ISSN 2456-3110
Vol 9 · Issue 12
December 2024

JAiMS
INTERNATIONAL

Journal of Ayurveda and Integrated Medical Sciences

www.jaims.in

JAIMS

An International Journal for Researches in Ayurveda and Allied Sciences

Maharshi Charaka
Ayurveda

Indexed

Journal of
Ayurveda and Integrated Medical Sciences
ISSN 2456-3110
CASE REPORT December 2024

Efficacy of Ayurvedic Interventions in the management of Post-Viral Arthritis: A Case Study

Ratnesh Kumar Shukla[1], Ayushi Chandil[2], Vivek Sharma[3], Shraddha Sharma[4]

[1,2]Post Graduate Scholar, Dept. of Kayachikitsa, Pt. Khushilal Sharma Government Ayurveda College, Bhopal, Madhya Pradesh, India.

[3,4]Assistant Professor, Dept. of Kayachikitsa, Pt. Khushilal Sharma Government Ayurveda College, Bhopal, Madhya Pradesh, India.

ABSTRACT

Introduction: Post-viral arthritis (PVA) is a clinical condition frequently presenting as temporary inflammatory symptoms such as joint pain, stiffness, and swelling, arising in the aftermath of viral infections. According to Acharya Charaka in the Charaka Samhita, post-fever conditions can lead to a *Vata-Pradhana Sannipataja* condition, causing aggravated *Vata Dosha*, which results in joint pain, stiffness, heaviness, headaches, and dizziness, along with involvement of *Pitta* and *Kapha Doshas*. **Objective**: The primary objective of this study is to assess the clinical outcomes of Ayurvedic treatments, particularly *Panchakarma* therapies like *Sarwang Patrapinda Swedana* and *Janu Basti*, in the management of post-viral arthritis. **Methods**: A 37-year-old female patient presented to the outpatient department (OPD) with a history of chikungunya fever 15 days prior. She complained of mild swelling in the lower limbs, accompanied by pain and stiffness in the wrist, knee, and shoulder joints. The patient reported significant difficulty in walking without support due to severe stiffness in bilateral knee joints. For this patient regimen encompassed *Panchakarma* therapies, including *Sarwang Patrapinda Swedana* and *Janu Basti*, along with oral medicine. **Results**: Substantial improvement was observed in joint mobility, accompanied by notable alleviation of symptoms. After 1month of Ayurvedic treatment, the patient showed significant improvement, with a marked reduction in joint pain, stiffness, and swelling. **Conclusion**: Ayurvedic interventions, including *Panchakarma* therapies and *Shamana Yog*, offer a promising approach to the management of post-viral arthritis by addressing both symptomatic relief and the underlying *Doshic* imbalances, contributing to enhanced joint mobility and overall well-being.

Key words: *Post-Viral-Arthritis, Chikungunya, Patrapinda Swedana, Sannipataja Jwara.*

INTRODUCTION

Post-viral arthritis, characterized by transient inflammatory joint manifestations such as pain, stiffness, and swelling, frequently follows viral infections. CHIKF is characterized by an acute phase followed by subacute and chronic phases. Acute CHIKF is often accompanied by high fever, headache, maculopapular rash, myalgias, and severe arthritis/arthralgias. Exanthema and polyarthralgia primarily affect the hands and feet, which cause significant functional disabilities.[1] As *Acharya Charaka* mentioned in the *Charaka Samhita* when *Jwara* become as *Vata-Pradhana Sannipataja* condition then *Vata Dosha* becomes aggravated, it leads to symptoms such as pain in the joints, bones, and head, along with a sense of heaviness, Headache, and dizziness (*Sandhi-Asthi-Shirasaḥ Śūlam, Gauravam, Bhramaḥ)* and *Pitta* and *Kapha* are also involved so additional symptoms such as excessive thirst and dryness of the throat and mouth (*Tṛṣṇā, Kaṇṭha-Āsya-Śuṣkatā*) may manifest. This highlights the role of *Doshic* imbalance in joint-related disorders. These descriptions align with the clinical presentation of post-viral arthritis, where joint pain, stiffness, and systemic disturbances often stem from underlying *Doshic* imbalances triggered by a viral infection. Conventional management relies predominantly on symptom alleviation through the use of nonsteroidal anti-inflammatory drugs (NSAIDs) and

