

## Case Report

# Ayurvedic perspective on osteoarthritis: management and outcomes: a case report

Savitha C. B.\*, Marikutty T. C.

Department of Kayachikitsa, Vaidyaratnam Ayurveda College, Ollur, Thrissur, Kerala, India

**Received:** 19 June 2025

**Revised:** 14 July 2025

**Accepted:** 18 August 2025

### \*Correspondence:

Dr. Savitha C. B.,

E-mail: [savithacb007@gmail.com](mailto:savithacb007@gmail.com)

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## ABSTRACT

Osteoarthritis is a foremost health problem considering its associated disability and impact on the quality of life. It is a leading cause of disability in elderly people. This is a case of a 74-years-old female who presented with multiple joint pains, namely, right shoulder joint, left hip joint, numbness over both feet and gastric discomfort and was admitted to the Kayachikitsa IPD of Vaidyaratnam Ayurveda College Hospital on 02/04/2025. She has been diagnosed with a case of osteoarthritis (Sandhigataavata) based on ACR criteria, including the clinical presentation, physical examination, laboratory tests and Kellgren's radiographic scale. The patient underwent treatment based on the principle of Vataavyadhi Chikitsa. Treatment commenced with Rookshana, followed by Rooksha snigda and Snigda swedas externally. Gulgulutikthakam kashayam, Lakshadi gulgulu, Gulgulutikthakam ghrtham and Aswagandharasayanam were the internal medicines given. Dhanyakizhi, Lepamam, Jambeera pinda sweda and Patrapotala sweda were given as external therapy. Visual analogue scales for pain, range of movements, duration and severity of stiffness were used to evaluate the effectiveness of the treatment. Patient-reported outcome measures such as Hip disability and Osteoarthritis Outcome Score (HOOS), Lequesne Index were used to assess the quality of life of the patient. Significant improvement was noted in the VAS for the pain, duration and severity of stiffness. Range of movements and daily routine work ability also showed significant improvement. Although this particular case was krichrasadhya, it was effectively managed through Ayurvedic therapies, which shows its relevance in this current scenario that emphasises the invasive approaches.

**Keywords:** Ayurveda, Osteoarthritis, Sandhigataavata, Vataavyadhi chikitsa

## INTRODUCTION

Osteoarthritis is defined as joint failure, a disease in which all structures of the joint have undergone pathologic change, often in concert. The pathologic sine qua non of disease is hyaline articular cartilage loss, present in a focal and initially, nonuniform manner. This is accompanied by increasing thickness and sclerosis of the subchondral bony plate, by outgrowth of osteophytes at the joint margin, by stretching of the articular capsule, by mild synovitis in many affected joints and by weakness of muscles bridging the joint. Much more common in women than in men and sex differences in prevalence increase with age. Commonly affected joints include the cervical and lumbosacral spine, hip, knee and first metatarsal

phalangeal joint (MTP). In the hands, the distal and proximal interphalangeal joints and the base of the thumb are often affected. Usually spared are the wrist, elbow and ankle. Although radiographically evident hand OA and the appearance of bony enlargement in affected hand joints are extremely common in older persons, most cases are often not symptomatic. Even so, symptomatic First carpometacarpal Distal and proximal interphalangeal Lower lumbar vertebrae Hip Joints are commonly affected by osteoarthritis. Severe osteoarthritis of the hands affecting the distal interphalangeal joints (Heberden's) and the proximal interphalangeal joints (Bouchard's nodes). There is no clear bony enlargement of the other common sites in the hands, the thumb base. Hand OA occurs in ~10% of elderly individuals and often produces

measurable limitation in function.<sup>1</sup> In Ayurveda, the symptoms of OA are correlated with sandhigatavata, one of the most common degenerative articular disorders of the geriatric age group. It is a type of Vatavyadhi which mainly occurs in Vriddhavastha due to Dhatukshaya limiting routine activities. Lifestyle, excessive weight, trauma, calcium-deficient diet and age are some of the causative factors. Trauma or joint injuries are becoming a more common reason for OA in younger adults. It being a Vatavyadhi, located in Marmasthisandhi and its occurrence in the old age group makes it Kasthasadhya. Vata dosha is mainly affected in this disease, which creates Sandhishool, Sandhishoth, Vatapoornadruti sparsha, lack of movements of joints or painful movements of joints, i.e., Prasaraan aakunchan pravrutti savedana.<sup>2</sup>

