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#### Research Article

# A COMPARATIVE CLINICAL STUDY TO EVALUATE THE EFFICACY OF JANUBASTI FOLLOWED BY PATRAPINDA SWEDA AND JANUBASTI FOLLOWED BY ATASI UPANAHA SWEDA IN JANU SANDHIGATA VATA W.S.R TO OSTEOARTHRITIS OF KNEE JOINT

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## **ABSTRACT**

Janu Sandhigata Vata is a common Vata predominant disorder mainly caused in Vriddhavastha. It is a degenerative articular disorder caused in geriatric age group and its correlates with Osteoarthritis of knee joint. Being commonest form of articular disorders, Osteoarthritis poses a huge hindrance in day to day activities of the sufferer like walking, dressing and bathing etc. Due to Vriddaavasta, Uttarothara Dhatuposhana gets reduced and finally makes the person lame. Hence this study was conducted on 10 patients for 7 days to evaluate the efficacy of Janubasti with Moorchita Tila Taila followed by Patrapinda Sweda in Group A and Janubasti with Moorchita Tila Taila followed by Atasi Upanaha Sweda in Group B. The study reports significant relief in subjective parameters like Vatapurna Dritisparsha (joint crepitations), Sandhi Shoola (joint pain) and Prasarana akunchana pravriti sa vedana (pain during flexion and extension of joint) Sandhi Shotha (joint swelling) is completely relieved after the study. Assessment of results was done on the subjective parameters which showed highly significant changes in Vatapurna Drithisparsha, Sandhi Shotha and Prasarana Akunchana Vedana, and significant improvement in Sandhi Shoola in Group A. In group B Vatapurna Drithisparsha, Sandhi Shotha and Sandhi Shoola showed highly significant changes and Prasarana Akunchana Vedana showed significant changes.

**KEYWORDS:** *Janusandhigatavata*, Osteo-arthritis of Knee joint, *Janubasti, Moorchita Tila Taila, Patrapinda Sweda, Atasi Upanaha.* 

### INTRODUCTION

Janu Sandhigata Vata is one of the most common condition a clinical practitioner witnesses. Bruhattrayees and Laghutryees, have explained Sandhivata as one among Vata Vyadhis. Achrayas have not specified particular Nidana Janusandhivata, so we can take common Nidana of Vatavyadhi. Vata Prakopa may be because of Dhatukshyajanya and Avaranajanya. The Lakshanas of Janu Sandhigata Vata are Sandhi Shota, Sandhi Shoola. Vatapoorna Drutisparsha, Prasarana Aunchana Vedanas.[1]

Osteoarthritis is most common type of Arthritis. Its high prevalence especially in the elderly, and the high rate of disability related to diseases makes it a leading cause of disability in the elderly. [2] Osteoarthritis is a joint failure, a disease in which all the structures of the joint have undergone pathologic change, often in concert. The pathologic sinequa none of disease is hyaline articular cartilage loss, present in a focal and, initially, no uniform manner. [3] This is accompanied by increasing thickness and sclerosis of

the subchondral bony plate, by outgrowth of osteophytes at the margin, by stretching of the articular capsule, by mild synovitis in many affected joints, and by weakness of muscles bridging the joint  $^{(3)}$ . According to World Health Organization Osteoarthritis is the second common musculoskeletal problem in the world (30%) after back pain (50%), the reported prevalence of osteoarthritis from a study in rural India is 5.78%.  $^{[4]}$ 

Hence Janu Sandhigata Vata being one among Vataja Nanatmaja Vyadhi are of two types Avaranaja and Dhatu Kshayaja. In Ayurveda it can be treated by Shodhana chikitsa which includes both Antah Parimarjana and Bahir Parimarjana. Bahir Parimarjana includes Snehana, Swedana, Mardana and Lepana. Hence an attempt is being made to evaluate the clinical efficacy of Janubasti with Moorchita Tila Taila followed by Patrapinda Sweda and Janubasti with Moorchita Tila Taila followed by Atasi Upanaha in Janu Sandhigata Vata W.S.R to Osteoarthritis in this study.

