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AYURVEDIC MANAGEMENT OF BILATERAL SANDHIGATA VATA (KNEE OSTEOARTHRITIS WITH DEGENERATIVE MEDIAL MENISCAL TEAR) IN A 51-YEAR-OLD MAN: A CASE STUDY

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ABSTRACT

Background: Sandhigata Vata, the Ayurvedic counterpart of knee osteoarthritis (OA), commonly progresses despite analgesic and symptomatic therapy, and surgery is often advised when function declines. **Case:** A 51-year-old man presented in September 2025 with 15 months of bilateral knee pain (medial predominance), non-pitting suprapatellar swelling, marked morning stiffness, crepitus and a varus-appearing antalgic gait. He could not climb stairs. About one year of conventional treatment had given inadequate relief and surgery was advised, which he declined. Magnetic resonance imaging of the right knee (July 2024) showed medial-predominant tibiofemoral and patellofemoral cartilage thinning, marginal osteophytes, subchondral marrow oedema, moderate effusion and a complex degenerative tear of the medial meniscus. McMurray and Thessaly tests were positive. **Intervention:** Over four months (September 2025 to January 2026) he received oral Shamana therapy aimed at Ama digestion and Vata pacification, Janu Basti with Murivenna and Sandhilin oils, and Anuvasana Basti with Sahacharadi Taila, alongside dietary and lifestyle advice. **Outcomes:** At the January 2026 review, pain on the visual analogue scale (VAS) fell from 8–9/10 to 1–2/10, swelling resolved, morning stiffness fell from over one hour to under five minutes, and flexion improved from 80–100° to 130–140°.

He reported unrestricted stair climbing and walking of more than 1000 m. **Conclusion:** This single uncontrolled case records clinically meaningful symptomatic and functional improvement during a multimodal Ayurvedic programme.

KEYWORDS: Sandhigata Vata; Knee osteoarthritis; Meniscal tear; Janu Basti; Anuvasana Basti; Ayurveda.

INTRODUCTION

Osteoarthritis (OA) is the commonest form of arthritis, and the knee is its most frequently affected site. The Global Burden of Disease Study 2021 estimated that about 595 million people (7.6% of the world population) lived with OA in 2020, with knee OA cases projected to rise by about 75% by 2050.[1] Community studies from India likewise describe a substantial burden of knee OA.[2] Conventional care relies on analgesics, non-steroidal anti-inflammatory drugs, intra-articular and nutraceutical agents, and joint surgery for advanced disease. Many patients find these options only partly effective or poorly tolerated, which is why complementary systems of medicine are often sought.

In Ayurveda, the clinical picture of knee OA corresponds most closely to Sandhigata Vata, a disorder of Vata lodged in the Sandhi (joint), classed among the Vatavyadhi. Charaka describes it as a swelling that feels like a bag filled with air on palpation, with pain on extension and flexion of the joint.[3] Classically, ageing (Vriddhavastha), reduced Agni, Ama formation, obstruction of the channels (Srotorodha) and depletion of Shleshaka Kapha and Asthi Dhatu are held to underlie its progression. Treatment combines Ama-digesting and Vata-pacifying oral therapy (Shamana) with external and enema-based procedures (Bahya and Basti therapies) and dietary-lifestyle regulation (Pathya-Apathya).

Controlled studies of multimodal or standardised Ayurvedic treatment in knee OA have reported symptomatic benefit, although the evidence is limited by small samples, exploratory design and open-label allocation.[4,5] Case-level documentation therefore remains useful, particularly for atypical or advanced presentations where conventional treatment has failed.

The present patient was unusual for four reasons: onset at age 51 with rapidly progressive bilateral, medial-predominant disease; a mother who developed leg deformity at a similar age; imaging evidence of a degenerative medial meniscal tear; and failure of about a year of

conventional treatment, after which surgery was advised. This report describes his Ayurvedic assessment, a four-month multimodal treatment programme, and the clinical course observed.

CASE PRESENTATION

Patient information

A 51-year-old man from Udaipur, Rajasthan, employed in a government post at a nuclear power plant (mixed standing, sitting and walking work; middle socio-economic status), presented to the Ayurvedic hospital in September 2025. He was vegetarian and took tea habitually. His main complaint was bilateral knee pain with swelling for 15 months (June 2024 to September 2025).