## CASE REPORT

A 74-years-old female patient with the following presenting complaints was admitted to our hospital for 17 days and discharged on 19/04/2025. Primary concerns and symptoms of the patient right shoulder joint pain, left hip joint pain, left foot pain aggravated for 1 month, numbness of both feet for 5 months. Abdominal bloating, chest burn, unsatisfactory bowel, increased watering of mouth-aggravated for 2 months.

### Case history

74-years-old female, a mat weaver by occupation since of 15 her age, developed pain over the right shoulder joint gradually, aching, non-radiating, exacerbating on activities, with moderate severity seven years ago. Patient consulted and took one month of internal Allopathic medicines, by which she was able to manage with her job. Three years later, the patient presented with gastric discomfort, chest burn, sour belching and took Allopathic medicines (tablet 2 bd-later reduced to 1 bd). She continued self-medication and stopped for two months, but the complaints persist. The following year, the patient was unable to continue her weaving job and stopped it permanently thereafter.

Two years later, the patient noticed recurrent displacement of the left second toe, followed by aching pain, which got reduced only by replacing it in position manually. Later developed left hip joint pain and difficulty in lying in the left lateral position. Allopathic consultation was done and it took three weeks of internal medicine for the pain. Got symptomatic relief but aggravated the gastric issues. She consulted in a nearby Ayurveda Dispensary and continued to take medicines for three consecutive months, by which her pain got reduced, her bowel got a regular pattern, chest burn and sour belching were manageable. Six months ago, she consulted in our OPD and took internal medicines, by which she got considerable relief. She has been continuing medications since then. She also complains of numbness in both feet for five months. Numbness aggravates after getting up from a sitting position with both legs extended for a prolonged time and gets relief on applying local

warmth and massage. She got admitted to the Kayachikitsa IPD of VACH on 02/04/2025.

### Personal history

Patient follows a mixed diet with a history of delayed intake for Breakfast and lunch. Bowel was irregular, once in two days, unsatisfied and constipated. Appetite was reduced with early Satiety, sour belching, chest burn, abdominal bloating and increased salivation were present. Micturition was found to be within normal limits. Sleep was interrupted for 1 and ½ months and day sleep was present, had no positive history suggestive of allergy and addictions were present in this case.

### Medical, family and psychosocial history

She has been taking Allopathic medicines for Hypertension for two years.

### Relevant past interventions with outcome

Took NSAIDs for the pain and was able to manage the pain during her work.

### Systemic examination

#### Examination of the locomotor system

The patient was of moderate build, nourished moderately with a height of 136.5 cm and a weight of 43.5 kg, BMI of 23.3 kg/m<sup>2</sup>. Appearance was neat and tidy with a mild stoop in the upper back. The patient was cooperative, oriented to time, place and person and intelligent. On physical examination, Bouchard's nodes were found in the distal interphalangeal joints of the upper limb bilaterally. Flexion deformity-of 1st, 2nd and 5th phalanges was present bilaterally. Bouchard's node over the Proximal interphalangeal joint and Heberden's node over the distal interphalangeal joint of the Second toe of both feet. Flexion deformity of the second toe bilaterally and contracted toes were present. On examination of joints, all the movements of the hip joint were in full range with no difficulty. For the shoulder joint, Grade 1 crepitation was found bilaterally. All movements were possible without any difficulty for the left shoulder joint, while flexion and Internal rotation were restricted to 30 degrees due to pain for the right shoulder joint.

