



A Clinical Case Study on *Janu Sandhigata Vata* with *Dhanwantri Taila Basti*

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Abstract

The Purpose of the Work: The elderly are prone to the condition known as *Sandhigata vata* (osteoarthritis). Some of the risk/cause factors include lifestyle choices, excessive weight, trauma, and a diet lacking in calcium. *Vata* is vitiated by *Rooksha aahar* (dry diet) and *Ativyaam* (excessive exercise) It mostly affects the body's weight-bearing joints, particularly the knee, hip, and lumbar spine. The most prevalent type of articular problems, *Sandhigata vata* (osteoarthritis) severely restricts a sufferer's ability to walk, dress, bathe, and do other daily tasks. The condition frequently manifests as *Shula* (pain), *Sotha* (swelling), *Vata Poornadriti Sparsha* (crackling sound), and trouble flexing and extending the *Sandhi* (joints). calcium supplements, and ultimately joint replacement are all alternatives for therapy. **Methodology:** A 39-year-old patient with *Janu Sandhigata Vata* (osteoarthritis) came to Mahatma Gandhi Ayurveda College, Hospital, and Research Centre, Salod (H), Wardha. **Key Findings and Major Conclusion:** This indoor patient received 10 days of *Anuvasana* with *Murchhita Tila Taila* (medicated oil) and *Dhanwantri Tailam Basti* (enema) and 10 days of *Abhyanga* (massage) at *Nabhi* (umbilicus), *Parshva* (flanks), *Prushtha* (back), and *Ubhayapada pradesh*. The patient reacted favourably to these Ayurvedic therapies and had significant alleviation symptoms. The patient was treated with *Anuvashana* and *Niruha basti* (enema). Schedule for the period 08 February 2023 to 18 February 2023 days and substantial positive change in signs and symptoms was observed.

Keywords: *Anuvasana Basti, Dhanwantri Tailam, Niruh Basti, Osteoarthritis, Sandhigata Vata*

1. Introduction

Any illness begins with an insufficient supply of the right nutrients or food to certain tissues. Because of channel *Srotoavarodha* (obstruction), nutrients do not reach the target place^{1,2}. It can thus cause sickness^{3,4}. Due to a lack of *Poshaka rasa* (nutrients), *Janu Sandhigata Vata* (knee osteoarthritis) is *Asthi-Sandhigata Vyadhi* (osteoarthritis), and *Asthi Dhatu* (bone tissue) has *Kshaya* (emaciation)^{5,6}. Osteoarthritis and *Sandhigata Vata* (osteoarthritis) are related in Ayurveda. Separate descriptions of *Janu Sandhigata Vata* (knee osteoarthritis) condition may be found in *Charak Samhita*^{7,8}. The *Vata Vyadhi* (*vata* disease) was used by Acharya Charak to describe it.

Shotha (swelling), *Akunchana Prasaranā Vedana* (pain during movement of joints), and *Vata Purna Driti Sparsha* (feeling of roughness) were some of the signs that Charak used to diagnose the condition^{9,10}. Acharya Sushruta identified the symptoms of *Sandhigata Vata* (osteoarthritis) as *Shoola* (pain), *Shotha* (swelling), and *Janu Sandhigata* (decreasing knee joint motions)¹¹⁻¹⁴. *Vata Prakopa* (aggravation), which develops in the joints and causes symptoms like joint swelling¹⁵⁻¹⁷.

This science has developed preventative and curative healthcare techniques that might provide all-encompassing treatments for the multifactorial human disorders¹⁸⁻²⁰. One such illness experiencing an increase in occurrence is Osteoarthritis (OA), which

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is linked to poor food and lifestyle choices²¹⁻²³. The fourth decade is when the illness often strikes, and the likelihood of getting it rises linearly with age. Bilateral Osteoarthritis (OA) affects more women than men, who tend to have unilateral Osteoarthritis (OA)²⁴⁻²⁶. The hallmark signs of this degenerative illness are joint stiffness, swelling, discomfort, and loss of mobility²⁷. It is defined by the loss of articular cartilage and synovial inflammation^{28,29}.

