

EFFECT OF *RĀSNĀ PAÑCAKA KṢĪRA VASTI* IN *SANDHIGATA VĀTĀ* W.S.R. TO OSTEOARTHRITIS OF KNEEJOINT: A SINGLE CASE STUDY

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ABSTRACT

Sandhigata Vāta can be defined as a disease of *Sandhi* (Joint) with symptoms *Sandhiśūla* (Pain in joints) *Sandhiśoṭha* (Swelling in the joint) and *Ākuñcana prasāraṇe vedana* (Pain on flexion and extension of the joints) and in the later stage *Hanti sandhigatah* (Diminution of the movements at the joints). If it affects the *Jānu* (knee), then known as *Jānu Sandhigata Vāta*. It is correlated with osteoarthritis of the knee joint, is one such chronic, degenerative, non-inflammatory disease which significantly affects a person's quality of life. Its prevalence rate is 22–39%, making it India's second most prevalent rheumatologic condition. Osteoarthritis itself does not create a life-threatening hazard,

but the pain and decreased mobility it causes can dramatically lower quality of life, leading to dependency and incapacity. In classics, *Tiktaka Sa Ghṛta Kṣīra Vasti* is praised in the management of *Asthi Saṁśruta Vikāra*. *Rāsnāpañcaka Kaṣāya* which is explained in *Sahasrayoga* predominantly contains *Tikta rasa* drugs. **Aim:** To evaluate the effectiveness of *Rāsnāpañcaka Kṣīra vasti* in the management of *Jānu Sandhigata Vāta*. **Method:** 56 years old female patient came with complain of pain, Tenderness, Crepitus, Limitation of movement of Both Knee joint, Varus deformity of Knee joint and disturbed sleep due to Knee pain. Patient was admitted to the Panchakarma IPD of S.V. Ayurveda college hospital female ward and she had been treated with *Rāsnāpañcaka Kṣīra Vasti* for 16 days. **Result:** After undergoing Panchakarma therapy, the patient's symptoms, such as pain, swelling, stiffness, etc, significantly improved. **Conclusion:** It was found that *Rāsnāpañcaka Kṣīra Vasti* played a crucial role in the management of *Jānu Sandhigata Vāta*.

KEYWORDS: *Jānu Sandhigata Vāta*, Osteoarthritis, *Rāsnāpañcaka Kṣīra Vasti*.

INTRODUCTION

The term *Sandhigata Vāta* originates from the combining of three words viz. ‘*Sandhi*’, ‘*Gata*’ and ‘*Vāta*’.^[1] Here *Sandhi* means the Joint, *Gata* is related with Site. Thus, collectively the *Jānu sandhigata vāta* means the disease resulting from the settling of vitiated *vāta doṣā* in *Jānu sandhi* (Knee joint). *Jānu Sandhigata Vāta* is a disease caused by *Kupita Vyana Vata* localizing around *Jānu sandhi* and giving rise to symptoms like *Śoṭha* (swelling) which on palpation feels like a bag filled with air and *Śūla* (pain) on *Prasarana* and *Ākuñcana* (pain on flexion and extension of the joints).

As the sign and symptoms of *Sandhigata Vāta* is much similar to the disease Osteoarthritis, it can be correlated with Osteoarthritis. Osteoarthritis is a degenerative, non-inflammatory joint condition characterised by the production of new bone at the surfaces and borders of the joints and the degradation of articular cartilage.^[2] Its defining symptoms include pain, stiffness in the joints, edoema, and decreased mobility. Articular cartilage degradation and a subsequent periarticular bone reaction are its main notable characteristics. Osteoarthritis affects 20% of elderly people worldwide and causes pain or impairment in 41% of women and 20% of men, respectively.^[3] The main objectives of modern therapy are to reduce pain, stiffness, and to enhance physical functions. In contemporary medicine, the major alternatives for treating osteoarthritis are analgesics, anti-inflammatory medications, or surgery. These don't, however, offer adequate alleviation. The muscle relaxants are sometimes helpful for a few days but can cause drowsiness. NSAIDs have a risk of gastric mucosal & small bowel injuries, a risk of cardio-vascular disease, a risk of renal injury & hepatic toxicity.^[4] To eradicate the disease, we must therefore develop novel therapeutic modalities.

In the present case study, we administered *Rāsnāpañcaka Kṣīra Vasti* as a method of therapy of the disease *Sandhigata Vāta*.

