

CLINICAL EFFECT OF AGNIKARMA WITH ERAND PAK IN THE MANAGEMENT OF JANU SANDHIGATA VATA (KNEE OSTEOARTHRITIS): A CASE REPORT

Dr. Priyanka P. Sawai^{*1}, Dr. Chandrakant A. Dhanokar², Dr. Sahili H. Gharde³

¹P.G. Scholar, Department of Shalya Tantra, R.T. Ayurveda College and Hospital, Akola.

²Associate Professor and Head of the Department of Shalya Tantra, R.T. Ayurveda College and Hospital, Akola.

³P.G. Scholar, Department of Shalya Tantra, R.T. Ayurveda College and Hospital, Akola.

Article Received on 04 August 2026,
Article Revised on 25 August 2026,
Article Published on 01 Sept. 2026,

<https://doi.org/10.5281/zenodo.22161048>

***Corresponding Author**

Dr. Priyanka P. Sawai

P.G. Scholar, Department of Shalya
Tantra, R.T. Ayurveda College and
Hospital, Akola.



How to cite this Article: Dr. Priyanka P. Sawai^{*1}, Dr. Chandrakant A. Dhanokar², Dr. Sahili H. Gharde³ (2026). Clinical Effect Of Agnikarma With Erand Pak In The Management Of Janu Sandhigata Vata (Knee Osteoarthritis): A Case Report. World Journal of Pharmaceutical Research, 15(17), 1241-1249

This work is licensed under Creative Commons Attribution 4.0 International license.

ABSTRACT

Knee Osteoarthritis is a common degenerative joint disorder characterized by pain, stiffness, tenderness, crepitus, restricted joint movement and progressive functional disability. It can be correlated with Janu Sandhigata Vata in Ayurveda as both the entities exhibits similar clinical symptoms. Agnikarma is a para-surgical procedure described in Ayurvedic classical texts, is considered beneficial in disorders involving Vata and Kapha. Erand Pak is a classical Ayurvedic preparation used in Vata-predominant musculoskeletal disorders. A 60 years old female patient diagnosed with Janu Sandhigata Vata (knee Osteoarthritis) presented to the OPD. Patient had been taking NSAID's regularly that provided symptomatic relief. However, she subsequently noticed gastritis, compelling her to seek alternative treatment at our hospital. Patient was treated with Agnikarma using Suvarna Shalaka over the affected knee

joint along with Erand Pak orally. Assessment of patient done before and after treatment using subjective and objective parameters including pain, stiffness, tenderness, swelling, crepitus, Gait /walking speed and Range of movement. After treatment, patient's symptoms were significantly reduced and functional ability was improved. The present case was successfully managed with Agnikarma along with Erand Pak. It suggests that, considering the chronicity of the disease, long term use of NSAID's and steroids is not desirable, this

particular combination may be a useful therapeutic approach in the management of Janu Sandhigata Vata w. s. r. to knee osteoarthritis. The observed improvement demands further evaluation through adequately designed clinical studies with larger sample sizes and appropriate controls.

KEYWORDS: Agnikarma, Erand Pak, Janu Sandhigata Vata, Knee Osteoarthritis, Suvarna Shalaka.

INTRODUCTION

Osteoarthritis is the second most prevalent musculoskeletal disorder after backache.^[1] It represents a major source of chronic pain and functional limitation ranking as the tenth leading cause of disability.^[2] Knee osteoarthritis is particularly significant because the knee joint plays an essential role in weight bearing, walking, standing and other activities of other living. The clinical manifestation includes pain, stiffness, crepitus, restricted range of motion and functional disability as the disease progresses.

Non-pharmacological management of knee osteoarthritis involves weight management, exercise, physiotherapy etc. Pharmacological management includes use of NSAIDS, opioid analgesics. In advanced cases intra-articular steroids and surgical procedures may be considered. However, long-term management remains challenging because osteoarthritis is a chronic degenerative condition and prolonged use of certain pharmacological agents may be associated with adverse effects.

In Ayurveda, the clinical features of knee osteoarthritis can be correlated with Janu Sandhigata Vata described under the broader concept of Vatavyadhi. According to Ayurvedic principles, aggravated Vata Dosha becomes localised in the sandhi and produces manifestations such as Sandhishool (joint pain), Sandhishotha (Swelling), Atop^[3] (Crepitus), Stambha (stiffness) and Akunchan-Prasarane Vedana (pain during joint movement).^[4] Chronicity and degeneration of the tissues may further contribute to deterioration of joint function.

