2), 60 ml (day 3), 90 ml (day 4), 120 ml (day 5)	50 ml lukewarm water	Once daily on empty stomach	5 days
4	04/05/2025–04/07/2025	<i>Trailokya Vijaya Vati</i>	1 tablet (250 mg)	50 ml lukewarm water	Twice daily post-meals (8 AM, 8 PM)	9 weeks
5	04/05/2025–04/07/2025	<i>Simhanada Guggulu</i>	500 mg (2 × 250 mg tablets)	50 ml lukewarm water or 5 ml honey	Twice daily post-meals (8 AM, 8 PM)	9 weeks
6	04/05/2025–31/05/2025	<i>Anulomaka Vati</i>	500 mg (1 tablet)	50 ml lukewarm water	Once daily	4 weeks
7	04/05/2025–04/07/2025	<i>Nimba Amritadi Eranda Taila</i>	10 ml Taila + 10 ml warm milk	Warm milk	Once daily at night	9 weeks
8	04/05/2025–04/07/2025	<i>Churna Mixture (Rasna, Devdaru, Erandamoola, Nirgundi Patra, Chopachini)</i>	3 g each (total 15 g)	40 ml warm water	Once daily before lunch	9 weeks

Novel Medicated Water Therapy (*Sausadham Jala*) – Two-Phase Approach

Table 3: Sausadham Jala – Ingredients, Preparation, Dosage, and Duration

Phase	Formulation & Ingredients	Preparation Method	Dosage & Duration
Phase I <i>Nagara Dhanyaka Siddha Jala</i> (19/04/2025–26/05/2025)	<i>Sunthi</i> (<i>Zingiber officinale</i> Roscoe) powder – 2 pinches; <i>Dhanyaka</i> (<i>Coriandrum sativum</i> L.) powder – 3 pinches; Water – 2 litres	All ingredients added to 2 litres of water and boiled for 20–30 minutes on medium flame until appropriately reduced. Strained and stored in a thermos flask.	Taken in small, frequent sips throughout the day (5 weeks 3 days)
Phase II <i>Laghu Panchamula Jala with Amalaki Churna</i> (27/05/2025–04/07/2025)	<i>Laghu Panchamula</i> powder – 3 g [comprising <i>Shalaparni</i> (<i>Desmodium gangeticum</i> (L.) DC.), <i>Prishnaparni</i> (<i>Uraria picta</i> (Jacq.) Desv. ex DC.), <i>Brihati</i> (<i>Solanum indicum</i> L.), <i>Kantakari</i> (<i>Solanum xanthocarpum</i> Schrad. & H.Wendl.), <i>Gokshura</i> (<i>Tribulus terrestris</i> L.)]; <i>Amalaki</i> (<i>Embolica officinalis</i> Gaertn.) powder – 2 g; Water – 2 litres	Ingredients added to 2 litres of water and boiled for 20–30 minutes on medium flame until appropriately reduced. Strained and stored in a thermos flask.	Taken in small, frequent sips throughout the day (5 weeks 3 days)

Agnikarma (Therapeutic Cauterisation)

Therapeutic cauterisation was performed on affected joints (MCP, PIP, and ankle joints) using a heated metallic rod (*Shalaka*), once weekly for four weeks (4–25 May 2025), to relieve localised pain and stiffness through stimulation of tissue healing and *Vata* pacification.

Pathya-Apathya (Dietary and Lifestyle Guidelines)

For the initial five days (19–23 April 2025), *Laghu Ahara* (light, easily digestible diet) was advised to enhance *Agni* and facilitate *Ama* digestion. The patient was thereafter advised a therapeutic diet comprising *Raktashali* (red rice), *Yava* (barley), and *Kulatha* (horse gram); warm water, garlic, and wet ginger; vegetables including *Karvellaka* (*Momordica charantia* L.), *Shigru* (*Moringa*

oleifera Lam.), and *Patola* (*Trichosanthes dioica* Roxb.); *Takra* (buttermilk) and *Eranda Taila* (castor oil).