Associated complaints were non-pitting swelling about 1 cm above both knees, marked morning stiffness with disturbed sleep, inability to climb stairs or stand and walk for long, an antalgic gait with inward bowing of the knees, audible crepitus, and loss of confidence in walking. Secondary complaints were sticky, unformed stools (Sama mala pravritti) passed three to four times daily, and gaseous abdominal distension (Adhmana).

History of Present Illness

In June 2024 the patient first felt that "something was wrong" in his knees, followed by sudden pain, first in the left knee and later in the right. Within months the disease became bilateral and progressive. The pain was described as pins-and-needles, tingling and aching with paraesthesia, mainly over the medial tibiofemoral compartment of both knees, with an initial VAS of 8 to 9 out of 10. Pain was aggravated by climbing stairs, prolonged standing or walking, certain joint positions (which provoked crepitus) and cold weather, and eased with rest, limb elevation, oil massage (Abhyanga) and initial weight-bearing restriction. He reported a loss of confidence and anxiety about walking.

From June 2024 to June 2025 he took conventional treatment (vitamin B12 and "synovial fluid enhancers", agents not named in the record) with minimal relief and poor tolerance, and surgery was advised, which he declined. He started Ayurvedic treatment in September 2025.

Past, family and personal history

- **Past:** hypertension, Sheetapitta (urticaria-like rash) and amoebiasis (as diagnosed by conventional physicians). No drug allergy; sensitivity to spicy food.

- **Family:** his mother developed inward bending of the legs (varus deformity) at age 50 and also had bowel problems resembling his sticky stools.
- **Personal:** low appetite, normal sleep (although the complaints list night pain with disturbed sleep), irregular bowels with gaseous distension and sticky stools, normal micturition with occasional burning after spicy food, and tea as his only habit.
- **Lifestyle (Nidana):** about two years of sedentary routine after long-standing vigorous activity (cycling and prolonged walking), which stopped abruptly.

Clinical findings

General and systemic examination. He was alert and oriented. Build was moderate; pallor, icterus, cyanosis, clubbing and lymphadenopathy were absent; the tongue was coated. Pulse was 78 per minute, blood pressure 128/78 mmHg (reported as mostly normal and higher under stress), respiratory rate 16 per minute, and temperature normal. Weight was 61 kg and height 154.94 cm on 15 September 2025, giving a body-mass index of 25.4 kg/m² on recalculation.

Local examination of both knees. Inspection showed symmetric suprapatellar non-pitting swelling, initial erythema, an apparent varus (bow-legged) alignment and bilateral quadriceps wasting. Palpation found initial warmth, tenderness along the medial joint line and suprapatellar region, and extreme crepitus. McMurray's and Thessaly's tests were positive. Range of movement was limited in flexion and extension, with flexion of 80 to 100° at presentation.