Agnikarma is an important para-surgical procedure described in classical Ayurvedic texts.^[5] Therapeutic application of controlled heat is traditionally considered useful in Vata and Kapha predominant disorders. The Ushna (hot), Sukshma (penetrating) properties of Agni counteracts with Shita (cold), Guru (heavy) qualities associated with Vata and Kapha

pathology. From a contemporary perspective, local therapeutic heat may influence pain perception, local circulation, muscle tone and tissue extensibility.

Erand Pak is an Ayurvedic formulation traditionally used in Vata- predominant disorders and musculoskeletal conditions.^[6] Its therapeutic properties may support reduction of pain and stiffness and improvement in functional status. The combination of local Agnikarma with systemic administration of Erand Pak provides a rationale for addressing both local symptoms and systemic Vata involvement.

As knee osteoarthritis is a chronic degenerative disorder there is a need for safe and effective conservative approaches, the present case was documented to evaluate the clinical response of Agnikarma along with Erand Pak in a patient diagnosed with Janu Sandhigata Vata with reference to knee osteoarthritis.

Rationale of the study

Knee osteoarthritis is a progressively disabling condition that significantly affects functional mobility and quality of life. Although several pharmacological treatments available but considering the chronicity of the disease they are not advisable for long term use as they may produce certain side-effects. So, the patients may continue to experience pain, stiffness, restricted joint movements and functional disability.

Agnikarma is a classical Ayurvedic para-surgical procedure with potential utility in painful musculoskeletal conditions. Erand Pak is a classical medicinal formulation used for Vata predominant disorders. However, clinical studies describing the combined use of these interventions in knee osteoarthritis remains limited.

Therefore, the present case was documented to describe the clinical presentation, therapeutic intervention, outcome and follow-up of a patient with Janu Sandhigata Vata treated with Agnikarma along with Erand Pak. The case may provide a scope for generation of hypothesis for further systematic research.

2.1 METHODOLOGY

This is a single case study conducted in Radhakisan Toshniwal Ayurved Hospital, Akola, Maharashtra. The patient suffering from Janu Sandhigata Vata was treated with Agnikarma along with oral administration of Erand Pak with diet and lifestyle modification. Agnikarma was performed in three sittings at the interval of 7 days each. Erand Pak was given orally in a

15 g dose for one month. Assessment of symptoms was done every week for one month. After thorough explanation of treatment plan, written informed consent was obtained from the patient before the intervention for treatment and publication of the case, including relevant information.

2.2 Case History

A 60 years old female patient presented to the Kayachikitsa OPD of Radhakisan Toshniwal Ayurved Hospital, Akola, with chief complaints of left knee joint pain, swelling, stiffness and difficulty in walking from one year.

2.2.1 History of present illness

The patient was apparently healthy approximately one year before when she gradually developed pain in the knee joint. Initially, the pain was mild and was occurring while walking, climbing the stairs and prolonged squatting. Then the pain increased progressively and was associated with stiffness and difficulty in performing routine activities. The patient also reported swelling, tenderness, crepitus and restricted range of movements. The patient had taken Modern medications like NSAID's and steroids which provided symptomatic relief. However, after a few months of regular NSAID use, she developed gastritis as an adverse effect of NSAID's and discontinued the treatment. Subsequently due to the persistent knee pain, she came to our hospital for alternative treatment. There was no history of trauma to the affected knee.

2.2.2. Past history

There was no significant history of any major medical illness like diabetes mellitus, Hypertension, Rheumatoid Arthritis, gout. There was no history of any previous surgery.

2.2.3 Family History

Not significant.

2.2.4 Personal history

Appetite- Good, Bowel habit – constipation, Micturition - Normal, sleep- disturbed, Diet- Vegetarian, Addiction- Not any, lifestyle- Active.