#### Muscles

Elbow joint -flexion and extension-grade 5 bilaterally. Wrist joint-palmar flexion, dorsiflexion, ulnar deviation, Radial deviation- grade 5 bilaterally. Lower limb- Power in grades. Hip-flexion, extension, adduction, abduction, internal rotation, External rotation grade 5 bilaterally. Knee flexion and extension-grade 5 bilaterally. Ankle-plantar flexion, dorsiflexion, medial and lateral deviation-grade 5 bilaterally

### Joints

Tests for the shoulder joint, including Neer's test, Hawkins Kennedy test and Empty can test, were negative. For the sacro-iliac joint, tests including the Pump handle test were negative bilaterally, while the Faber's test was positive on the left side. The Thomas test for the hip joint was negative bilaterally.

### Spine

In the examination of the spine, all movements were possible without pain for the lumbar spine with an SLR of 80 degrees bilaterally. Bragard's test, Lasague's test, FNST and Flip test were negative bilaterally. All movements were possible without pain for the cervical spine. Spurling test, Valsalva Maneuver, Flexion compression test, Extension compression test and Lhermitte sign were negative.

### Tendons

Thickening, localised swelling, tenderness, rupture and functional abnormalities were absent for the tendons, while triggering was present for the second toe of the bilateral lower limb. Reflexes- superficial reflex – corneal was intact bilaterally and plantar reflex was intact b/l (+), deep tendon reflexes, including Biceps, knee and ankle jerks, were intact (+) bilaterally

### Sensory system

Superficial sensations, including pain, Touch, Temperature; Deep sensations, including Vibration, Proprioception; Cortical sensations, including two-point discrimination, Stereognosis, Graphaesthesia, were found to be intact bilaterally.

### Nidana

Aharajam-Untimely intake-Breakfast and Dinner. Viharajam-Wear and tear of joints-Excess use and vishama angata-left ankle and right shoulder. Manasika-Nil. Poorvaroopam-Sandhivedhana (pain in the joints). Roopa-Prasarana Akunjana pravruithim-sa vedhana (painful and restricted movements of the joints). Samprapthi – due to the above nidanas, vatakopa in sandhi, resulting in restricted and painful movements of the joints.

### Diagnostic assessment

This case was diagnosed as a case of osteoarthritis based on criteria for osteoarthritis by the American College of Rheumatology, including the clinical presentation, physical examination and laboratory tests and Kellgren's radiographic scale. Criteria mentioned by the American College of Rheumatology, namely, hard tissue enlargement in  $\geq 2$  of 10 joints-DIP, PIP, thumb, hard tissue enlargement in  $\geq 2$  DIP joints and deformity in  $\geq 1$  of 10 selected joints. Laboratory tests suggested a negative

RA factor. Clinical presentation and Physical examination results showed Persistent joint pain worsened by activity, Minimal Morning stiffness and Joint deformities, all suggestive of the diagnosis of Osteoarthritis. Radiographic images taken of the right shoulder and lumbar spine were also suggestive of the diagnosis.

### Investigations

Blood – RA- 18.4 IU/ml, Hb-18.4 gm%, ESR-35 mm/hr.

### Imaging techniques

Kellgren's radiographic scale – Grade 2.

### Therapeutic interventions

The treatment aimed to reduce the current symptoms of the patient and improve the quality of life of the patient. Since the patient had the symptoms of ama, deepana pacahana was adopted first, followed by the principles of vatavyadhi chikitsa. Internal medicines started from the date of admission (Table 4) and external therapies started the next day after admission (Table 5).

### Ama assessment score

Before treatment – 3: After treatment – 0.



**Figure 1: X-ray-Right shoulder joint-AP view.**



**Figure 2: X-ray-Lumbosacral spine-AP view.**

**Table 1: Muscle power–upper limb (in grades).**

Shoulder	Right	Left
Flexion	3	5
Extension	4	5
Adduction	4	5
Abduction	4	5
Internal rotation	3	5
External rotation	4	5