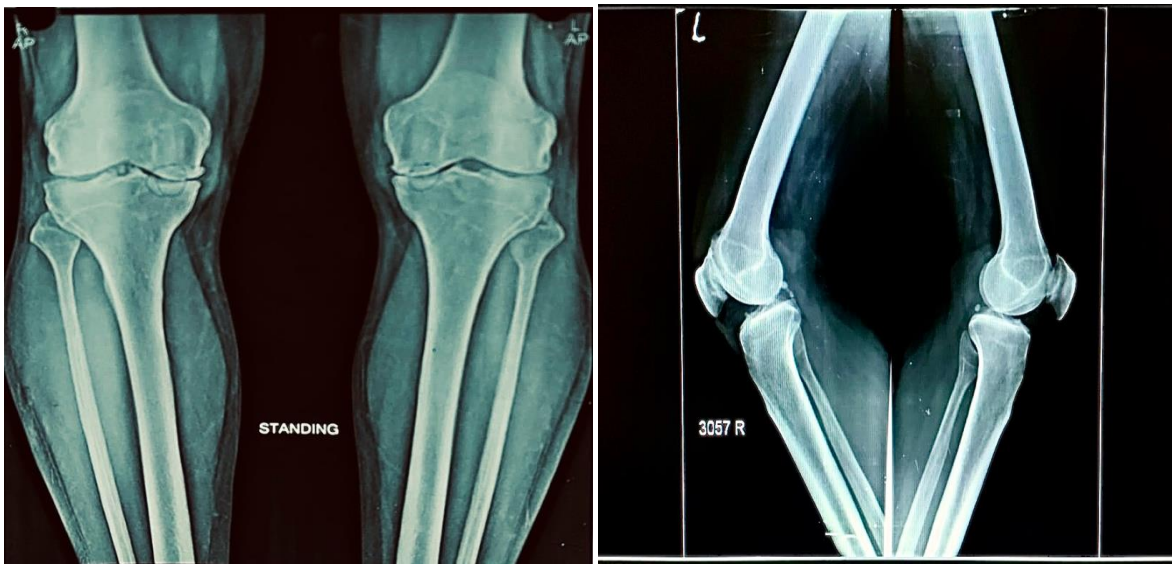
Ayurvedic assessment (Ashtavidha and Dashavidha Pariksha). Findings are in Table 1.

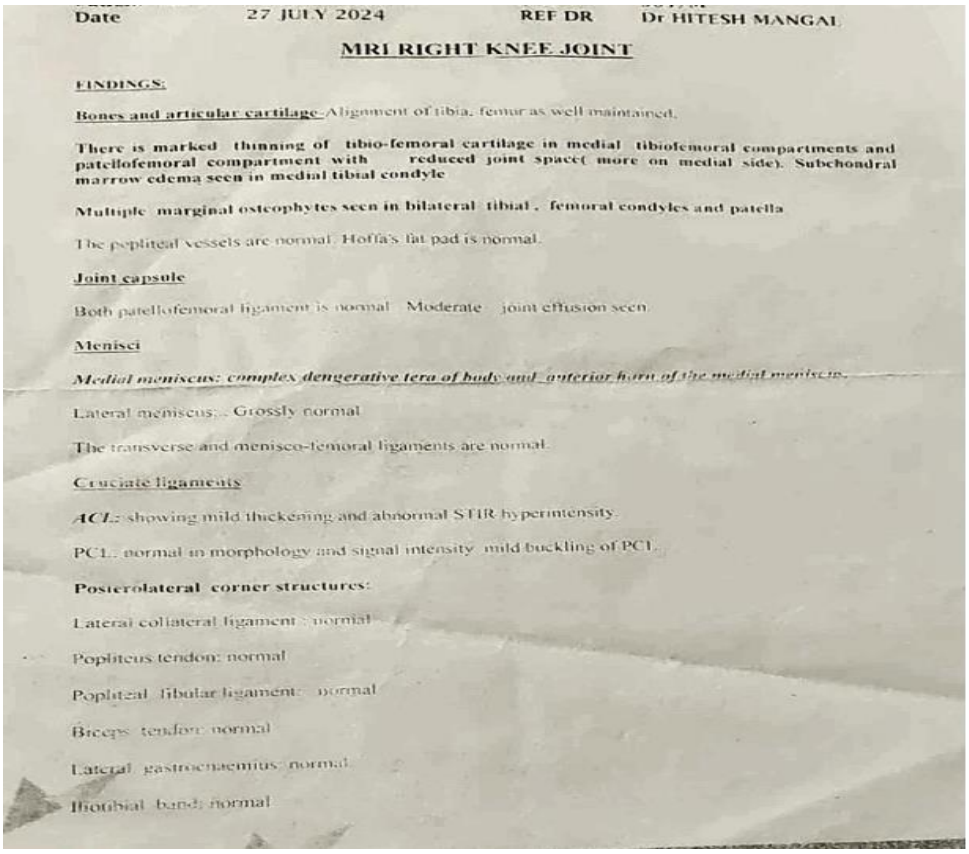
Table 1: Ayurvedic clinical examination.