The *Sandhigata vata* described under *Vatavyadhi* correlates with the symptoms of (Osteoarthritis) OA^{30,31}. Acharya Charaka initially identified *Sandhivata* as *Sandhigata Anila*, exhibiting the signs of *Shotha* (swelling), which when palpated feels like a bag filled with air, and *Shula* (pain) on *Prasarana* and *Akunchana* (pain during flexion and extension of the joints)^{32,33}. Acharya Sushruta also discussed *Shula* and *Shotha* concerning this illness that causes a reduction (*Hanti*) in the range of motion at the affected joint. *Atopa* (crepitus in the joint) is a further characteristic of it that Madhavakara adds³⁴. The *Asthi* (bone), *Sandhi* (joint), *Mamsa* (muscle), and *Snayu* (ligament) are affected by the pathologic foundations of this condition, which are attributable to the aberration of *Vata* and *Kapha Dosh*^{35,36}.

2. Objective of the Present Work

To evaluate the role of *Dhanwantri Tailin* the treatment of *Sandhigata vata*.

3. Materials and Methods

The patient data of *Sandhigata vata* has been collected from OPD of Mahatma Gandhi Ayurveda College, Hospital, and Research Centre, Salod (H), Wardha. The following treatment has been scheduled.

4. Treatment

- *Abhayanga* (massage) in *Nabhi* (umbilicus), *Parshva* (flanks), *Prastha* (back), *Ubhayapada* with *Murchhita Tila Taila* (15 minutes).
- *Nadi sweda* (3 minutes)
- *Anuvashana Basti* (enema) with *Murchhita Tila Taila* (Medicated oil) (80 ml).
Dhanwantri Tailam Basti (enema)

5. Case Report

A female patient of 39 years old, Admitted 08 February 2023 in Mahatma Gandhi Ayurveda College, Hospital and Research Centre, Salod (H), Wardha.

- OPD No. - 2302080047

5.1 Chief Complaint

Right knee joint pain in the last two months duration.

5.2 History of Present Illness

The patient was asymptomatic before 2 months. She gradually develops the above symptoms. She came to Mahatma Gandhi Ayurveda College, Hospital and Research Centre, Salod (H), Wardha, for further treatment.

5.3 Past History

N/K/C/O - hypertension (HTN), DM, SLE.

5.4 Personal History

Ahara – Mixed
Vihara – *Sadharan*
Addiction – Tea
Bowel Habit – Regular
Nidra – Sound
Urine – Frequency – 3-4/ Day, 0-1/Night
Blood Group – O⁺

5.5 Occupational History

Nature of work – standing, working hour – 3-4 hrs.

5.6 Menstrual and Obstetric History

Number of delivery - 2

5.7 General Examination

Gait – Normal
Decubitus - Normal
Faces - Normal
Pallor - Normal
Icterus - Normal
Cyanosis - Normal
Edema - Normal
Clubbing - Normal
Lymph nodes - Not palpable

5.8 Ashta Vidha Pariksha

Nadi: *Vatapitta*, Pulse: 78/minute
Mutra: 3-4 Times/day

Mala: One Time
Sparsha: Normal
Drik: Normal
Jihva: *Niramal*
Sabdha: Normal
Akrithi: Normal

5.9 On Examination

General condition: Moderate
 Pulse Rate: 78/min
 BP: 130 /80 mm of Hg
 RR: 18/min
 HR: 80/min
 Temp- 98.6 F⁰

Table 1. *Rogi pariksha* (Patient Examination)

