



Case Study

AYURVEDIC APPROACH IN OSTEOARTHRITIS KNEE JOINT GRADE II AND III

Aneesa T A^{1*}, Remya V R², Aneesh S³

¹PG Scholar, ²Assistant Professor, ³Associate Professor, Department of Shalyatantra, Govt. Ayurveda College, Thiruvananthapuram, Kerala, India.

Article info

Article History:

Received: 17-08-2025

Accepted: 15-09-2025

Published: 15-10-2025

KEYWORDS:

Osteoarthritis,
Sandhigatavata,
Ayurveda,
Brihmana
chikitsa.

ABSTRACT

Osteoarthritis is a common degenerative disorder affecting joints. Age is the major factor for the high incidence of OA. OA can affect any joint but is most common in the knee joint. Muscles and tissue around the joints are also affected. Main signs and symptoms of OA knee joint are pain, tenderness and restricted movements. Moreover, it has a great impact on reducing the quality of affected people's life. A 42-year-old male patient complains of left knee joint pain and difficult to move the joint since 5 months, came to the OPD of our hospital. The condition was diagnosed as Osteoarthritis knee joint grade II (Left) through clinical examination and X-ray knee joint. In Ayurveda, the etiology, pathology and clinical features of OA resembles with *Asthigatavata* and *Sandhigatavata* types of *Vatavyadhi*. Patient underwent Ayurvedic treatment modalities for 30 days and follow up of 3 months. After treatment pain and tenderness reduced and joint movement improved. The treatment outcome suggest that Ayurvedic treatment modalities can be valuable alternative in management of degenerative diseases.

INTRODUCTION

Osteoarthritis [OA] is the most common joint disease of all adult worldwide, approximately 528 million prevalence^[1]. OA is a chronic degenerative disorder of multifactorial etiology characterized by the loss of articular cartilage, hypertrophy of bone at the margins, subchondral sclerosis, and range of biochemical and morphological alterations of the synovial membrane and joint capsule^[2]. It is also known as degenerative arthritis, which commonly affects the hands, feet, spine, and large weight-bearing joints, such as the hips and knees. Knee joint OA is the most prevalent and leading cause of pain, disability and affecting the quality of life^[3]. OA knee joint is a chronic degenerative disease characterized by the deterioration of bone, cartilage, and surrounding structures in joints which results in pain, stiffness, restricted range of motion and swelling of the joints. Minimal tenderness and coarse crepitus can be elicited^[4]. Major risk factors of OA knee joint are age,

sex, obesity, lack of exercise, occupational long standing, etc. The primary goals of treating OA knee joint are to relieve pain and return mobility. The conservative management includes weight reduction, exercise, pain relievers and anti-inflammatory drugs, injection of corticosteroids etc. The Surgical measures include arthroscopy, osteotomy and arthroplasty.

Here is presenting the case of Osteoarthritis knee joint grade II (left). As per Ayurvedic guidelines, this condition may be correlated with *Asthigatavata* and *Sandhigatavata* types of *Vatavyadhi* having *Lakshanas* like *Asthisandhibedham*, *Sandhisoolam*, *Mamsabalakshayam*, *Vatapooranadridhisparsham*, *Sotham*, and *Prasaranaakunjanayorpravrthi savedana* respectively^[5]. Hence the treatment was planned with Ayurveda intervention followed the protocol of *Vatavyadhi*.

Patient information

A 42-year-old male patient came to the OPD with complains of pain associated with difficulty in movement of left knee joint. He is an electrician by his profession, because of his increased physical exertion, gradually the pain increased. Pain was pricking type in nature. Also, he experienced increased pain on prolonged walking and standing. Felt difficulty in movement while getting up after long sitting. Pain increase during night time. Felt stiffness during

| Access this article online | |
|--|---|
| Quick Response Code | https://doi.org/10.47070/ijapr.v13i9.3843 |
|  | Published by Mahadev Publications (Regd.) publication licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) |

morning time. Later he noticed bending of his knee joint laterally.

Informed consent was obtained and whole the details of procedures and its adverse effect was explained.

Examination of bilateral knee joint

| | Right | Left |
|------------|--|---|
| Inspection | No deformity, swelling | Genu varum present |
| Palpation | No tenderness, temperature | Tenderness grade II, crepitus present |
| ROM | Flexion – Normal (135 degree) Extension – Normal (180 degree) | Flexion – 57 degrees Extension – (175 degrees) |

Range of Motion Lt knee – 57 degrees (Flexion)

Vas score **7 (severe)**

Investigation

Xray – LT knee joint (Ap and lateral view)

Degenerative changes

Space reduction

Definite osteophyte present

Diagnosis: Based on the examination and investigation the case was diagnosed as osteoarthritis knee joint Grade II on left (*Sandhigata vata*).