Examination	Finding
Nadi (pulse)	78/min
Mutra (urine)	Samyak; occasional daha after katu ahara
Mala (stool)	Foul-smelling, sticky (picchila)
Jihva (tongue)	Amayukta (coated)
Shabda, Sparsha, Drik, Akriti	Clear; normal warmth and coolness; clear; normal
Prakriti	Vata-Pittaja
Vikriti	Aggravated Vata and Pitta with Kapha kshaya (reduced synovial fluid)
Sara / Samhanana / Pramana	Asthi sara / Madhyama / Madhyama (slightly overweight)
Satmya / Sattva	Madhyama (sensitivity to spicy food) / Madhyama
Ahara shakti / Vyayama shakti	Avara / Madhyama
Vaya	Praudha (middle age)

Investigations

Standing anteroposterior radiographs of both knees and a lateral view were obtained.





Date 27 JULY 2024 REF DR Dr HITESH MANGAL

MRI RIGHT KNEE JOINT

FINDINGS:

Bones and articular cartilage-Alignment of tibia, femur as well maintained.

There is marked thinning of tibio-femoral cartilage in medial tibiofemoral compartments and patellofemoral compartment with reduced joint space(more on medial side). Subchondral marrow edema seen in medial tibial condyle

Multiple marginal osteophytes seen in bilateral tibial , femoral condyles and patella

The popliteal vessels are normal. Hoffa's fat pad is normal.

Joint capsule

Both patellofemoral ligament is normal Moderate joint effusion seen

Menisci

Medial meniscus: complex dengerative tera of body and anterior horn of the medial meniscus.

Lateral meniscus: Grossly normal

The transverse and menisco-femoral ligaments are normal.

Cruciate ligaments

ACL: showing mild thickening and abnormal STIR hyperintensity

PCL: normal in morphology and signal intensity mild buckling of PCL

Posterolateral corner structures:

Lateral collateral ligament : normal

Popliteus tendon: normal

Popliteal fibular ligament: normal

Biceps tendon: normal

Lateral gastrocnaemius: normal

Iliotibial band: normal

MRI imaging of the right knee on 27 July 2024 showed marked thinning of the tibiofemoral cartilage in the medial compartment and of the patellofemoral cartilage, with reduced joint space (more on the medial side), subchondral marrow oedema in the medial tibial condyle, multiple marginal osteophytes of the tibia, femur and patella, moderate joint effusion, and a complex degenerative tear of the body and anterior horn of the medial meniscus.

The anterior cruciate ligament showed mild thickening with abnormal signal on short-tau inversion recovery, and the posterior cruciate ligament showed mild buckling. The lateral meniscus, collateral ligaments, popliteal structures and Hoffa's fat pad were normal. No MRI of the left knee, blood tests or radiographic severity grade were available.

Diagnosis

The Ayurvedic diagnosis was Sandhigata Vata, differentiated from Amavata, Gridhrasi and Kroshtukashirsha. The contemporary diagnosis was bilateral knee osteoarthritis with a degenerative medial meniscal tear. The cardinal features matching Charaka's description were joint swelling, pain on flexion and extension, heaviness, crepitus and deformity.[3] The proposed Samprapti (pathogenesis) is summarised below and the Samprapti Ghataka in Table 2.

Samprapti as recorded: (1) Nidana (sedentary life after abrupt stopping of habitual exercise, Vata-Pitta prakriti, age-related Vata increase, Mandagni, family tendency) leads to (2) aggravation of Vata and Pitta; (3) impaired Agni and formation of Ama; (4) obstruction of channels by Ama, with Kapha covering the Asthivaha srotas; (5) depletion of Shleshaka Kapha and Asthi dhatu, with loss of synovial lubrication and bone change; (6) manifest disease with pain, stiffness, crepitus, loss of movement, disturbed sleep and psychological distress.

Table 2: Samprapti Ghataka.

Component	Finding
Dosha	Vata and Pitta aggravation with Kapha deficiency
Dushya	Rasa, Rakta, Asthi
Agni	Jatharagni mandya (Vishamagni)
Srotas / Srotodushti	Asthivaha / Sanga, Granthi, Vimargagamana
Udbhava sthana	Pakvashaya
Adhisthana	Asthi-Sandhi
Vyadhi svabhava	Chirakari
Sadhyasadhyata	Krichchhrasadhya / Yapya

Therapeutic intervention

Treatment ran from September 2025 to January 2026 (about four months) on an outpatient and inpatient basis. The therapeutic aim was Vata shamana, Agni deepana and Ama pachana, nourishment of Asthi dhatu, and protection of Shleshaka Kapha. The regimen is listed in Table 3 and the procedures in Table 4.