1.	<i>Prakruti</i>	<i>Vata Pitta</i>
2.	<i>Sarata</i>	<i>Madhyam</i>
3.	<i>Sanhananataha</i>	<i>Madhyam</i>
4.	<i>Pramanata</i>	Ht-164 cm., Wt-64 kg, BMI- 25.62
5.	<i>Satwataha</i>	<i>Madhyam</i>
6.	<i>Satmyataha</i>	<i>Madhyam</i>
7.	<i>Ahara Shakti</i>	<i>Madhyam</i>
8.	<i>Vyayamataha</i>	<i>Madhyam</i>
9.	<i>Vaya</i>	<i>Madhyam</i>
10.	<i>Jihwa</i>	<i>Nirama</i>
11.	<i>Deshataha</i>	<i>Sadharana</i>

5.10 Systemic Examination

Table 2. Locomotory system

Symptoms	Right	Left
Swelling	-	-
Pain	+	-
Crepitus	+	-
Temp	-	-

5.11 Respiratory System

AEBE – Clear

5.12 Cardiovascular System

S₁S₂ – Normal

5.13 Gastrointestinal System

Not Any Deformity (NAD)

5.14 Central Nervous System

At the time of admission patient was conscious and well oriented and all the sensory and motor system are well functioned.

5.15 Other System

Micturation frequency – 3-5 in day and 0-1 in night tme

6. Pathology Report

- Hb% - 12.4 gms%
- RBS - 123 mg/dl
- Platelet count - 1.75 lakhs cells/cu mm
- Urine routine - Whitish yellow
- PH- 6.2, specific gravity – 1.031

7. Radiology Finding

X –ray – Changes of OA Grade – II

8. Nidana

- Provisional Diagnosis – *Janu Sandhigata Vata, Ama vata, Janu shoola*
- Differential Diagnosis - *Janu Sandhigata Vata, Ama vata, Janu shoola*
- Diagnosis - *Janu Sandhigata Vata*
- Prognosis – *Sadhya*

Table 3. *Samprapti ghataka* (Pathogenesis factor)

1.	<i>Dosha</i>	<i>Vata Pradhana</i>
2.	<i>Dushya</i>	<i>Rasa, Lashika, Asthi. Majja</i>
3.	<i>Srotas</i>	<i>Asthivaha</i>
4.	<i>Ama</i>	<i>Sama</i>
5.	<i>Udbhavasthana</i>	<i>Pakvashya</i>
6.	<i>Vyaktisthana</i>	<i>JanuPradesh</i>
7.	<i>Tratment</i>	<i>Shodhana, Shamana</i>

9. Treatment

Abhayanga (masseage) in *Nabhi* (umbilicus), *Parshva* (flanks), *Prastha* (back), *Ubhayapada* with *Murchhita Tila Taila* (15 minutes).

Nadi sweda (3 minutes)

Anuvashana Basti (enema) with *Murchhita Tila Taila* (medicated oil) – (80 ml).

Dhanwantri Tailam Basti (enema) – As per schedule.

10. Dhanwantri Tailam Basti Dravyas⁴

Tila Taila - *Sesamum indicum* Oil. 100.00 ml
 Godugdha Milk Lq. 600.00 ml
 Balaa - *Sida cordifolia* Rt. Dct. 174.00 g
 Yava - *Hordeum vulgare* Sd. Dct. 7.68 g
 Kola - *Zizyphus mauritiana* Fr. Dct. 7.68 g
 Kulattha - *Vigna unguiculata* Sd. Dct. 7.68 g
 Bilva - *Aegle marmelos* Rt./St. Bk. Dct. 7.68 g
 Syonaka - *Oroxylum indicum* Rt./St. Bk. Dct. 7.68 g
 Gambhari - *Gmelina arborea* Rt./St. Bk. Dct. 7.68 g
 Patala - *Stereospermum suaveolens* Rt./St. Bk. Dct. 7.68 g
 Agnimantha - *Premna integrifolia* Rt./St. Bk. Dct. 7.68 g
 Salaparni - *Desmodium gangeticum* Pl. Dct. 7.68 g
 Prsniparni - *Uraria picta* Pl. Dct. 7.68 g
 Brhati - *Solanum indicum* Pl. Dct. 7.68 g
 Kantakari - *Solanum surattense* Pl. Dct. 7.68 g
 Goksura - *Tribulus terrestris* Fr. Dct. 7.68 g
 Polygonatum cirrhifolium Rt. Tr. Pst. 0.78 g
 Mahameda - *Polygonatum cirrhifolium* Rt. Tr. Pst. 0.78 g
 Devadaru - *Cedrus deodara* Ht. Wd. Pst. 0.78 g
 Manjistha - *Rubia cordifolia* Rt. Pst. 0.78 g
 Kakoli - *Lilium polyphyllum* Sub. Rt. Pst. 0.78 g
 Ksirakakoli - *Fritillaria roylei* Sub. Rt. Pst. 0.78 g
 Chandana - *Santalum album* Ht. Wd. Pst. 0.78 g