## Aims and Objective

- 1. To study the effect of *Janubasti* followed by *Patra Pinda sweda* in *Janu Sandhigata Vata*.
- 2. To study the effect of *Janubasti* followed by *Atasi Upanaha* in *Janu Sandhigata Vata.*
- 3. To compare the efficacy of *Janubasti* followed by *Patrapinda Sweda* and *Janubasti* followed by *Atasi Upanaha Sweda*.

#### **Inclusion Criteria**

- 1. Patients of either sex between the age group of 50-70 years.
- 2. Patients with *Lakshanas* of *Janu Sandhigata Vata*<sup>[6]</sup>
- 3. Patients with signs and symptoms of Osteoarthritis of knee joint<sup>[7]</sup>
- 4. Patients fit for *Swedana Karma*<sup>[8]</sup>

#### **Exclusion criteria**

- 1. Patients with any other systemic illness which could interfere with the course of treatment.
- 2. Patients not fit for Swedana Karma.[9]

## **Duration of the Study**

Procedure	Duration	No of Days		
Janu Basti	30 mins	7 days		
Patrapinda Sweda	20 mins	7 days		
Atasi Upanaha	12 hours	7 days		

#### Assessment criteria

**Subjective Parameters** 

- 1. Vatapurna Drutisparsha
- 2. Sandhi Shoola
- 3. Sandhi Shota
- 4. Akunchana Vedana.

## **Gradation of Subjective Parameters**

Vatapoorna Drutisparsha	Sandhi Shoola	Sandhi Shotha	Prasarana Akunchana Vedana		
No Crepitus – 0	No pain - 0	No Swelling – 0	No pain - 0		
Palpable Crepitus - 1	Mild pain - 1	Mild Swelling - 1	Pain without winching of face -1		
Audible Crepitus -2	Moderate pain -2	Moderate Swelling - 2	Pain with winching of face - 2		
Always Audible Crepitus -3	Severe pain -3	Severe Swelling - 3	Prevents complete flexion - 3		

## **Materials and Methods**

## *Ianubasti Procedure*

- 1. First, *Mashapishti* was prepared by adding sufficient quantity of water.
- 2. Patient was asked to lie down in supine position and the knees were exposed.
- 3. The *Mashapisht*i was sealed on the knees in such a way that there was no scope for leakage of *Moorchita Tila Taila*.
- 4. The *Moorchita Tila Taila* was indirectly heated by keeping it in hot water and the lukewarm *Moorchita Tila Taila* was gently poured along with inner surface of *Mashapali* and was retained with the cavity.
- 5. As the time passes the oil got cooled and it was replaced with the heated oil. So that the temperature can be monitored and kept constant.
- 6. This procedure was done for 30 minutes, after the specified time, the *Moorchita Tila Taila* was removed and *Mashapishti* was also removed.
- 7. Then gentle massage was given in circular fashion around the knee joint.

## Patrapinda Swedana Procedure

1. Quantity sufficient *Moorchita Tila Taila* was added to pan and heated.

- 2. The Patras like Eranda Patra, Nirgundi Patra, Nimba Patra, Shigru Patra, Arka Patra where cut into pieces and was fried in a pan using Moorchita TilaTaila till it turns golden brown.
- 3. Grated coconut, crushed garlic and ginger along with sliced lemons where also added and fried.
- 4. The contents were removed from the pan and *Pottali* was prepared using cora cloth and *Swedana* was given.
- 5. If the temperature of the *Pottali* decreases again it was reheated by smearing *Pottali* in hot *Taila* pan and the procedure will be continued for 20 minutes.
- 6. After the completion of *Patrapinda Sweda* the patient was asked to rest for 10 minutes.
- 7. Duration 7 consecutive days.

#### Atasi Upanaha Procedure

In Group B the patients were called to come in evening time around 6:30 PM then *Janubasti* was done followed by *Atasi Upanaha*.