Table 3: Oral and topical medication.

Timing	Formulation	Dose	Intended action (as recorded)
Before food, twice daily, with water	Laghusutashekhara Rasa (shuddha parada, shuddha gandhaka, shankha bhasma, shuddha tankana)	250 mg	Improves Jatharagni and acts on Ama
Before food, twice daily, with water	Ashwagandha churna	3 g	Supports bone, cartilage and muscle; slows dhatu kshaya
Before food, twice daily, with water	Shatavari churna	2 g	Reduces dryness; supports Shleshaka Kapha
Before food, twice daily, with water	Chopchini churna	1 g	Ama pachana; anti-inflammatory
Before food, twice daily, with water	Samirapannaga Rasa (hingula, vatsanabha, shunthi, maricha, pippali; bhavana with ginger or lemon juice)	125 mg	Breaks Kapha and Ama avarana of Vata
At bedtime, with milk	Eranda taila	2 teaspoons	Pacifies Vata; clears Ama
Twice daily, with water	Avipattikara churna	3 g	Gentle digestion; prevents fresh Ama
Empty stomach, twice daily	Dashamula kwatha	10 g	Kapha shamaka, analgesic, anti-oedema, srotoshodhana
Empty stomach, twice daily	Dhanyapanchaka kwatha (dhanyaka, shweta and krishna jiraka, shunthi, musta)	10 g	Ama pachana, Agni deepana, Vata anulomana
After food	Tablet Relief Ayu	2 tablets, two times daily	
After food	Tablet Rhumayog	2 tablets, two times daily	
Local application	Spray Relief Ayu	As needed	

Table 4: Panchakarma procedures.

Procedure	Material	Quantity
Janu Basti (both knees)	Murivenna taila and Sandhilin oil	200 ml each
Anuvasana Basti	Sahacharadi taila	30 ml

Pathya-Apathya. He was advised warm, unctuous, freshly cooked food (ghee, sesame oil, meat soup, Shashtika shali rice, wheat, green gram), digestive spices in small amounts, and gentle regular movement including controlled cycling and quadriceps strengthening. He was advised to avoid dry, cold or packaged food, excess spicy, fried, fermented food and caffeine, excess sweets and heavy dairy, prolonged sitting, repeated stair climbing, squatting, jerky movements and cold or damp exposure.

Follow-up and outcomes

The patient was reviewed in January 2026, after four months of Ayurvedic treatment. Outcomes (Table 5) were recorded clinically. The patient reported 80 to 90% overall symptomatic relief, and the signs of inflammation had settled: swelling had resolved, erythema was minimal or absent, and the joints were no longer warm. Tenderness over the medial joint line and suprapatellar region persisted at moderate level. Crepitus fell from extreme and constant to three or four episodes a day. No adverse events were recorded. Repeat imaging was not performed.

Table 5: Clinical outcomes, baseline (September 2025) versus review (January 2026).

Parameter	Baseline	Review	Change as recorded
Pain (VAS, 0 to 10)	8 to 9	1 to 2	80 to 90% reduction
Swelling above the knee	1 cm	Resolved	100% reduction
Morning stiffness	More than 1 hour	Under 5 minutes	95% reduction
Crepitus	Extreme, constant	3 to 4 episodes per day	90% reduction
Knee flexion	80 to 100°	130 to 140°	Gain of 40 to 60°
Walking distance	Unable	More than 1000 m	Restored
Stair climbing	Unable	Normal	Restored
Quality of life	Severely limited	Near-normal	80 to 90% improvement

Timeline. June 2024: symptom onset and first conventional consultation. July 2024: MRI of the right knee. June 2024 to June 2025: conventional treatment without adequate relief; surgery advised and declined. September 2025: Ayurvedic treatment begun. January 2026: review after four months.