**Table 2: Ayurvedic diagnostic assessment.**

Prakriti	Vata pitha
Doshas vitiated	Vata
Dhatu	Rasa, Mamsa , Asthi, Majja
Upadhatu	Snayu, Sira, Kandara
Sara	Madhyama
Samhananan	Madhyama
Satvam	Pravara
Satmyam	Madhyama
Srotas affected	Annavaha, Rasa, Asthi, Majja
Pramanam	Madhyama
Aharasakthi	Jaranasakthi–Madhyama Abhyavaharana sakathi-Madhyama
Vyayama Sakthi	Madhyama
Vaya	Vrudha
Kalam	Kshanadi-Greeshma, Vyadhyavastha-puranam
Desham	Sandhi
Bhumi	Sadharanam
Rogamargam	Madhyama

**Table 3: Ama assessment score.**

Symptoms	Score
Constipation	1
Heaviness of the body	0
Loss of taste	0
Loss of appetite	1
Loss of thirst	0
Bad belching	0
Pain (Joint pain)	1
Lack of enthusiasm (Utsah)	1
Lethargy (Tantra)	0
Total	3

**Table 4: Internal medicines.**

Internal medicines			
Date	Medicine	Dosage	Time
02/04/2025 onwards	1. Gandharvahasthadi kashayam 2. Avipathy churnam 3. Lakshadigulgulu	60 ml bd bf 1 tsp, along with Kashaya 1-0-1 bd af	6 am, 6 pm
04/04/2025 onwards	Dhanwantharam Gulika	1-0-1 bd bf	Morning and night
	Thaleesadi choornam	1-2 pinch	SOS
09/04/2025 onwards	Indukantham Ghrtham	1 tsp ghee, after food	Night

Continued.

Internal medicines			
19/04/2025		Discharged	
20/04/2025	Gulgulutikthakam kashayam	60ml bd bf	6 am, 6 pm
Onwards	Lakshadi gulgulu	1-0-1 bd with Kashayam	6 am, 6 pm
14 days	Gulgulu tiktham ghrtham capsule	1-0-1 bd af	Morning and evening
	Tab. Dhanwantharam	1-0-1 bd af	Morning and evening
	Mandoora vataka	0-1-0, with Takram	Morning and evening
	Ashwagandharasayanaottamchukkadi taila	5gm with milk, a/f	Afternoon
		e/a	Bedtime
			Once/day

Table 5: External therapies.

External therapies			
Date	Procedure	Medicine	Remarks
03/04/2025 onwards	Mukkikizhi-5 days	Dhanyakizhi dipped in Dhanyamla	Whole body
03/04/2025 onwards	Lepanam-5 days	Jadamayadi in Dhanyamla	Nape of neck, Shoulder – right and low-back
08/04/2025 onwards	Avikizhi 4 days	Dhanyakizhi in Dhanyamla Steam	4 days, whole body
12/04/2025 onwards	Jambeera pinda swedam 4 days	Dhanwantharam+Murivenna	Whole body 4 days
16/04/2025 onwards	Patrapotala sweda 4 days	Dhanwantharam+Murivenna	Whole body 4 days

Table 6: Visual analogue scale for pain.

Score-before treatment	Score-after treatment
6	2

VAS-Visual analogue Scale.

Table 7: Range of motions – right shoulder joint.

Movement-affected	Before treatment (in degrees)	After treatment (in degrees)
Flexion	30	90
Internal rotation	30	90

ROM- range of Movements.

Table 8: Hip disability and osteoarthritis outcome score.

Criteria	Score-BT (Severe)	Score-AT (Mild) (75%)
Symptoms and stiffness (40)	12 (40%)	5
Pain (20)	26 (35%)	10
Activities of daily living (68)	50 (27%)	17
Function in sports and recreational activities (16)	16 (0%)	4
Quality of life (16)	15 (7%)	4

HOOS- Hip disability and osteoarthritis outcome Score.

Table 9: Lequesne index.

Parameters	Point – BT	Point - AT
Pain or discomfort	8	2
Maximum distance walked	7	2
Activities of daily living	4.5	0.5
Index score BT	19.5	Extremely severe
Index score AT	4.5	Mild



## DISCUSSION

In this case of osteoarthritis, the patient presented with the symptoms of sandhigata vata associated with the ama symptoms. Vata vitiation was more pronounced in the form of pain and restricted joint movements. The treatment started by assessing the Ama, Agni and Bala of the patient. The protocol commenced with pinda Sweda as the Vatadosha is here associated with kapha. Rooksha and Ushna gunas of Churna and Swedana procedures are utilised to pacify both. The rooksha pinda sweda as bahya rookshana will help in pacifying the associated kapha dosha.