Sveta - *Sariva Hemidesmus indicus* Rt. Pst. 0.78 g
 Kushta - *Saussurea lappa* Rt. Pst. 0.78 g
 Tagara - *Valeriana wallichii* Rt./Rz. Pst. 0.78 g
 Jivaka - *Malaxis acuminata* Rt.Tr. Pst. 0.78 g
 Rsabhaka - *Malaxis acuminata* Rt.Tr. Pst. 0.78 g
 Saindhava - *Lavana Rock Salt* Pdr. Pst. 0.78 g

11. Method of Administration

Form: *Anuvashana Basti* (enema) and *Dhanwantri Tailam Basti* (enema)

Dose: 80 ml

Kala: once a day

Duration of therapy: for 10 days

Follow up: after 20 days

12. Diet and Regimen

Laghu Supachhya (light food for digestion) (Table 5).

13. Observations and Result

Patients underwent the above-mentioned medication from 08/02/2023 to 18/02/2023 (Table 6).

Janu Sandhigata Vata (knee osteo arthritis) is mentioned in all the classics. Symptoms are usually found in bus drivers, computer operators and school instructors, obese individuals, etc.

Table 4. Basti schedule

Sl. No.				Basti	Schedule				
Date	08/02/23	09/02/23	10/02/23	11/02/23	12/02/23	13/02/23	14/02/23	15/02/23	16/02/23
1.	Anuvashana Basti	Niruha Basti	Niruha Basti	Niruha Basti	Niruha Basti	Niruha Basti	Niruha Basti	Anuvashana Basti	Anuvashana Basti
2.		Anuvashana Basti	Anuvashana Basti	Anuvashana Basti	Anuvashana Basti	Anuvashana Basti	Anuvashana Basti		

Table 5. Chikitsa follow-up

Date	Shamana	Shodhana
08/02/2023		<p><i>Abhyanga</i> (massage) in <i>Nabhi</i> (umbilicus), <i>Parshva</i> (flanks), <i>Prastha</i> (back), <i>Ubhayapada</i> with <i>Murchhita Tila Taila</i> (15 min) followed by <i>Nadi sweda</i> (5 min) <i>Anuvashana Basti</i> (enema) with <i>Murchhita Tila Taila</i> - 80 ml <i>Anuvashana Basti</i> (enema) Kala - 2:00 pm <i>Pratyagamana Kala</i> - 8:00 pm <i>Dhanwantri Tailam Basti</i> (enema) – as per schedule</p>

Table 5. Continued...