On examination

On physical examination, appetite, bowel, and micturition are normal in limit. Sleep was little disturbed and patient had *Kapha pitha prakrthi* with *Pravara samhananm* and *Madhyama sara*.

Intervention

The treatment was planned according to *Vatavyadhi* line of *Chikitsa*, giving more focus on *Asthigata* and *Sandhigata vata*. This includes *Ruksha sweda*, *Bandhana*, *Pathrapotala sveda*, *Abhyanga ooshma sveda*, *Anulomana*, and finally *Pizhinj thadaval* along with *Matravasthi*. Along with bandage and *Pathrapotala sveda vicharana snehapana* with *Gugguluithikthakam ghritham* given as an internal *Snehana*. During the treatment period internal medicines was also administered.

| S.no | Procedure | Medicine | Duration | Internal medicines |
|------|--|----------------------------------|------------------------------------|---|
| 1. | <i>Ruksha sveda</i> | <i>Kolakulathadi choornam</i> | 1-7 th days | 1. <i>Rasnerandadi kashayam</i> 48ml twice a day (6am and 6 pm) 2. <i>Yogaraja guggulu</i> 1 tablet twice a day (API) 3. <i>Vaiswanara choornam</i> 6g twice a day, morning and evening before food with hot water (11am and 3pm) |
| 2. | Bandage | <i>Murivenna</i> | 8-14 th days | 4. <i>Guggulu thikthakam ghritham</i> (<i>Vicharana sneha</i>) along with food twice daily (6am and 6pm) |
| 3. | <i>Pathra potala svedam</i> (After digestion of <i>Vicharana Sneha</i>) | <i>Balathailam</i> | 15-21 st days | Continue <i>Vicharana snehapanam</i> and <i>Gandharva hasthadi kashayam</i> 48ml twice a day before food (6am and 6 pm). |
| 4. | <i>Abhyangam Oshmasveda</i> | <i>Balathailam</i> | 22 nd day | Stop all internal medicines |
| 5. | <i>Anulomanam</i> | <i>Gandharava erandam</i> (10ml) | 23 rd day | Stop all internal medicine |
| 6. | <i>Pizhinju thadaval</i> (<i>Adhakayam</i>) | <i>Dhanwantharam thailam</i> | 24 rd -30 th | Restart medicine 1 and <i>Gandhathailam</i> 10 drops twice a day with <i>Kashayam</i> . |

Advised 3 months proper rest and knee exercise after treatment.

Result

After 30 days treatment the pain and tenderness reduced and range of motion improved for Lt knee joint.

VAS scale score after the treatment in Lt knee was 5 (moderate).

Tenderness after treatment was become grade I in the Lt knee.

Range of motion after treatment - 75 degree flexion on Lt knee .

Follow up

Patient assessed for 3 months after treatment.

Pain – VAS scale score was 2 (mild) in Lt knee.

Tenderness was absent 0 in Lt knee.

Range of motion was 75 degree flexion Lt knee.

DISCUSSION

Probable pathology of disease

OA knee joint is a chronic degenerative disease characterized by the deterioration of bone, cartilage, and surrounding structures in joints which results in pain, tenderness, stiffness, restricted range of motion and swelling of the joints. Main causes of OA are aging, lack of exercise, and long standing related to occupation. Degenerative changes are irreversible but can be prevented the progression. Here the patient had continuous long standing related to his job and, lack of *Vyayama*, and another *Nidana* like *Alpanidra*, *Akala bojana*, *Ruksha ahara*. Due to this continuous exposure to *Nidana vata* get aggravated and affect the different *Dhatus*. Vitiated *Vata* get lodged in *Asthi dhathu*, then leads to *Asthidhatukshaya*. This *Vata* in *Asthi* will cause *Asthisandhibhedham* (cracking of bones and joints), *Sandhisoolam* (joint pain), *Mamsabalakshayam* (diminution of muscle tissue and strength)^[7]. *Asthi* will cause *Rookshata*. When it gets lodged on joints, by its *Ruksha*, *Khara*, *Laghu*, *Sukshma* qualities destroy the *Snigdha*, *Guru*, *Pichila* qualities of *Sleshakakapha* in the joints and produce symptoms like, *Prasaranaakunjanapravarthisavedana* (reduced ROM due to pain) and *Sotham* (swelling)^[8].