Address for correspondence:
Dr. Ratnesh Kumar Shukla
Post Graduate Scholar, Dept. of Kayachikitsa, Pt. Khushilal Sharma Government Ayurveda College, Bhopal, Madhya Pradesh, India.
E-mail: drratneshs@gmail.com
Submission Date: 12/11/2024 Accepted Date: 24/12/2024

Access this article online
Quick Response Code
Website: www.jaims.in
DOI: 10.21760/jaims.9.12.48

ISSN: 2456-3110 CASE REPORT December 2024

analgesics, often associated with undesirable side effects. In contrast, *Ayurveda* offers a holistic approach rooted in natural interventions that aim to address the underlying causative factors, restore *doshic* equilibrium, and promote systemic well-being.

Disease Review

Post viral arthritis is a condition often overlooked, arising from systemic viral infections. It differs from bacterial or autoimmune arthritis, presenting as acute joint pain, swelling, and stiffness that can resemble other inflammatory forms of arthritis, such as rheumatoid arthritis. Although most cases are self-limiting, some infections may lead to prolonged joint complications.[2-4]

Etiology

Numerous viruses are linked to post-viral arthritis, including:

- **Enteroviruses:** Coxsackievirus, Echovirus
- **Arboviruses:** Chikungunya, Zika, Dengue
- **Retroviruses:** Human Immunodeficiency Virus (HIV)
- **Hepatitis Viruses:** Hepatitis B, Hepatitis C
- **Others:** Influenza, Rubella, Parvovirus B19, Epstein-Barr virus, and Cytomegalovirus

The arthritis may manifest during an active infection or as a delayed immune response. Mechanisms of joint involvement vary, with some viruses directly affecting synovial tissues, while others provoke immune-related inflammation.

Pathophysiology

The mechanisms of post-viral arthritis can be classified into:

- **Direct Infection of Joint Tissue:** Some viruses invade synovial cells, triggering localized inflammation.
- **Immune Complex Deposition:** Immune complexes form in response to viral antigens and settle in the joints, activating inflammatory processes.
- **Molecular Mimicry:** Shared features between viral proteins and host tissues may lead to autoimmunity.

Clinical Features:

Symptoms of post-viral arthritis can range from mild to severe and include:

- Sudden joint pain and swelling, commonly symmetrical and involving multiple joints.
- Joint stiffness, especially after periods of inactivity.
- Systemic symptoms like fever, more noticeable during the acute phase of the viral illness.

While symptoms typically resolve within a few weeks, some infections, such as Chikungunya or Hepatitis, may lead to chronic joint issues.

Diagnostic Approaches:

Accurate diagnosis is based on clinical evaluation supported by laboratory findings:

- Evidence of viral-specific antibodies (IgM and rising IgG titers).
- Detection of viral genetic material through **Polymerase Chain Reaction (PCR)** in blood or synovial fluid.
- Synovial fluid analysis, which typically shows mild inflammation with low white blood cell counts.

Prognosis and Long-Term Outcomes:

Most cases resolve within weeks. However, prolonged joint issues, particularly in infections such as Chikungunya, can occur. In these cases, persistent symptoms are likely linked to immune-mediated mechanisms rather than active viral replication. Complications may be occurred If untreated Arthritis (joint inflammation), Chronic neurological disorders (e.g., vertigo, paralysis), Severe dehydration or dryness in the body.

Ayurvedic Review

सन्ध्यस्थिशिरसः शूलं प्रलापो गौरवं भ्रमः|

वातोल्बणे स्याद् द्व्यनुगे तृष्णा कण्ठास्यशुष्कता||९४||[4]

1. ***Sandhi- Shūlam*** - Pain in Multiple joints.
2. ***Asthi Shulam*** - Pain in Bones.
3. ***Shirasaḥ Shulam*** - Headache.
4. ***Pralāpo*** - Delirium or incoherent speech.
5. ***Gauravaṃ*** - Heaviness in the body.

ISSN: 2456-3110 CASE REPORT December 2024

6. ***Bhramaḥ*** - Dizziness or vertigo.
7. ***Tṛṣṇā*** - Excessive thirst.
8. ***Kaṇṭhāsyaśuṣkatā*** - Dryness of throat and mouth.

Samprapti Chakra

Nidana (Vata-aggravating causes)

↓

Vata aggravation occurs due to the causative factors, spreading its influence across the body.