The patient was instructed to avoid *Apathya Ahara* including *Navanna* (newly harvested rice), *Masha* (black gram), *Dadhi* (curd), *Ksheera* (milk), *Matsya* (fish), and *Guda* (jaggery). The patient was advised to refrain from *Divaswapna* (daytime sleep), *Ratri Jagarana* (late-night wakefulness), and *Vegavidharana* (suppression of natural urges). Exposure to cold and damp environments, sedentary behaviour, and mental stress were identified as aggravating factors and were discouraged.

Sukshma Vyayama (Gentle Exercises)

From 19 April to 4 July 2025, the patient performed gentle exercises twice daily (morning and evening) to improve joint mobility and reduce *Vata*-related stiffness. The exercise regimen comprised ankle and wrist rotations (10 repetitions each), finger flexion and extension (15 repetitions), lateral neck tilts (10 repetitions), shoulder rolls (10 repetitions), and seated knee bends (10–15 repetitions). Exercises were performed within a comfortable pain-free range to avoid *Vata* aggravation (17).

Follow-Up and Outcomes

Follow-up was conducted post-treatment on 5 July 2025, after the 11-week integrative intervention (19 April–4 July 2025). No adverse effects were reported throughout the treatment period. The patient reported improved joint mobility, significant reduction in fatigue, and enhanced ability to perform occupational tasks, indicating an overall improvement in quality of life.

Table 4: Comparative Outcomes Before and After Treatment

Parameter / Symptom	Before Treatment (19/04/2025)	After Treatment (05/07/2025)
Rheumatoid Factor (IU/ml)	45.2 (Positive)	18.4 (Negative/Normal)
CRP (mg/L)	6.90 (Elevated)	5.2 (Normal)
ESR (mm/hr)	112 (Markedly elevated)	18 (Normal)
Serum Uric Acid (mg/dl)	5.9 (Normal)	4.8 (Normal)
Haemoglobin (g/dl)	11.9 (Borderline anaemia)	12.9 (Normal)
Neutrophils (%)	78 (Elevated)	60 (Normal)
Lymphocytes (%)	16 (Low)	34 (Normal)
<i>Sandhi Shoola</i> (Joint Pain)	Grade 3 – Severe (VAS 7–10)	Grade 1 – Mild (VAS 1–3)
<i>Sandhi Shotha</i> (Joint Swelling)	Grade 3 – Severe	Grade 1 – Mild
<i>Sthambha</i> (Stiffness)	Grade 3 – Severe (>2 hrs)	Grade 1 – Mild (<2 hrs)
<i>Sparshasahatwa</i> (Tenderness)	Grade 2 – Moderate	Grade 0 – Absent
<i>Vrishcika-damsha-vata-vedana</i> (Pricking Pain)	Grade 3 – Severe	Grade 1 – Mild
<i>Agnidaurbalya</i> (Digestive Weakness)	Grade 3 – Severe	Grade 0 – Absent/Normal
<i>Aruchi</i> (Loss of Appetite)	Grade 2 – Moderate	Grade 0 – Absent
<i>Gaurava</i> (Heaviness)	Grade 2 – Moderate	Grade 0 – Absent
<i>Vibandha</i> (Constipation)	Grade 2 – Moderate	Grade 0 – Absent

Discussion

This case report documents clinically meaningful and laboratory-confirmed improvement in post-COVID-19 *Amavata* (seropositive RA) following an 11-week integrative Ayurvedic protocol. The findings are discussed in the context of the CARE (CAse REport) guidelines (18), addressing clinical plausibility, probable mechanisms of action, consistency with existing literature, and limitations.