Date	Shamana	Shodhana
09/02/2023	Tab. Yogaraj Guggulu 2-0-2 with lukewarm water for 7 days	<i>Abhyanga</i> (massage) in <i>Nabhi</i> (umbilicus), <i>Parshva</i> (flanks), <i>Prastha</i> (back), <i>Ubhayapada</i> with <i>Murchhita Tila Taila</i> (15 min) followed by <i>Nadi sweda</i> (5 min) <i>Niruha Basti</i> (enema) <i>Anuvashana Basti</i> (enema) with <i>Murchhita Tila Taila</i> -80 ml <i>Anuvashana Basti</i> (enema) <i>Dana Kala</i> - 2:00 pm <i>Pratyagamana Kala</i> - 7:00 pm <i>Dhanwantri Tailam Basti</i> (enema) – as per Schedule <i>Dhanwantri Tailam Basti</i> (enema) <i>Dana Kala</i> – 10:00 am <i>Pratyagamana Kala</i> - 9:30 am
10/02/2023		<i>Abhyanga</i> (message) in <i>Nabhi</i> (umbilicus), <i>Parshva</i> (flanks), <i>Prastha</i> (back), <i>Ubhayapada</i> with <i>Murchhita Tila Taila</i> (15 min) followed by <i>Nadi sweda</i> (5 min) <i>Niruha Basti</i> (enema) <i>Anuvashana Basti</i> (enema) with <i>Murchhita Tila Taila</i> -80 ml <i>Anuvashana Basti</i> (enema) <i>Dana Kala</i> - 3.00 pm <i>Pratyagamana Kala</i> - 8:35 pm <i>Dhanwantri Tailam Basti</i> (enema) – as per Schedule <i>Dhanwantri Tailam Basti</i> (enema) <i>Dana Kala</i> – 9:15 am <i>Pratyagamana Kala</i> - 9:25 am
11/02/2023		<i>Abhyanga</i> (message) in <i>Nabhi</i> (umbilicus), <i>Parshva</i> (flanks), <i>Prastha</i> (back), <i>Ubhayapada</i> with <i>Murchhita Tila Taila</i> (15 min) followed by <i>Nadi sweda</i> (5 min) <i>Niruha Basti</i> (enema) <i>Anuvashana Basti</i> with <i>Murchhita Tila Taila</i> -80 ml <i>Anuvashana Basti Dana Kala</i> - 2:30 pm <i>Pratyagamana Kala</i> - 8:40 pm <i>Dhanwantri Tailam Basti</i> (enema) – as per Schedule <i>Dhanwantri Tailam Basti</i> (enema) <i>Dana Kala</i> – 9:30 am <i>Pratyagamana Kala</i> - 9:45 am
12/02/2023		<i>Abhyanga</i> (message) in <i>Nabhi</i> (umbilicus), <i>Parshva</i> (flanks), <i>Prastha</i> (back), <i>Ubhayapada</i> with <i>Murchhita Tila Taila</i> (15 min) followed by <i>Nadi sweda</i> (5 min) <i>Niruha Basti</i> (enema) <i>Anuvashana Basti</i> (enema) with <i>Murchhita Tila Taila</i> -80 ml <i>Anuvashana Basti</i> (enema) <i>Dana Kala</i> - 2:30 pm <i>Pratyagamana Kala</i> - 8:42 pm <i>Dhanwantri Tailam Basti</i> (enema) – as per Schedule <i>Dhanwantri Tailam Basti</i> (enema) <i>Dana Kala</i> – 9:15 am <i>Pratyagamana Kala</i> - 9:35 am
13/02/2023		<i>Abhyanga</i> (message) in <i>Nabhi</i> (umbilicus), <i>Parshva</i> (flanks), <i>Prastha</i> (back), <i>Ubhayapada</i> with <i>Murchhita Tila Taila</i> (15 min) followed by <i>Nadi sweda</i> (5 min) <i>Niruha Basti</i> (enema) <i>Anuvashana Basti</i> (enema) with <i>Murchhita Tila Taila</i> -80 ml <i>Anuvashana Basti</i> (enema) <i>Dana Kala</i> - 2:18 pm <i>Pratyagamana Kala</i> - 8:00 pm <i>Dhanwantri Tailam Basti</i> (enema) – as per Schedule <i>Dhanwantri Tailam Basti</i> (enema) <i>Dana Kala</i> – 9:30 am <i>Pratyagamana Kala</i> - 9:45 am
14/02/2023		<i>Abhyanga</i> (message) in <i>Nabhi</i> (umbilicus), <i>Parshva</i> (flanks), <i>Prastha</i> (back), <i>Ubhayapada</i> with <i>Murchhita Tila Taila</i> (15 min) followed by <i>Nadi sweda</i> (5 min) <i>Niruha Basti</i> (enema) <i>Anuvashana Basti</i> (enema) with <i>Murchhita Tila Taila</i> - 80 ml <i>Anuvashana Basti</i> (enema) <i>Dana Kala</i> - 2:25 pm <i>Pratyagamana Kala</i> - 9:30 pm

Table 5. Continued...