MATERIALS AND METHODS

Case Report

A 56 years old female patient hailing from Nandyala came to the OPD of S.V. Ayurveda college hospital with pain, Tenderness, Crepitus, Limitation of movement of Both Knee joint, Varus deformity of Knee joint and disturbed sleep due to Knee pain since – 4 years. She was unable to carry out her regular tasks. She underwent allopathic treatment, but the patient had no improvement.

Family History: No relevant family history.

Personal History

- ✓ Diet : Vegetarian.
- ✓ Appetite: Poor.
- ✓ Bowel :Regular, (1/day)
- ✓ Micturation : 5-6 times/day, 2-3 times/ngt.
- ✓ Sleep: Disturbed due to pain.

Vitals

- i. Blood Pressure: 140/90 mmHg.
- ii. Pulse rate: 82/min.
- iii. Respiratory Rate: 24/min.

Menstrual history:

- i. Age of Menarche: 14 yrs.
- ii. Age of Menopause: 51 yrs.
- iii. Regularity: Regular.

Obstetric history

No. of deliveries- FTND: 2
Gynaecological problem: Nil.

General Examination

Overall appearance: Well.

Built: Medium.

Posture & Gait: Antalgic gait.

Nutrition : Nourished.

Deformities: Present (Genu Varum).

Body Weight: 62 Kg

Height: 144cm

BMI: 29 kg/m²

Category of BMI: Over weight.

Detailed examination of knee joint

❖ **Inspection**

- **Attitude** : Genu varum (B/l).
- **Redness** : Nil.
- **Swelling** : Absent.
- **Deformity** : Present.
- **Wasting** : Absent.

❖ **Palpation:**

- **Tenderness :** Winces (+)
- **Temperature :** Absent.
- **Swelling** : Absent.
- **Crepitus** : Palpable.

❖ **Movements:**

- **Flexion, Internal rotation, External rotation** – Restricted due to pain.
- **Walking Time :** 14.38 Sec /10 meters on an average of 3 times.

Astavidha Pariksha (Eight fold examination)

- I. *Nadi* : *Hamsa gati.*
- II. *Mutra* : *Peeta.*
- III. *Mala* : *Peeta.*
- IV. *Jihwa* : *Subhra.*
- V. *Sabda* : *Sphuta.*
- VI. *Sparsha* : *Ushna.*
- VII. *Drik* : *Rakta.*
- VIII. *Akrithi* : *Madhyama.*

Dasavidha Pariksha (Ten fold examination)

- I. *Prakrithi* : *Vata Pittaja.*
- II. *Vikriti: Dosha* : *Vata-Kapha.*
Dhatu: Medas, Asthi, Majja.
Srotas: Asthivaha, Majjavaha, Māmsavaha, Medovaha.
- III. *Sara: Asthi sara.*
- IV. *Samhana* : *Madhyama*
- V. *Pramana: Madhyama*
- VI. *Satwa: Madhyama*
- VII. *Satyma* : *Sarvarasa*
- VIII. *Aharashakthi: Abhyavahara Sakti* : *Madhyama*
Jarana Sakti : *Avara*
- IX. *Vyamashakthi: Madhyama*
- X. *Vaya: Madhyam*

Diagnostic Criteria

- i. Patients having clinical features of *Sandhigata Vāta*
- ii. Clinical features of Osteoarthritis of Kneejoint- Pain, tenderness, limitation of movements, crepitus, Occasional effusion.
- iii. Radiographic findings of Osteoarthritis of Kneejoint.
- iv. ACR Revised criteria for early diagnosis of Knee osteoarthritis-2016

ACR Guidelines

- ✓ Knee pain.
- ✓ Radiographic osteophytes.
- ✓ At least one of the following three.
 - Age greater than 50 years.
 - Morning stiffness less than or equal to 30 minutes.
 - Crepitus on motion.

Assessment Criteria

The effect of therapies was evaluated under the following criteria.

A. Subjective Parameter

Table No. I: Showing Subjective Parameters.

Subjective	
Ayurveda	Modern
<i>Śoṭha</i> (swelling)	Pain
<i>Śūla</i> (Pain) on <i>Prasaraṇa</i> and <i>Ākuñcana</i> (Flexion and Extension of joints)	Limitation of movements.
<i>Āṭopa</i> (crepitus)	Crepitus
	Occasional effusion (swelling).

Table No. II: Showing Grading of Subjective Parameters.

Symptom.	Grade
1. Pain	
No pain	0
Mild pain	1
Moderate pain	2
Severe pain	3
2. Crepitations	
No crepitus	0
Palpable crepitus	1
Audible crepitus	2
Always audible crepitus	3

3. Stiffness	
Normal flexion	0
Mild restriction	1
Moderate restriction	2
Severe restriction	3
4. Swelling	
No swelling	0
Mild swelling	1
Moderate swelling	2
Marked swelling	3

B. Objective Parameter

Goniometer is used for assessment of joint mobility/range of motion of Knee joint.