DISCUSSION

This man had bilateral, medial-predominant knee OA with an MRI-documented degenerative medial meniscal tear, and he improved clinically over four months of a multimodal Ayurvedic programme: pain, swelling, stiffness, flexion and walking capacity all moved in the favourable direction (Table 5). What this report can show is a temporal association. It cannot show that any single drug or procedure caused the change.

Ayurvedic interpretation. The picture fits Sandhigata Vata with Ama and Pitta involvement. The coated tongue, low appetite, sticky foul stools and abdominal distension indicate Agnimandya with Ama, which is why the regimen began with Ama pachana and Deepana agents (Chopchini, Dhanyapanchaka kwatha, Avipattikara, Laghusutashekhara). Samirapannaga Rasa and Dashamula were intended to relieve Kapha and Ama avarana of

Vata and to reduce pain and swelling. Ashwagandha and Shatavari were given for Asthi and Shleshaka Kapha support, Eranda taila as a mild purgative-unctuous Vata anulomana measure, and Janu Basti and Anuvasana Basti for local and systemic Vata pacification. These explanations come from classical reasoning and the treating team's rationale; none was tested here. The mechanism of each agent, such as Ashwagandha, was not measured in this report.

Contemporary interpretation. The MRI shows cartilage loss, osteophytes, marrow oedema, effusion and a medial meniscal tear, a pattern in which pain is driven by synovitis and bone-marrow lesions as well as mechanical overload. Positive McMurray and Thessaly tests agree with the imaging, and the Thessaly test has been reported to perform well for meniscal tears in clinical use.[6] The improvement in swelling and warmth is compatible with settling of synovitis, but no inflammatory marker, ultrasound or repeat MRI was obtained, so this cannot be confirmed. Structural change (cartilage, osteophytes, the meniscal tear) would not be expected to reverse in four months, and the report makes no such claim.

Comparison with published work. Open-label and exploratory controlled trials of multimodal Ayurvedic care in knee OA have reported larger symptom improvement than comparator care.[4,5] Our observation points in the same direction but carries far less weight, since it is a single uncontrolled case with unvalidated measures.

Alternative explanations. The recorded improvement may reflect natural fluctuation or regression of a flare, reduced loading with rest and "weight-bearing restriction", dietary change, resumed graded exercise (quadriceps strengthening and controlled cycling were advised), a delayed effect of the earlier conventional treatment, and expectation effects in a patient who had been advised surgery. The pain was described as pins-and-needles with tingling and numbness-like paraesthesia, which is less typical of OA; the record contains no neurological examination, spinal assessment or serum vitamin B12 level, so a neuropathic contribution cannot be excluded. The date of the radiographs relative to the MRI is not stated, and the MRI covers only the right knee, 14 months before treatment began.

Safety. Laghusutashekhara and Samirapannaga contain processed mercury and aconite (Vatsanabha). Heavy-metal content of some Ayurvedic products has been documented,[7] so product source, standardisation and safety monitoring (renal and liver function, blood pressure, neurological symptoms) deserve explicit reporting. The patient also had hypertension; no antihypertensive therapy or blood-pressure trend is recorded.

Strengths and limitations. Strengths are a detailed Ayurvedic assessment, objective baseline imaging, and a clear before-and-after clinical record. Limitations are the single case, absence of a comparator, no validated outcome measures (WOMAC, KOOS, Lequesne index or goniometer-confirmed range recorded per visit), no repeat imaging, undefined intervention durations, many concurrent therapies that cannot be separated, and a short follow-up of four months with no post-treatment observation period.

CONCLUSION

In this 51-year-old man with bilateral medial-predominant knee OA and a degenerative medial meniscal tear, a four-month multimodal Ayurvedic programme was followed by marked reduction in pain, resolution of swelling, shorter morning stiffness, better knee flexion and restored walking and stair-climbing. The report documents an association, not a treatment effect, and rests on unvalidated, clinician-recorded measures in one patient. It supports the case for prospective, controlled studies that use validated scales, repeat imaging and systematic safety monitoring.

Patient perspective

At review the patient reported 80 to 90% relief and confidence in walking.

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