Ayurvedic management of OA includes oral medications, various external therapies along with selected *Panchakarma* procedures. Treatment protocol mainly focusses on aggravated *Vata dosa*, starting with *Ruksha sweda* for initial *Amaharathva* followed by *Bahyabhyanthara snehana*, *Swedana*, *Shodhana*, and finally *Brihmana*.

Probable mode of action

Rooksa sweda with *Kolakulathadi choorna* was done to pacify the initial *Amavastha* of the *Roga*. Also, *Rasnerandadi Kashaya* and *Yogaraja guggulu* was administered internally have action of *Amapachana* and internal *Rukshana*. Initial *Ruksa sweda* will open the *Srotas* and thereby facilitate the action of further treatments. *Murivenna* bandage and *Pathrapotala sweda* along with *Vicharana snehana* with *Gugguluthikthakam ghritam* provide both *Bahya-abhyanthara snehana*. *Bahya-abhyanthara Sneha* is the treatment for *Asthimajjagata vata*^[9]. It will provide a lubricating effect in *Sandhi* and *Asthi*. Helps to improve movements of joint and reduce pain, by alleviating *vata Dosa* and *Sleshaka kapha ksaya*. Also, *Ghrita* and *Tiktharasa* has direct effect on Central nervous system by its penetrating nature. *Gandharva hasthadi* has additional action on *Vata dosa* (*Pavanasya santhi*) and *Malasodhana*^[10]. *Anulomana* after *Abhyanga Ooshmasveda* will provide a *Mrdusodhana* effect to the body and helps to eliminate *dosa* completely. It empties the *mala* from all *Srothas* and give purity to the body. It helps to reduce all the symptoms of disease. *Pizhinj thadaval* with *Balatailam* along with

Matra vasthi with *Dhanwantharam mezhkpakam* will provide a *brahmana* effect^[11]. This *Brahmana* pacifies *Sodhanajanyakseena*. *Gandhathailam* along with this *Pizhinj thadaval* also act as *Brahmana* for *Asthi* and *Sandhi*.

Action on Pain: *Vata* is responsible for pain as per Ayurveda. This protocol includes mainly *Snehana*, *Swedana*, *Bandhana* and *Mrdusodhana*. These are the main *Upakramas* for *Vata dosa* as per *Acharyas*^[12]. *Basti* is the best treatment for *Vatadosa*. *Matra vasthi* is the smallest form of *Basti* and act as a *Brihmana*, That also alleviate *Vata dosa*. Hence these external therapies provide proper *Vata samana* action. Also, internal medicines provided here, *Rasnerandadi Kashaya*, *Yogaraja guggulu*, *Gandharva hasthadi Kashaya* all are good *Vatahara* medicines. Combined action of these treatment protocol primarily helps to reduce *Vata* and thereby pain. *Snehapana* with *Vatahara ghrita* will cross the blood brain barrier and thereby normalize the action of pain pathway^[13,14].

Action on Tenderness: Tenderness occurs due to the activation and sensitization of nociceptors^[15]. It response to tissue damage and inflammation. Sensation (pain) of body is maintained by *Vata dosa* (*Vyana*). *Swedana* like treatments provide proper vasodilation and promote blood flow to the tissues. This will further enhance proper nourishment and tissue repair. It will reduce the inflammation and normalise the altered skin sensation^[16]. The medicines provided here both externally and internally have anti-inflammatory and analgesic action. *Snehapana* have appreciable action on central nervous system. This also balance the nociceptor action.

Action on Range of Motion: Both pain and stiffness are responsible for restricted movements. *Swedana* act as *Sthambagana*, *Gouravagna* and *Seetagna*. It will provide *Srodhosodhana*, *Laguthvam* and relieves *Seetata* and thereby reduce pain and stiffness. *Swedana* along with *Snehana* will properly lubricates joints. It will promote the freely movement of joints^[17].

CONCLUSION

Ayurvedic management of OA knee joint not only focus on symptomatic relief but also in strengthening the surrounding structures – ligaments, tendons, capsules, muscles and bones, so as to reduce the progression of degeneration. These symptomatic effects tend to be more long lasting after the end of the treatment. Hence this Ayurveda protocol for 30 days is very effective in OA knee joint and improve the quality of life of people.