- Range of motion of Kneejoints.
- Walking time within 30 seconds.
- Radiographic findings of Kneejoint OA (Kellgren –Lawrence classification).
- Tenderness.
- Gait.

Table No. III: Showing Grading of Objective parameters.

1. Range of movement	
Normal flexion 135°	0
< 135° > 100°	1
< 100° > 75°	2
< 75°	3
2. Walking time for 10 meters	
< 10 Sec	0
11 sec to 20 sec	1
21 sec to 30 sec	2
31 sec to 40 sec	3
3. Tenderness	
No tenderness	0
Pt c/o pain	1
Pt c/o pain & winces	2
Pt withdraws the joint	3
4. Gait	
Normal gait	0
Limping gait with no additional support	1
Limping gait with unilateral support	2
Limping gait with bilateral support	3

Treatment Protocol: *Rāsnāpañcaka Kṣīra Vasti* for 16 days. Before vasti local abhyanga sweda with Nirgundi Tailam.

Rāsnā pañcaka kṣīra vasti: (ingredients)	Quantity
• Saindhava Lavaṇa (Rock salt)	- 6g
• Madhu (Honey)	- 100 ml
• Ghṛta (Go ghṛta) (Ghee)	- 100 ml
• Tailam (Tila tailam)	- 100 ml
• Kalka (Shatapushpa)	- 48g
• Kaṣāya (Medicated decoction of kṣīra)	- 200 ml
Total	- 554 ml.

Materials to administer Vasti

- i. Mortar & pestle
- ii. Measuring flask
- iii. Vasti netra
- iv. Plastic bag (Vasti putaka).
- v. Thread
- vi. Disposable gloves

Observation

Table IV: Observation of Parameters.

Parameters	BT	AT	45 days AT
Knee joint pain.	3	1	1
Knee joint Crepitations.	1	0	0
Knee joint Stiffness.	2	0	0
Knee joint Swelling.	0	0	0
Knee joint Tenderness.	2	1	0
Knee joint Range of Motion	2	1	1
Walking Time	1	0	0

RESULT AND DISCUSSION

Vasti is the ideal treatment for Vata. The first place the Vasti medication is delivered is to the Pakvashaya (large intestine). The primary Vata dosha site is Pakvashaya. Vasti therefore exerts control over Vata^[5] throughout the body by acting on the primary site. Purishadharakala is located in Pakvashaya. According to commentator Dalhana^[6], Purishadhara and Asthidhara kala are same. Drugs that directly affect Purishadharakala, can also directly affect Asthidharakala.

Rasna panchaka is a compound drug consisting of five drugs, which include Rāsnā, Guḍūcī, Eraṇḍa, Devadāru, Ārdraka. Rāsnā and Eraṇḍa are considered best in vata vyadhi as they have guru snigdha guna. Guḍūcī and Ārdraka have Rasayana, Sothahara, Amapachana,

Vedanasthapana, *Sulahara*, *Vatahara*, *Jwaraghna*, and *Balya* properties which strengthen the joint. *Devadāru* also has *Sothahara*, *Vedanasthapana*, and *Depana Pachana* properties, and *Sunthi* has anti-inflammatory properties that help in reducing pain and swelling.

The majority of the drugs in this combination have *Tikta rasa* predominance and *Vata-Kapha* property. Additionally, *Jwaraghna* and *Daha Prashamana*, which are found in *Tikta Rasa*, have anti-inflammatory and pain-relieving qualities. *Vayu* and *Akasha Mahabhuta* are dominant in *Tikta Rasa*. As a result, it is attracted to body aspects like *Asthi* that are dominated by *Vayu* and *Akasha Mahabhuta*. As it has *Ushna laghu guna* and *Ushna veerya*, it removes *Srotorodha*, enters even in the minutest channels of the body thereby showing the desired effects.

Deepana, *Pachana*, and *Rochana* properties are owned by *Tikta Rasa*. (*Su.Soo -42:10*). As a result, it contributes to an improvement in overall health and strengthens both the joints and the entire body. *Tikta Rasa* has the *Lekhana* property, which helps patients lose weight and manage osteoarthritis. Obesity is a risk factor for osteoarthritis of the knee joints because the knee joint bears weight. As a result, the provided *Vasti* directly corrects the pathology.