↓

Aggravated *Vata* spreads throughout the body, manifesting symptoms like pain, dizziness, and heaviness.

↓

Sthanasamshraya in

Sandhi (joints): Causing pain and stiffness.

Shiras (head): Causing headache or dizziness.

Asthi (bones): Causing bone pain.

CASE REPORT

Name: XYZ

Age/Gender: 37-year-old female

Chief Complaints: Joint pain, stiffness (wrist, knee, shoulder), lower limb swelling, difficulty walking without support

Duration: 15 days post-chikungunya fever

Appearance: Small and Moderate body built

Physical and mental disposition: Normal

Occupation and socio-economic status: House-wife/Upper Middle class

History of Present Illness

The patient, a 37-year-old female, reported a history of chikungunya fever 15 days ago. Following recovery from fever, she developed mild swelling in the lower limbs accompanied by pain and stiffness in multiple joints, including the wrist, knee, and shoulder. The stiffness is most pronounced in the bilateral knee joints, severely restricting mobility and making it difficult for her to walk without external support. She denies associated fever, redness, or warmth in the affected joints but reports significant discomfort and reduced physical strength. So for the further management she came to our OPD.

Clinical Assessment:

Physical Examination: Weak, fatigued, requiring support for walking.

Subjective Grading: Pain, stiffness, swelling, and functional limitations were graded based on severity.

Treatment: The patient received *Panchakarma* therapies including *Sarwang Patrapinda Swedana* and *Janu Basti*, along with oral Ayurvedic medicines like *Shallaki Ghanavati, Kaishor Guggul*, and *Swarna Bhasma* combinations.

Dashavidha Pariksha

1.	*Prakriti: Vata-Kapha dominance.*
2.	*Vikruti: Vatapradhana tridoshaja* aggravation post-viral fever.
3.	*Sara:* Moderate *Asthi Sara,* likely impaired *Majja Sara.*
4.	*Samhanana: Madhyama.*
5.	*Pramana:* Moderate build.
6.	*Satmya: Madhyama*
7.	*Satva: Avara*
8.	*Aahara Shakti: Avara*
9.	*Vyayama Shakti: Avara*
10.	*Vaya: Madhyama*

Examination

General: Weak, fatigued, dependent on support for walking.

Vitals: Normal pulse, afebrile.

Musculoskeletal: Tenderness, swelling, stiffness in joints

Assessment

Subjective Grading[6-9]

1.	**Pain (Visual Analog Scale, VAS 0–10):**
▪	**0**: No pain (VAS 0).
▪	**1**: Mild pain, tolerable without medication (VAS 1–3).

ISSN: 2456-3110 CASE REPORT December 2024

▪	**2**: Moderate pain, occasionally requiring medication (VAS 4–6).
▪	**3**: Severe pain, frequent need for medication, affecting daily activities (VAS 7–10).
2.	**Stiffness Duration (Morning Stiffness):**
▪	**0**: No stiffness.
▪	**1**: Stiffness lasting <15 minutes.
▪	**2**: Stiffness lasting 15–30 minutes.
▪	**3**: Stiffness lasting >30 minutes or persisting throughout the day.
3.	**Swelling (Patient-reported feeling of heaviness or swelling):**
▪	**0**: No swelling.
▪	**1**: Mild swelling, no visible changes.
▪	**2**: Moderate swelling, visible but not restricting movement.
▪	**3**: Severe swelling, visible and restricting joint movement.
4.	**Functional Limitation:**
▪	**0**: No limitation, can perform all activities.
▪	**1**: Mild difficulty in performing some activities.
▪	**2**: Moderate difficulty, dependent on support for some activities.
▪	**3**: Severe limitation, completely dependent on support for basic activities.

Objective Grading[10-12]

1.	**Range of Motion (ROM) Limitation (% of normal ROM):**
▪	**0**: Full ROM.
▪	**1**: ROM reduced by <25%.
▪	**2**: ROM reduced by 25–50%.
▪	**3**: ROM reduced by >50%.
2.	**Tenderness (Tenderness Grading Scale):**
▪	**0**: No tenderness.
▪	**1**: Tenderness on palpation, no grimace.
▪	**2**: Tenderness with grimace or flinch.
▪	**3**: Tenderness with withdrawal or verbal complaint.
3.	**Functional Mobility (Timed Up and Go Test):**
▪	**0**: Completes in <10 seconds (normal).
▪	**1**: Completes in 10–15 seconds (mild limitation).
▪	**2**: Completes in 15–20 seconds (moderate limitation).
▪	**3**: Takes >20 seconds (severe limitation).
4.	**Laboratory Markers (Inflammation):**
▪	**0**: ESR and CRP within normal limits.
▪	**1**: Mild elevation of ESR (20–30 mm/hr) or CRP (5–10 mg/L).
▪	**2**: Moderate elevation of ESR (30–50 mm/hr) or CRP (10–20 mg/L).
▪	**3**: Severe elevation of ESR (>50 mm/hr) or CRP (>20 mg/L).