Date	Shamana	Shodhana
		<i>Dhanwantri Tailam Basti</i> (enema) – as per Schedule <i>Dhanwantri Tailam Basti</i> (enema) <i>Dana Kala</i> – 10:00 am <i>Pratyagamana Kala</i> - 10:15 am
15/02/2023		<i>Abhyanga</i> (message) in <i>Nabhi</i> (umbilicus), <i>Parshva</i> (flanks), <i>Prastha</i> (back), <i>Ubhayapada</i> with <i>Murchhita Tila Taila</i> (15 min) followed by <i>Nadi sweda</i> (5 min) <i>Anuvashana Basti</i> (enema) with <i>Murchhita Tila Taila</i> -80 ml <i>Anuvashana Basti</i> (enema) <i>Dana Kala</i> - 2:30 pm <i>Pratyagamana Kala</i> - 9:15 pm
16/02/2023		<i>Abhyanga</i> (message) in <i>Nabhi</i> (umbilicus), <i>Parshva</i> (flanks), <i>Prastha</i> (back), <i>Ubhayapada</i> with <i>Murchhita Tila Taila</i> (15 min) followed by <i>Nadi sweda</i> (5 min) <i>Anuvashana Basti</i> (enema) with <i>Murchhita Tila Taila</i> - 80 ml <i>Anuvashana Basti</i> (enema) <i>Dana Kala</i> - 3:00 pm <i>Pratyagamana Kala</i> - 8:5 pm
17/02/2023		<i>Abhyanga</i> (message) in <i>Nabhi</i> (umbilicus), <i>Parshva</i> (flanks), <i>Prastha</i> (back), <i>Ubhayapada</i> with <i>Murchhita Tila Taila</i> (15 min) followed by <i>Nadi sweda</i> (5 min) <i>Anuvashana Basti</i> (enema) with <i>Murchhita Tila Taila</i> -80 ml <i>Anuvashana Basti</i> (enema) <i>Dana Kala</i> - 2:30 pm <i>Pratyagamana Kala</i> - 9:10 pm
18/02/2023		<i>Supachhya Ahara</i> (diet)

Table 6. Patients were assessed before and after treatment

Knee examination	Before treatment	After treatment
Pain	+++	-
Crepitus	++	+
Swelling	+	-
Tenderness	-	-
Temperature	+	-

According to *Ayurveda*, *sandhi's* (joints) serve as *Slesamaka Kapha's* (synovial fluid) seats. A large portion of osteoarthritis is caused by *Ruksha Guna* (roughness)³⁶. *Vata dosha Prakopa* (aggravation) is present in *Kapha sthana* (location/place) in *Sandhigata vata* (Osteoarthritis)³⁷. Therefore, it is *Kapha Kshaya* (diminish) and *Ruksha Vriddhi* (increase of roughness)³⁸. In *Guna*, *Vata* and *Kapha* are *Sheeta*. Therefore, *Ushna* (hot) *Brimhana* (nourishment) and *Anulomana* (inverted direction of *Vata*) must be the drug. One of the *Vata Vyadhis* (diseases) listed in every *Samhita* and *Sangraha Grantha* is *Sandhigata Vata* (Osteoarthritis)³⁹.

- *Yogaraj Guggulu* has the properties of *Vatahara* (*vata* decrease), *Pachana* (digestion), *Ushnaviryaya* (hot potency), *Tiktakatu rasa* (bitter taste).