Mukkikizhi, being a rooksha Snigda sweda, helps in relieving the stiffness around the joints. Dhanyakizhi dipped in Dhanyamla (Mukkikizhi) along with Lepana with Jadamayadi churna in Dhanyamla was applied over the nape of the neck, right shoulder and low back, followed by Dhanyakizhi in Dhanyamla steam (Avikizhi). Dhanya churna is moderately Snigda so that it will not aggravate the vata dosha during the rookshana procedure. Rujasophahara property of Jadamayadi churna made it suitable for lepana with Dhanyamla for relieving the stiffness and pain in the initial stage. Jambeerapinda sweda was selected in the next stage, followed by Patrapotalasweda. Dhanwantharam tailam and Murivenna were used for the abhyanga and dipping for the Snigda swedas.<sup>4</sup> Both taila are vatavikarasamaka and bruhmana in action. Jambeerapinda sweda, which is Rooksha and ushna in nature.

The amla theekshna, rooksha guna of Jambeera will help in reducing the kapha dosha and the incorporated Sneha Dravya will maintain the vata dosha without being aggravated. It helps in removing the muscle spasm and improving the movements and reducing the pain. Patrapotala sweda, consisting of vatahara patras added with vatahara churna and Snigda dravyas, acts upon vata dosha owing to its snigdha ushna guna. By swedana, the pindaswedana causing vasodilation, results in increased blood circulation to the confined area, here in the joints and reduces the pain and inflammation. Internally, Gandharvahasthadi Kashaya was given in the initial stage, added with Avipathychurna owing to Deepana and Malasodhana.<sup>5</sup>

Dhanwantharam gulika also got Vatanulomana property, which helped with the abdominal bloating in this patient. Thaleesa patradi churna mentioned in the Arochaka chikitsa prakarana in Ashtanga Hrudaya, Rajayakshma chikitsadyaya was given when the patient experienced episodes of dry cough owing to its Kasahara and vatanulomana property.<sup>6</sup> In the next stage, it was changed to Indukantha ghrtha as rasayana. After addressing the amavastha, treatment was focused on alleviating the vata dosha and thus improving the functions of the affected joints. Gulgulutikthaka Kashaya, which is Vatavyadhihara, Bruhmana and asthidhatu poshana, was given with Lakshadi Gulgu, which is of Vatahara and

Bruhmana property. Lakshagulgulu is a polyherbal formulation consisting of 6 drugs, namely, Laksha, Asthisamhruta, Kakuba, Aswagandha, Nagabala and Pura.<sup>7,8</sup> It is mentioned in the Asthibaghna, asthimukti and asthiruja prakarana in the classical nighantus. Asthi-Majja kshaya occurs due to degeneration of bone tissue, which happens because of an imbalance of Vata dosha in the body. According to Ashraya - Ashrayi Bhava, Asthi and Vata are inversely proportional to each other with their vridhhi and kshaya. Laksha Guggulu helps to prevent bone deterioration by delivering vital natural calcium, promoting a faster healing process in bone fractures by increasing calcium deposition on the bones and promoting faster recovery. It is useful in treating painful illnesses such as osteoarthritis. Sandhivata is caused by an increase in Vata dosha, which causes pain and joint movement. Laksha promotes tissue restoration and Asthi shrunkhala contains hydroxyapatite, which is a natural key component found in healthy bones. It is a part of the bone mineral mass matrix. Nagabala is a powerful muscle relaxant and other herbs are known for their anti-spasmodic properties. They relieve fibromyalgia pain and sensitivity while also relaxing the muscles.