Treatment

Panchakarma		
Sarwang Patrapinda Swedan	*Vatashamka Taila*	
Janu Basti	*Sahacharadi Taila*	
Shamana Oushadha		
Shallaki Ghanavati	*600 mg*	BiD
Kaishor Guggul	*500 mg*	BiD
Swarna Bhasma 1 mg + Vanga Bhasma 5 mg + Naga Bhasma 5 mg + Lauha Bhasma 5 mg + Makshika Bhasma 5 mg + Mandoora Bhasma 5 mg + Rasa sindoora 5 mg + Yograj Guggul 30 mg + Abhraka Bhasma 5mg + Maharasnadi Kwath Ghana 234mg	*300 mg*	BiD

RESULT

Subjective Criteria

Symptoms	Before Treatment	After Treatment	Percentage Relief
Pain	3	1	66.67%
Morning Stiffness	3	2	33.33%
Swelling	2	0	100%

ISSN: 2456-3110 CASE REPORT December 2024

Functional Limitation	3	1	66.67%

Mean Relief was 66.67%.

Objective Criteria

Symptoms	Before Treatment	After Treatment	Percentage Relief
Range of Motion	3	1	66.67%
Laboratory Markers	1	0	100%
Functional Assessment	3	1	66.67%
Tenderness	3	1	66.67%

Mean relief was 75%.

Discussion

Shallaki Ghanavati - *Shallaki* (*Boswellia serrata*) is renowned for its therapeutic properties, characterized by its bitter (*Tikta*), sweet (*Madhura*), and astringent (*Kashaya*) taste profiles. It is classified as dry (*Ruksha*), light (*Laghu*), and sharp (*Tikshna*) in quality, with a pungent (*Katu*) post-digestive effect and warm (*Ushna*) potency. *Shallaki* is traditionally recognized for its ability to balance the *Kapha* and *Pitta Doshas* while alleviating *Vata*-related disorders. Its primary bioactive components include volatile oils (4–8%), acid resin (56–65%), and gum (20–36%), with triterpenoids, collectively known as boswellic acids, serving as the primary active constituents. The gum resin of *Shallaki* typically contains around 43% boswellic acids, including 3-acetyl-11-keto boswellic acids (AKBA), which are instrumental in supporting joint cartilage integrity and modulating immune responses. These compounds are particularly effective in reducing pain and inflammation associated with post-viral arthritis by inhibiting leukotriene synthesis and suppressing the activity of the 5-lipoxygenase enzyme through a non-redox mechanism.[13,14]

Kaishora Guggulu - The *Rookshana* property of herbs such as *Danti* (*Baliospermum montanum*), *Triphala* (a combination of *Terminalia chebula, Terminalia bellerica,* and *Emblica officinalis*), *Vidanga* (*Embelia ribes*), and *Guggulu* (*Commiphora mukul*) is thought to target the abnormal accumulation of *Kapha Dosha* and *Medas* (fat tissue). Additionally, *Tikshna* (sharp) and *Ushna* (hot) drugs, including *Pippali, Shunthi, Maricha, Vidanga,* and *Danti*, are components of formulations like *Kaishora Guggulu*. *Guggulu* is particularly noted for its positive impact on *Srotovishodhana* (channel purification). Clinical observations indicate improvements in mobility, with notable gains in walking ability and a slight enhancement in peripheral pulses. This suggests a tangible improvement in circulation, which in turn helps reduce *Margavarana* (obstruction in the channels), leading to a reduction in the morbidity associated with *Vata Dosha*.[15]