- *Murchhita Tila Taila* (medicated oil) has the characteristics of a *Vatahara*⁴⁰ (*vata* decrease).

14. Discussion

14.1 Rationale and Relevance to the Present Study

Basti (enema) was given as per the timetable, consisting of the nine-day *Anuvashana Basti* (enema) and the six-day *Niruha Basti* (enema), and was followed by symptoms including physical lightness and increased hunger, among others⁴¹. Scheduled administration of *Anuvashana* and *Niruha Basti* (enema)⁴². The symptom assessment was carried out before, during, and after treatment. Right knee joint discomfort was measured using the Visual Analogue Scale (VAS) after 9 days of therapy and was shown to have dropped from 8 to 0, coupled with a marked improvement in other symptoms such limited joint mobility, standing duration, and soreness (Figure 1) (Table 7 and 8)⁴³.

The *Ayurvedic* classical advice suggests *Anuvashana* and *Niruha Basti* (enema) in the case of *Janu Sandhigata Vyadhi* (knee osteoarthritis) because the *Dravyas* (liquids) with *Snigdha*, (unctiousness) *Khara* (roughness), and *Shoshana* (emaciation) characteristics are necessary to nourish the *Asthi dhatu* (bone tissue)⁴⁴.

Tikta Rasa (bitter taste) supplies power to the *Asthi* (bone), to the *Kharatwa Guna* of the *Asthi* (bone), and the *Asthi dhatu* (bone tissue). Firm and unyielding with its *Shoshana Guna* (emaciation quality). *Basti* (enema) do *Asthi dhatu* (bone tissue)⁴⁵. *Poshana* (nutrients) (*Guna Samanya Siddhanta*). *Tikta Rasa*, (bitter taste) who is *Akasha Mahabhuta Pradhanya Dravya*, also acts as a conduit for *Basti Dravya* (medicated enema) to access their destination with a similar composition by making it possible for them to penetrate quickly⁴⁶.

Asthidhara Kala (bone tissue membrane) and *Purishadhara Kala* are completely dissimilar⁴⁷. Since *Basti Dravya* (medicated enema) will work directly on *Purishadhara Kala* and is necessary to nourish *Asthidhara Kala* (bone tissue membrane) and *Asthidhatu* (bone tissue) in particular, it is mentioned as a possible therapy for *Asthivaha Srotodushti* (bone tissue membrane)⁴⁸.

The *Basti* (enema) therapy was used in this case because of its ability to balance *Vata*⁴⁹.

The *Anuvashana Basti* (enema) was issued after the *Niruha Basti* (enema)⁵⁰. Purification of the distribution routes was the goal of the administration of *Anuvashana* or *Niruha Basti* (enema). It makes the provided medicine easier to absorb quickly and helps it reach its intended target⁵¹. Since this illness is a component of *Madhyama Roga Marga* with *Gambheera Dhatu*, (deeper tissue) involvement, the *Anuvasana* and *Niruha Basti* (enema) regimens have been chosen for therapy⁵².

The intestines control calcium metabolism, which is crucial for maintaining bone rigidity⁵³. They do this by altering calcium absorption. The *Tikta Ksheera Basti* (enema) technique uses cow milk, which contains the maximum calcium content⁵⁴. The large intestine

actively and unknowingly absorbs calcium, which is meant to promote the safe growth and renewal of bone structure⁵⁵.

It was *Doshaharana Basti* (enema) (withdraw the morbid *Dosha* from the body) and *Srotosodhaka* in its property before the administration of *Anuvashana* or *Niruha Basti* (enema)⁵⁶. Following the cleaning of the waterways, *Asthi* (bone), *Sandhi* (joints), and its surrounding structures underwent *Basti* (enema)⁵⁷. The knee joints need *Navaprasrutik Basti* (enema) to provide strength, compactness, and flexibility, as well as to support the *Snayu* (ligament) and *Kandara* (tendon). In this manner, the medicine will reach the intended tissue and we will be able to produce both a short-term and long-term impact⁵⁸.