2.3 Clinical Examination

Ashtaviadha Pariksha

Nadi (pulse) – 78/minute

Shabda (speech)- Prakrut

Mutra(micturition) – Samyak

Sparsha (temperature)-Anushnashit

Mala (Bowel)- Malavashtambha

Druk (eyesight)- Prakrut

Jivha (tongue) - Niram

Akruti- Madhyam

Prakriti- Vata-Kaphaj**Satva-** Madhyam**Agni-** Visham

2.4 General Examination

Pulse -78/min

R.S.- AEBE, clear

B.P. – 130/80 mm of Hg

CVS- S1S2 Normal

R.R.- 19 /min

CNS – Conscious, oriented

Temperature- 98.4 F

P/A – soft, non-tender

2.5 Assessment Criteria

2.5.1 Assessment criteria for Subjective parameters are as follows.

S. No.	Symptoms	Criteria	Gradation
1.	Sandhishool (Joint Pain) VAS score (0-10)	No pain	0
		Mild pain (VAS score 1-3)	10
		Moderate pain (VAS score 4-6)	20
		Severe pain (VAS score 7-10)	30
2.	Sandhishoth (Swelling)	No swelling	0
		Mild swelling (can be seen with very careful observation)	10
		Moderate Swelling (Easily noticeable)	20
		Severe Swelling (Gross swelling)	30
3.	Sandhigraha (stiffness)	No Stiffness	0
		Morning Stiffness for 0-10 minutes	10
		Stiffness for 10-20 minutes	20
		Severe stiffness more than 20 minutes	30
4.	Sparshasahatva (Tenderness)	No tenderness	0
		Tenderness on touching with more pressure	10
		Tenderness on touching with less pressure	20
		Does not allow to touch the joint	30
5.	Sandhisphutan or Sandhi Atop (Crepitus)	No Crepitus	0
		Palpable Crepitus	10
		Audible Crepitus	20

2.5.2 Assessment Criteria for Objective Parameter

a. Walking time /Distance covered (20 meter) or Gait speed-

Time taken by patient to cover 20 meters distance by walking was measured before commencement and after the completion of treatment.

Normal gait speed is 1meter/sec

b. Range of Movement

Angle of knee flexion was measured before and after the treatment.

Normal angle of flexion is 135-150 degrees.

3. Therapeutic intervention**3.1 Agnikarma**

Agnikarma was performed over the affected joint using Suvarna Shalaka. Three sittings of Agnikarma at the interval of 7 days each was performed.

Procedure of Agnikarma

The patient was positioned comfortably and the affected knee was exposed. Most tender points were identified. Procedure site was cleaned with antiseptic solution and covered with sterile drape.

Suvarna Shalaka was heated with candle and lighter. Samyak Dagdha Vran were made in the form of Bindu Dahan Vishesh.

Kumari pulp was applied over the dagdha vran to relieve burning sensation.

Dusting of Yashtimadhu Churna was done over the vran and it was covered with sterile gauze.

3.2 Erand Pak Administration

Reference- Erand Pak is a classical Ayurvedic Formulation mentioned in Yog Ratnakar in Vatavyadhi Chikitsa Chapter.

Ingredients and proportion of Ingredients of Erand Pak are well elucidated in Ayurvedic Formulary of India Part 2.

Dosage and duration

Erand Pak was administered orally in 15 g dose twice daily with lukewarm milk after meals for one month.

No other new treatment specifically targeting knee osteoarthritis was initiated during the observation period.

4. FOLLOW UP AND OUTCOME

The patient was assessed at baseline and after the treatment on the basis of subjective and objective criteria and followed up for one month after completion of treatment.

Details of Assessment parameters

S.no.	Assessment subjective Parameters	Before Treatment	After Treatment
1.	Sandhishool (Joint Pain)	30	0
2.	Sandhishotha (Swelling)	20	0
3.	Sandhigraha (Stiffness)	20	10
4.	Sparshasahatva (tenderness)	20	0
5.	Sandhi Atop / Sandhisphutan (Crepitus)	20	10
Assessment Objective Parameters		Before Treatment	After Treatment
1.	Gait speed/Walking time to cover 20 meters distance	30 seconds	27 seconds
2.	Range of motion (Angle of Flexion)	100 degrees	115 degrees

The patient had considerable relief in her symptoms like Sandhishool, Sandhishotha, Sandhigraha and Sparshasahatva. Remarkable improvement was reported in Gait speed and Range of movement. Mild improvement was observed in crepitus.

No adverse event related to the treatment was observed during the course of treatment or follow-up period.

5. DISCUSSION

The present case represents a clinical manifestation consistent with Janu Sandhigata Vata, which can be correlated with knee osteoarthritis. The predominant symptoms observed in the patient were pain, swelling, stiffness and restriction of functional activities.