Milk and ghee both are *Vata-Pitta shamaka*, *Rasayana*, and *Balya*.^[7] Since ghee is both *Agnivardhaka* and *Yogavahi*, it can aid in boosting the bioavailability of other medications without compromising its own effectiveness.

Patient's discomfort with the symptoms of *Sandhigata Vāta* was relieved by the *Rāsnāpañcaka Kṣīra Vasti*. *Vasti*, a *panchakarma* therapy, not only slows the disease's advancement but also eradicates its pathology.


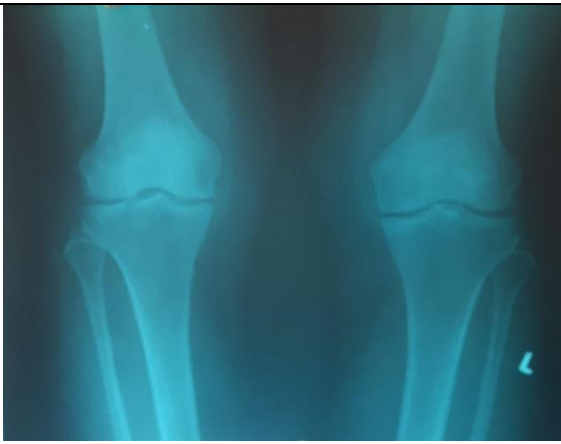

CONCLUSION

This case study demonstrated the potential of *Rāsnāpañcaka Kṣīra Vasti* in the management of *Sandhigata Vāta* i.e osteoarthritis and it also demonstrates that the proposed method is both secure and efficient for *Sandhigata Vāta* with in the short span of time. From the above case study, it can be said that *Sandhigata Vāta* can be managed by *Rāsnāpañcaka Kṣīra Vasti*. To assess the efficacy of *Rāsnāpañcaka Kṣīra Vasti* in the management of *Sandhigata Vāta*, extensive research with a large sample size is required.

REFERENCES

1. Raja Radhakanṭha Deva Bahadur, Shabdakalpadruma vol 5, 3rd ed. Varanasi: Chaukambha Sanskrit Series, 240: pp-298, pp- 325 (Chaukambha Samskrita Granthamala-93).
2. John Ebnezar, Textbook of Orthopedics, Fourth Edition, by, jaypee brothers medical publishers (P) Ltd, New Delhi, 2010; pp-674.
3. Lawrence JS, Bremner JM, Bier F. (Osteo- arthrosis Prevalence in the population and relationship between symptoms and x- ray changes). Ann Rheum Dis, 1966; 25: 1- 24.
4. Samik Bindu , Somnath Mazumder, Uday Bandyopadhyay(Non-steroidal anti-inflammatory drugs (NSAIDs) and organ damage: A current perspective) PMID: 32653589, PMCID: PMC7347500.
5. Āgniveśa, Caraka Saṃhita with 'Āyurveda Dīpikā' Commentary of Cakrapāṇidatta, edited by Vaidya Y T Ācārya, ,Chaukamba Orientalia, Varanasi, Reprint (2011), Siddhi Sthāna 7: 64, p:712.
6. Suśruta Saṃhita, with Nibandhasaṅgraha commentary of Dalhanācārya and Nyayachandrika Panjika of Gayadasa Ācārya on chikitsa sthāna edited-VaidyaYadawji Trikamji Ācārya, Chaukamba Orientalia, Varanasi, Reprint (2014), Uttar Pradesh. Kalpasthana –Chapter 4/40, p-574.
7. Vāgbhaṭa, Aṣṭanga Hṛdaya with commentaries Sarvanga Sundara of Aruna Datta, Āyurveda Rasāyana of Hemadri, Edited by Bhaisagācārya Harisastri Paradakara Vaidya, Chaukamba Orientalia Varanasi Reprint (2005), Sūtra Sthāna, Chapter-5/26.

Annexure:

SAMPATH KUMARI -BT	AT
 <p data-bbox="347 757 655 792">Fig.1-Kneejoint-0th day.</p>	 <p data-bbox="954 757 1262 792">Fig.2-Kneejoint-17th day.</p>
 <p data-bbox="331 1234 671 1263">Fig.3-X-RAY AP VIEW.</p>	 <p data-bbox="954 1234 1278 1263">Fig.4-X-RAY AP VIEW</p>
 <p data-bbox="276 1682 727 1718">Fig.5-X-RAY LATERAL VIEW.</p>	 <p data-bbox="895 1682 1347 1718">Fig.6-X-RAY LATERAL VIEW.</p>