14.2 Lacuna in the Area

This present case study only has one major lacuna i.e., the sample size of patients. This was only a single case study.

14.3 Further Research Work in Future

This research work in the future with a larger sample size with better statistical data will be proven this research.

Table 7. Symptoms of osteoarthritis can be correlated to *Sandhigata vata* (osteo arthritis)

<i>Sandhigata Vata</i>	Osteoarthritis
<i>Sandhi shola</i>	Pain in the joints
<i>Aatopa</i>	Crepitation's in the joints
<i>Vedanayukta sandhipravriti</i>	Painful movements in the joints
<i>Sandhi sthambha</i>	Stiffness in the joints
<i>Shotha</i>	Swelling of joints

0-10 Vas Numeric Pain Distress Scale

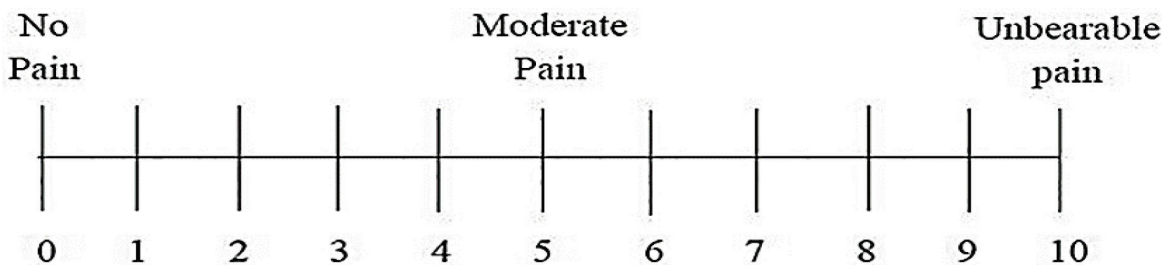


Figure 1. Vas scale.

Table 8. Assessment criteria

Assessment criteria	Before treatment	After treatment	During follow-up
Pain	Moderate	Occasional pain	No pain
Inflammation	-	-	-
Tenderness	No Tenderness	No tenderness	No tenderness
Crepitation	Moderate Crepitation	Mild Crepitation	No Crepitation

14.4 Extent of Present Study

This research work will extend in two ways:

1. A comparative study between two choices of drugs (Trial drug and Control Drug)
2. A comparative study between a trial drug and a second will be procedure-based study.

15. Conclusion

We may conclude that *Panchakarma*, in addition to oral medications, is efficient in managing *Janu Sandhigata Vata* (knee osteoarthritis), which was not relieved by any contemporary medical intervention and was prescribed surgical therapy but additional clinical studies. Long considered a significant social problem, *Janu Sandhigata Vata* (knee osteoarthritis) is now more likely to occur in the future owing to the way we live now. Strong *Pachaka* (digestion) include *Dhanwantari Tail Basti* (enema) and *Murchhita Tila Taila Anuvashana Basti* (enema). Neither before nor after the treatment, there were any ill effects noted. Based on the data, we can say that *Vatahara Ahara* (diet) *Vihara*, *Ushna* (hot), and *Brihana* (nourishment) *Dravyas* reduced the patient's symptoms and provided comfort.

The patient was treated with *Anuvashana* and *Niruha Basti* (enema). Schedule for the period 08 February 2023 to 18 February 2023 days and substantial positive change in signs and symptoms was observed. This will be the subject of further clinical studies and provide a chance for discussion in the future because extremely encouraging outcomes were achieved in this case study and practicality was demonstrated.

16. Acknowledgments

We would like to give special thanks to our guide Dr. Preeti Borkar for her support in completing

this research paper and also thanks to Department of Samhita Siddhant, Mahatma Gandhi Ayurved College, Hospital and Research Centre, Salod, Wardha, Maharashtra, India.

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