Clinical and Pathophysiological Plausibility

Amavata results from the concurrent vitiation of *Ama* and *Vata* dosha, precipitated by *Viruddha Ahara*, *Mandagni*, sedentary habits, and physical exertion after heavy meals. These triggers lead to *Ama* formation which, combined with aggravated *Vata*, localises in *Sleshma sthana* (*Kapha*-dominant joints) via *Rasavaha Dhamani*, disrupting *Tridosha* balance and manifesting as *Sandhi Shoola*, *Sandhi Shotha* and *Sthambha* (19). This Ayurvedic pathogenesis mirrors RA, particularly in post-COVID-19 cases, where viral-induced immune dysregulation amplifies autoimmune responses through molecular mimicry and cytokine storm mechanisms (4,5).

The patient's occupational history (prolonged standing, repetitive hand movements, air-conditioned environment) and lifestyle (sedentary, irregular diet) align with classical Ayurvedic etiological factors for *Amavata*. The post-COVID-19 temporal sequence of symptom onset six months after infection, as observed in this patient, is consistent with published reports of post-viral autoimmune sequelae (6). This convergence of Ayurvedic etiopathogenesis and contemporary immunopathological understanding strengthens the clinical plausibility of the integrative approach adopted.

Probable Mechanisms of Action of Individual Interventions

Amrutha Shadangam Kashayam, comprising *Musta* (*Cyperus rotundus* L.), *Chandana* (*Santalum album* L.), *Guduchi* (*Tinospora cordifolia* (Willd.) Miers), *Ambu* (*Plectranthus vettiveroides* (C.B.Clarke) N.P.Singh & B.D.Sharma), *Parpata* (*Oldenlandia corymbosa* L.), and *Ushira* (*Vetiveria zizanioides* (L.) Nash), possesses *Tikta* and *Kashaya Rasas*, *Laghu* and *Sheeta Gunas*, *Madhura Vipaka*, and *Sheeta Virya*. It mitigates *Pitta* and *Kapha*, stabilises *Vata*, promotes *Ama Pachana* via *Agnideepana*, and supports *Srotoshodhana*, thereby reducing joint inflammation (20).

Hinguvastaka Churna, containing *Hing* (*Ferula foetida* (Bunge) Regel), *Maricha* (*Piper nigrum* L.), *Pippali* (*Piper longum* L.), *Shunthi* (*Zingiber officinale* Roscoe), *Jeeraka* (*Cuminum cyminum* L.), *Kala Jeeraka* (*Nigella sativa* L.), *Ajwain* (*Trachyspermum ammi* (L.) Sprague), and *Saindhava Lavana* (rock salt), enhances *Agni*, metabolises *Ama*, balances *Vata*, and reduces joint pain through *Deepana* and *Pachana* properties. Its *Yogavahi* action amplifies the efficacy of co-administered drugs (21).

Simhanada Guggulu, with *Tikta* and *Kashaya Rasas*, *Ushna Virya*, and *Katu Vipaka*, employs *Tikshna* and *Ruksha* qualities to pacify *Vata* and *Kapha*, promote *Ama* digestion, and clear *Srotas*, thereby preventing toxin re-accumulation (22). *Indukanta Ghrita* offers *Brumhana* (nourishing) and *Rasayana* (immunomodulatory) effects, alleviating *Vata*-related pain and supporting tissue regeneration, particularly relevant in post-COVID-19 *Amavata* where tissue depletion and immune dysregulation coexist.

Trailokya Vijaya Vati, primarily comprising *Vijaya* (*Cannabis sativa* L.) and *Vanshlochan* (*Bambusa arundinacea* (Retz.) Willd.)

with *Trikatu* and *Triphala*, uses *Tikta Rasa* and *Ushna Virya* to relieve *Vata*-driven pain and promote *Ama Pachana*. *Anulomaka Vati* supports *Vata* normalisation through gentle bowel evacuation. *Nimba Amritadi Eranda Taila* provides laxative and anti-inflammatory effects, pacifying *Vata* and *Kapha* while aiding *Ama* metabolism. The Churna Mixture (*Rasna*, *Devdaru*, *Erandamoola*, *Nirgundi Patra*, *Chopachini*) reduces inflammation and pain via *Tikta* and *Katu* Rasas, supporting *Srotoshodhana* and *Vata* pacification.