According to Ayurveda, Sandhigata Vata occurs due to aggravation of Vata Dosha and its localisation in the joints. The clinical symptoms such as Sandhishool, Sandhigraha, Sandhisphutan and restricted joint movements are the consequences of disturbed joint function due to vitiated Vata and progressive tissue degeneration (Dhatukshaya).

Agnikarma was selected as a local therapeutic intervention because of its traditional application in painful Vata -kapha -predominant musculoskeletal disorders.

The Ushna (Hot), Sukshma (penetrating) properties of Agni alleviates Sheeta (cold) property of Vata and Sheeta and Guru Properties of Kapha. According to Ayurveda, Vata is the main factor responsible for pain pathology and pacification of Vata by Agnikarma reduces pain immediately and thus facilitating joint function smoothly.

From a contemporary physiological perspective, controlled thermal stimulation may influence local circulation, Peripheral pain pathway modulation (explained by Gate control Theory).^[7] It is also believed that thermal stimuli produce stress proteins or Heat Shock proteins (HSP 70) which are anti-inflammatory and chondro-protective in nature and delays degradation of cartilage.^[8]

Erand Pak was administered orally as a systemic treatment. The formulation is traditionally used in Vata-predominant disorders. Chief constituents of Erand Pak are Erand Seeds, Milk, Ghee, Sugar which possess Madhur Rasa and vipak- (Sweet), Snigdha (unctuous), Guru (Heavy), Balya (strengthening), Rasayan (Rejuvenating) properties and they counteract with opposite properties of Vata like Laghu (light), Ruksha (Dry), Sheeta (cold) properties of Vata. It helps to replenish Asthi and Majja Dhatu Kshaya (degeneration of bone and marrow tissue). Its Ayurvedic properties complement the local effect of Agnikarma.

The combination of Agnikarma and Erand Pak therefore provide a therapeutic approach involving both local and systemic management of Janu Sandhigata Vata.

6. CONCLUSION

The present case suggests that Agnikarma along with Erand Pak may provide beneficial symptomatic and functional improvement in a patient with Janu sandhigata Vata corresponding with knee osteoarthritis. Remarkable improvement in pain, swelling, tenderness, mobility and other clinical parameters following treatment indicates the potential usefulness of this particular combination.

However, systematic clinical studies with larger sample sizes, adequate controls, and longer follow-ups are required to determine the clinical effectiveness of Agnikarma combined with Erand Pak in Knee osteoarthritis.

7. REFERENCES

1. API textbook of medicine, volume 2, Edited by Y.P. Munjal, 10th edition, 2015; Chapter no. 24, page no.2478.
2. GBD 2021 Osteoarthritis Collaborators, Article on Global, regional, and national burden of Osteoarthritis, 1990-2020 and projections to 2050: a systemic analysis for the global burden of Disease study 2021, Lancet Rheumatol2023; Published in, September 2023; Doi 10.1016/S2665-9913(23)00163-7 published by Elsevier Ltd. 5: e508-22.

3. Madhavkara, Dr. P. Himasagara Chandra Murthy, 'Madhvnidanam' commentary Madhukosha Part 1, Nidansthan, Adhyay no. 22, verse no. 21, 1st edition 2006, Varanasi, Chaukhamba Sanskrit Series, Page no. 244.
4. Vaidya Yadavji Trikamji Acharya, Charak Samhita, with Ayurved Dipika Vyakhya, Chikitsa Sthan, Chapter no. 28, Verse no. 37, 2013, Varanasi, Chaukhamba Surbharti Prakashan, Page no. 618.
5. Dr. Anantram Sharma, Sushrut Samhita with Sushrutvimarshini Hindi Commentary, volume 2, Chikitsasthan, Chapter 4, verse 8, Reprint 2008, Chaukhamba Surbharti Prakashan, page no. 205.
6. Dr. Indradev Tripathi, Yogratnakara, Vidyaprabha Hindi commentary, Vata Vyadhi Prakaran, Verse No. 381-385, Chaukhamba Krishnadas Academy, 3rd edition, Page No. 436.
7. Bhingare S.D., Sawant R.S., Binorkar S.V., A Review on Mode of Action of Agnikarma by Virtue of Pain Modulation Theory, International Journal of AYUSH, oct-Dec 2020; 9(4): 9(4): 52-59.
8. Anoop Sachi, T. Thomas, A Review on the mode of Action of Agnikarma in Knee Osteoarthritis, International Journal of Research in Ayurveda and Pharmacy, 2020; 11(6): DOI:10.7897/2277-4343.1106193.