Combination Drug

Post-viral arthritis can be a debilitating condition. Ayurveda offers a holistic approach to managing it, focusing on balancing the body's *Doshas* (*Vata*, *Pitta*, and *Kapha*) and supporting the immune system. Herbal preparations like *Vanga Bhasma* (Tin Calx), *Naga Bhasma* (Lead Calx), *Lauha Bhasma* (Iron Calx), *Makshika Bhasma* (Pyrite Calx), *Mandura Bhasma* (Iron Oxide), *Abhraka Bhasma* (Mica Calx), *Rasa Sindura (Ayurvedic* medicine), *Yogaraja Guggulu (Ayurvedic* medicine), and *Maha Rasnadi Kwath* (solid extract) are often used in *Ayurvedic* treatments for arthritis. These herbs can help reduce inflammation, ease pain, and improve joint mobility. Additionally, *Swarna Bhasma* is believed to balance the *Doshas* and support overall health.[16]

Patra Pinda Swedana

Patra Pinda Swedana is a therapeutic treatment that uses herbs with specific properties to induce sweating and support detoxification. The herbs involved typically possess qualities such as *Guru* (heavy), *Teekshna* (sharp), and *Ushna* (hot), which help stimulate perspiration and enhance metabolic activity. These herbs also have characteristics like *Sara*, *Snigdha*, *Ruksha* (dry), *Sukshma*, *Drava* (liquid), and *Sthira* (stable), which work synergistically to promote therapeutic effects. This treatment is known to alleviate stiffness (*Stambhagna*), heaviness (*Gauravghna*), and coldness (*Shitaghna*), while encouraging sweating (*Swedakaraka*) to expel toxins from the body. The *Ushna* and *Teekshna* qualities further boost the metabolic rate, leading to capillary

ISSN: 2456-3110 CASE REPORT December 2024

dilation (vasodilation) and improved circulation. As a result, waste products are more efficiently eliminated, and the absorption of therapeutic oils (*Sneha*) through the skin nourishes tissues. Additionally, the treatment aids in reducing *Aama* (toxins), balancing *Doshas*, and supporting digestive health by enhancing *Agni* (digestive fire) and promoting overall rejuvenation.[17]

Janu Basti

Janu Basti is an external therapeutic procedure classified as *Bahya Snehana*, which involves the application of medicinal oils to the knee region to relieve *Vata*-related conditions. This process primarily counters the *Ruksha* (dry) quality of *Vata Dosha*, providing relief from stiffness (*Stambha*) and heaviness (*Gauravata*) in the joints. According to *Acharya Vagbhata*, the therapeutic oils and herbs used in *Janu Basti* are absorbed through the skin, allowing the active ingredients to exert their beneficial effects based on their inherent properties. The key components in oils like *Sahcharadi* oil are typically imbued with *Tikta* (bitter) taste, *Ushna* (hot) potency, and *Katu* (pungent) post-digestive effect. The *Tikta Rasa* of the oil helps to stimulate the *Dhatwagni* (metabolic fire) of the body, enhancing the nutritional absorption and metabolic processes of all tissues (*Dhatus*). This improved metabolic activity leads to the effective reduction of stiffness, pain, and swelling in the affected areas. Moreover, the *Ushna* quality of the oil aids in alleviating the coldness and heaviness associated with *Vata* imbalances, while the *Katu Vipaka* further supports the digestion and assimilation of the herbs used. Through this method, the oil penetrates deeply into the tissues, reducing inflammation and promoting circulation, thereby offering both immediate relief and lasting therapeutic benefits.[18]

Conclusion

The *Ayurvedic* management of post-viral arthritis has shown promising results through the use of herbal formulations and *Panchakarma* therapies that focus on balancing the *Doshas* and alleviating inflammation, pain, and functional limitations. The treatment resulted in significant improvements in both subjective and objective criteria, with mean relief observed at 66.67% for subjective symptoms and 75% for objective assessments, such as range of motion and inflammatory markers. The combination of powerful *Ayurvedic Aushadha* ingredients, such as *Shallaki* (*Boswella serrata*), *Guggulu* (*Commiphora mukul*), and various *Bhasmas* (including *Vanga Bhasma, Naga Bhasma, Lauha Bhasma,* and others), effectively addressed the symptoms of post-viral arthritis by reducing pain, swelling, and improving joint function. Additionally, therapies like *Patra Pinda Swedana* and *Janu Basti* offered supportive care to further reduce stiffness and promote circulation. These findings underscore the efficacy of *Ayurvedic* interventions in managing post-viral arthritis, providing a holistic approach that complements modern medical practices by emphasizing immune support, detoxification, and *Dosha* balance. Future research can build upon these results to further validate and refine *Ayurvedic* treatments for arthritis.