Sausadham Jala – Mechanistic Rationale

The novel two-phase *Sausadham Jala* therapy operated on the classical principle that *Ushna* (warm) and *Deepana* (digestive-stimulant) water facilitates *Ama* metabolism and prevents its reaccumulation throughout the day. Phase I (*Dhanya-Nagara Jala* with *Zingiber officinale* Roscoe and *Coriandrum sativum* L.) leveraged the *Deepana* and *Pachana* properties of ginger — well-documented for anti-inflammatory (gingerols, shogaols) and gastrokinetic activity — and coriander for *Pitta-Kapha* pacification, to metabolise *Ama* and reduce systemic inflammation (23).

Phase II (*Laghu Panchamula Jala* with *Amalaki*) transitioned to immunomodulatory and *Rasayana*-supportive therapy. *Amalaki* (*Emblica officinalis* Gaertn.) is among the most extensively studied *Ayurvedic Rasayana* herbs, with documented antioxidant, anti-inflammatory, and immunomodulatory activities attributed to its high polyphenol content, making it particularly relevant to post-COVID-19 immune dysregulation. The transition between phases was guided by clinical improvement in tongue coating and bowel regularity, indicating adequate *Ama* reduction before shifting emphasis to immune reconstitution.

Consistency with Published Literature

The outcomes observed are consistent with published case reports and clinical studies on Ayurvedic management of *Amavata*. Reduction in RF, ESR, and CRP following Ayurvedic protocols has been documented in prior studies, and the use of Guggulu preparations, *Rasna*-based formulations, and internal oleation for RA correlates has a substantial evidence base in Ayurvedic clinical literature.^{17,22} The role of *Sukshma Vyayama* in improving joint mobility and reducing *Vata*-related stiffness has also been recently reported.²⁴ The post-COVID-19 context of this case is particularly noteworthy, as the integrative protocol demonstrated the ability to simultaneously address *Agni*, *Ama*, and immune homeostasis — a multidimensional approach that conventional monotherapy cannot replicate.

Limitations

This case report has several important limitations. First, the single-patient design precludes generalisability and causal attribution; concurrent DMARD therapy makes it impossible to isolate the contribution of Ayurvedic interventions. Second, the absence of a control arm limits interpretation of treatment efficacy. Third, follow-up beyond 11 weeks is lacking, and the durability of observed improvements is unknown. Fourth, subjective symptom grading, though standardised, carries inherent reporter bias. These limitations highlight the need for larger, well-designed randomised controlled trials with appropriate comparator arms and extended follow-up periods to validate these promising findings and establish standardised protocols for clinical application in post-COVID-19 autoimmune sequelae.

Conclusion

This case study demonstrates the efficacy of an integrative approach combining *Shamana Aushadhis*, *Sausadham Jala* (novel medicated water therapy), *Agnikarma*, *Sukshma Vyayama*, and *Pathya-Apathya* alongside DMARD therapy in managing post-COVID-19 *Amavata* (rheumatoid arthritis). The comprehensive protocol resulted in significant reductions in inflammatory markers (rheumatoid factor, ESR, CRP), improvement in haematological parameters, and substantial alleviation of *Sandhi Shoola*, *Shotha*, *Sthambha*, and gastrointestinal symptoms, without adverse effects. Randomised controlled trials with larger cohorts and longer follow-up durations are warranted to validate long-term efficacy, safety, and optimal dosing protocols.

Declaration of Patient Consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given consent for clinical information and images to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal her identity, though anonymity cannot be guaranteed.

Conflict of Interest

The authors declare no conflicts of interest.

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Author Contributions

Conceptualization: RS, DS. Clinical Management and Documentation: HS. Diagnostic Interpretation: RS, SR, DS. Resources and Literature Search: RS, DS, SP. Supervision: RS, DS. Writing – Original Draft: RS, DS. Writing – Review and Editing: RS, SR, DS. All authors approved the final manuscript and agree to be accountable for all aspects of the work.

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