REFERENCES

1. World Health Organization. Osteoarthritis [Internet]. Geneva: WHO; 2023 Jul 14 [cited 2025 Oct 6]. Available from: <https://www.who.int/news-room/fact-sheets/detail/osteoarthritis>

2. Pal CP, Singh P, Chaturvedi S, Pruthi KK, Vij A. Epidemiology of knee osteoarthritis in India and related factors. Indian J Orthop. 2016 Sep; 50(5): 518-522.
3. World Health Organization. Osteoarthritis [Internet]. Geneva: WHO; [cited YYYY Mon DD]. Available from: <https://www.who.int/news-room/fact-sheets/detail/osteoarthritis>
4. Ebnezer J. Textbook of Orthopedics. 4th ed. Section 6, Geriatric orthopedics, Chapter: Osteoarthritis. Bengaluru: Jaypee Brothers Medical Publishers (P) Ltd; 2010. p.674.
5. Murthy KRS. Vagbhata's Ashtanga Hridayam, Nidana Sthana, Vol II, Vatavyadhi Nidanam Adhyaya. Reprint ed. Varanasi: Chowkhamba Krishnadas Academy; 2013. p. 150.
6. Bibin MV, Sujana TK. Combined effect of januvasthi and mathravasthi with Kethakimooladi thailam in osteoarthritis knee [scholarly synopsis]. Thiruvananthapuram: Government Ayurveda College; 2017. p. 8.
7. Sharma RK, Dash B. Agnivesa's Charaka samhitha, Sutra Sthana, Vol I, Dheerganjeevitheeyam Adhyaya. Reprint ed. Varanasi: Chaukhambha Sanskrit Series Office; 2018. p. 43.
8. Murthy KRS. Susrutha Samhitha, Nidana Sthana. Vol I, Ch 1, Vatavyadhi Nidanam. Reprint ed. Varanasi: Chaukhambha Orientalia; 2017. p. 464.
9. Murthy KRS. Susrutha Samhitha, Chikitsa Sthana. Vol II, Vatavyadhichikitsitham Adhyaya. Reprint ed. Varanasi: Chaukhambha Orientalia; 2017. 4/9. p. 57.
10. Krishnan Vaidhyan AKV, Gopalapilla AS. Chikitsasara sarvaswam or Sahasrayogam. Mullakkal, Alappuzha: Vidhyarambham Publishers; Vatavyadhi. p.78.
11. National Institute of Indian Medical Heritage (NIIMH). e-Samhita – Caraka Samhitā [Internet]. Hyderabad: Central Council for Research in Ayurveda and Siddha (CCRAS), NIIMH; [cited 17 Aug 2025]. Sidhisthana. Ch 4/52-54 Available from: <https://niimh.nic.in/ebooks/ecaraka/?mod=read> niimh.nic.in
12. Murthy KRS. Vagbhata's Ashtanga Hridayam, Sutra Sthana, Vol I, Doshopakramaneeyam Adhyaya. Reprint ed. Varanasi: Chowkhamba Krishnadas Academy; 2013. 13/1. p.289.
13. Pratap Shankar K, Akashlal M, Rohit K. Understanding transient osteoporosis of hip (Asthi-Majjagatavata) and management through Ayurveda. J Ayurveda Case Rep. 2020; 3(3): 108.
14. Sawant V. A Critical Review of Shodhana Snehapana. Int J Res Ayush Pharm Sci [Internet]. 2019 Jan 1 [Cited 2024 Sep 12]; Available From: https://www.academia.edu/45077071/A_Critical_Review_Of_Shodhana_Snehapana
15. StatPearls. Nociceptors. Treasure Island (FL): StatPearls Publishing; 2023. Available from: <https://www.ncbi.nlm.nih.gov/sites/books/NBK551562/>
16. Narine A, Garg R, Choudhary K, Mangal G. Alleviating Knee Joint Disorders with Janu Dhara Therapy -A Review Article. Int Ayurvedic Med J. 2021 Jun 23;9.
17. Agnivesha. Charaka Samhita, Sutrasthana. Edited by Vaidya Yadavaji Trikamji Acharya. Ayurveda Deepika commentary by Chakrapanidatta. Varanasi: Chaukhambha Publishers; 2021. Sveda Adhyaya 14/13.

Cite this article as:

Aneesa T A, Remya V R, Aneesh S. Ayurvedic Approach in Osteoarthritis Knee Joint Grade II and III. International Journal of Ayurveda and Pharma Research. 2025;13(9):46-49.

<https://doi.org/10.47070/ijapr.v13i9.3843>

Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**

Dr. Aneesa T A

PG Scholar,

Department of Shalyatantra,

Govt. Ayurveda College,

Thiruvananthapuram, Kerala, India.

Email: aneesafaisalta7@gmail.com

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.