References

1. Rolph MS, Foo SS, Mahalingam S. Emergent chikungunya virus and arthritis in the Americas. Lancet Infect Dis. 2015;15:1007-8.
2. Chen CI. Overview of viral arthritis. Curr Rheumatol Rep. 2017;19(6):34.
3. Suhrbier A, Jaffar-Bandjee MC, Gasque P. Arthritogenic alphaviruses – an overview. Nat Rev Rheumatol. 2012;8(7):420-9.
4. Miner JJ, Diamond MS. Zika virus pathogenesis and tissue tropism. Cell Host Microbe. 2016;19(2):150-9.
5. Agnivesa. Charaka Samhita. 4th ed. Varanasi: Chaukhambha Sanskrit Sansthan; 1994. (Kasi Sanskrit Series 228), Chikitsa 3/94.
6. Hawker GA, Mian S, Kendzerska T, French M. Measures of adult pain: Visual Analog Scale for Pain (VAS Pain), Numeric Rating Scale for Pain (NRS Pain), McGill Pain Questionnaire (MPQ), Short-Form McGill Pain Questionnaire (SF-MPQ), and Chronic Pain Grade Scale (CPGS). Arthritis Care Res (Hoboken). 2011;63(S11):S240-52.
7. Van der Heijde DM, van 't Hof MA, van Riel PL, van de Putte LB. Development of a disease activity score based on judgment in clinical practice by rheumatologists. J Rheumatol. 1993;20(3):579-81.
8. Norkin CC, White DJ. Measurement of Joint Motion: A Guide to Goniometry. 5th ed. Philadelphia: F.A. Davis Company; 2016.

ISSN: 2456-3110 **CASE REPORT** December 2024

9. Lassere MN, van der Heijde D. Imaging in Rheumatology: Joint Damage Assessment in Rheumatoid Arthritis Using MRI and Ultrasound. Best Pract Res Clin Rheumatol. 2007;21(3):499-520.
10. Norkin CC, White DJ. Measurement of Joint Motion: A Guide to Goniometry. 5th ed. Philadelphia: F.A. Davis Company; 2016.
11. Gabay C, Kushner I. Acute-phase proteins and other systemic responses to inflammation. N Engl J Med. 1999;340(6):448-54.
12. Podsiadlo D, Richardson S. The Timed "Up & Go": A test of basic functional mobility for frail elderly persons. J Am Geriatr Soc. 1991;39(2):142-8.
13. Kimmatkar N, Thawani V, Hingorani L, Khiyani R. Efficacy and tolerability of Boswellia serrata extract in the treatment of osteoarthritis of knee: A randomized double-blind placebo-controlled trial. Phytomedicine. 2003;10(1):37-44.
14. Dev SA. Selection of Prime Ayurvedic Plant Drugs: Ancient-modern Concordance. New Delhi: Anamaya Publishers; 2006. p. 113-7.
15. Ramachandran AP, Prasad SM, Prasad UN, Jonah S. A comparative study of Kaishora Guggulu and Amrita Guggulu in the management of Utthana Vatarakta. Ayu. 2010;31:410-5.
16. Ayurmedinfo. Rhumayog Gold Tablet [Internet]. 2019 Aug 1 [cited 2025 Feb 28]. Available from: https://www.ayurmedinfo.com/2019/08/01/rhumayog-gold-tablet
17. Juyal R, Mahajan K, Agrawal AK. A comparative clinical study of Patra Pinda Swedana and Parisheka in Avabahuka. J Ayurveda Integr Med Sci. 2024;9(7):36-47.
18. Kumain K, Gupta R, Kumar P, Mahajan K. A comparative clinical evaluation of Janu Basti with and without Upnaha in Janu Sandhigata Vata (osteoarthritis of knee). Int J Ayurveda Pharma Res. 2024;12(8):25-33.

How to cite this article: Ratnesh Kumar Shukla, Ayushi Chandil, Vivek Sharma, Shraddha Sharma. Efficacy of Ayurvedic Interventions in the management of Post-Viral Arthritis: A Case Study. J Ayurveda Integr Med Sci 2024;12:351-357.
http://dx.doi.org/10.21760/jaims.9.12.48

Source of Support: Nil, **Conflict of Interest:** None declared.

****