The active ingredients of Ashwagandha are Withaferin-A-A, which reduces bone mineral density loss. It reduces stress and inflammation while also promoting bone recovery after injury and osteoporosis. Laksha, Arjuna, Asthi shrunkhala, Ashwagandha and Nagabala provide natural calcium and vitamin D, which help to repair bone mineral density and offer strength to bones and joints. All the ingredients have anti-inflammatory and analgesic qualities, which aid in the relief of joint pain and inflammation.<sup>9</sup> Mandooravataka, mentioned in the Pandu prakarana, helps correct the dhatu parinama, ensuring the proper nourishment to the joints and supportive structures.<sup>10</sup> Ashwagandha rasayana was given in the final stage based on the conclusion that Ashwagandha is a real potent regenerative tonic (Rasayana of Ayurveda), due to its multiple pharmacological actions like anti-stress, neuroprotective, antitumor, anti-arthritis, analgesic and anti-inflammatory effects. Ashwagandha is an analgesic that soothes the nervous system from pain response. Withaferin A and 3-b-hydroxy-2,3-dihydrowithanolide F isolated from Withania somnifera show promising immunomodulating and anti-inflammatory properties.<sup>11</sup>

## CONCLUSION

The present case of Osteoarthritis in a 74/F was successfully managed with Ayurvedic IPD treatment. The aching pain and restriction in the movements were considerably reduced. Improvement was noted in the QOL of the patient, including her gait and doing her self-care chores. The numbness got 90% relief and so did her gastric issues. Since the disease is caused by the continuous use of the joints (wear and tear), particularly in this case, such activities should be advised to be avoided in this case. Patient is advised to follow a proper meal pattern, also, so that her gastric discomfort could be properly managed. By

adopting the methodologies of Vatavyadhi Chikitsa, owing to Bruhmana and Rasayana therapy, these conditions, though Krichrasadhya, can be managed effectively with Ayurveda.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

## REFERENCES

1. Kasper F. Harisson's Principles of Internal Medicine. 19th ed. USA: McGraw-Hill Medical Publishing Division. 2005: 2226.
2. Harsh D. Ayurvedic Treatment of Agantuja Sandivata (Post-traumatic osteo arthritis of the Knee) - a case study. Ayushdhara. 2018;1796-9.
3. Edavalath M, Bharathan BP. Methodology for developing and evaluating diagnostic tools in Ayurveda—a review. J Ayur Integr Med. 2021;12(2):389-97.
4. Talikoti R, Rajamane SH, Bhoi P, Patil S, Tongae A. Comparative study of Sharir in other Sthana. 2022.
5. S Gopala Pillai KVKV. Chikitsasarasarvasvam/ Sahasrayogam. Mullakkal, Alappuzha: Vaidyarambam. 2017;79:278.
6. Sreekumar T. Astanga Hridaya Vagbhata chikitsasthana. 4th ed. Vol. 2. Thrissur: Publication Department, Haresree Hospital, Mannuthy, Thrissur; 2013: 58-60.
7. Jigeesh PP, Das R. A Critical Review on Pindasweda With Special Reference to Churnapindasweda. 2020.
8. Dr. T Sreekumar. Astanga Hridaya Vagbhata chikitsasthana. 4th ed. Vol. 2. Thrissur: Publication Department, Haresree Hospital, Mannuthy, Thrissur. 2013: 48-61.
9. Prajapati V, Panesar N. Scientific evaluation of ayurvedic guggul formulations: therapeutic applications, pharmacodynamics and pharmacokinetic considerations. J Ayur Integr Med Sci. 2025;10(4):190-4.
10. Prathana HM, Desai S. Conceptual study on Sthoulya with its Chikitsa Sutra. J Ayur Integr Med Sci. 2022;7(1):135-41.
11. Singh N, Bhalla M, de Jager P, Gilca M. An Overview on Ashwagandha: A Rasayana (Rejuvenator) of Ayurveda. Afr J Tradit Complement Altern Med. 2011;8(5):208-13.

**Cite this article as:** Savitha CB, Marikutty TC. Ayurvedic perspective on osteoarthritis: management and outcomes:a case report. Int J Res Med Sci 2025;13:3854-60.