### Atasi Upanaha

- 1. In a pan *Moorchita Tila Taila* is added and heated. Then to the hot *Moorchita Tila Taila Atasi Upanaha* drugs are added and fried.
- 2. To that quantity sufficient *Kanji*/Milk/Water is added and boiled and the thickness is mentioned

- so as to confirm neither thin nor thick paste is made.
- 3. The paste is then applied on the cora cloth over the patient knee joint, about 1cm thick and then *Erandapatra* is kept over the paste. Above the *Erandapatra* cora cloth is wrapped and moderately tight bandaging is done.
- 4. Threads are taken and tightened above and below to prevent any leakage and also for stability.
- 5. The patient is asked to keep the *Upanaha* whole night for about 12 hours and asked to remove it next day morning.
- 6. As *Paschat karma* patient is advised to remove the paste with lukewarm water.

## **Observation and Results**

Table No. 1: Effect of Treatment (Group A)								
BT - AT	Mean		MD	Paired t - test				
	(BT)	(AT)	MD	SD	SE	t - value	p - value	Remarks
Vatapoorna Drutisparsha	2.14	1.14	1.00	0.14	0.05	9.02	<0.001	H.S
Sandhi Shotha	1.71	1.14	0.57	0.46	0.17	3.35	< 0.001	H.S
Sandhi Shoola	2.00	1.00	1.00	0.42	0.15	2.13	< 0.05	S
Prasarana akunchana Vedana	1.50	1.00	0.50	0.50	0.17	4.08	<0.001	H.S

In Group A, *Vatapoorna Drutisparsha, Sandhi Shotha* and *Sandhi shoola* has shown highly significant values and *Sandhi Shoola* has shown significant result.

Table No. 2: Effect of Treatment (Group B)								
BT - AT	Mean		STEWN	Paired t - test				
	(BT)	(AT)	MD	SD	SE	t - value	p - value	Remarks
Vatapoorna Drutisparsha	1.50	0.80	0.62	0.47	0.16	3.87	<0.001	H.S
Sandhi Shotha	1.50	1.00	0.50	0.50	0.17	0.17	< 0.001	H.S
Sandhi Shoola	1.75	0.80	0.80	0.60	0.21	3.80	< 0.001	H.S
Prasarana akunchana Vedana	1.66	0.77	0.88	0.92	0.30	2.03	<0.05	S

In Group B, *Vatapoorna Drutisparsha*, *Sandhi Shotha*, *Sandhi Shoola* has shown highly significant values and *Prasarana Akunchana Vedana* has shown significant results.

Table No. 3: Comparison between Group A and Group B								
BT - AT	Mean		MD	Paired t - test				
	(BT)	(AT)	MD	SD	SE	t - value	p - value	Remarks
Vatapoorna Drutisparsha	0.60	1.00	0.40	0.14	0.05	9.02	<0.001	H.S
Sandhi Shotha	0.50	0.57	0.07	0.46	0.17	3.35	<0.0	H.S
Sandhi Shoola	0.80	1.14	0.34	0.42	0.15	2.13	< 0.05	S
Prasarana akunchana Vedana	0.88	0.50	0.38	0.34	0.17	4.08	<0.001	H.S

In comparison between Group A and Group B, *Vatapoorna Druitisparsha* has shown highly significant result, whereas *Sandhi Shotha, Sandhi Shoola* and *Prasarana Akunchana Vedana* have shown not significant results.

#### **DISCUSSION**

Sandhigatavata is more common in elderly patients between the age group of 50-70 years. The *Udbhavasthana* of *Sandhigatavata* is *Pakwashaya*, which is also the *Sthana* of *Vata Dosha*. *Sandhigata* 

Vata is Madhyama Rogamarga Vikara. Because of Vrudhapya, Balakshya and Dhatukshaya it becomes Yapyavyadhi. For Sthambha Nigraha and Shoola Prashamanartha Acharya Charaka opines that Sneha Pooravaka Sweda will be beneficial. Accordingly Snehana, Upanaha, Agnikarma, Bandhana and Unmardana<sup>[10]</sup> are the treatments mentioned by Acharya Sushruta. Sthana samshraya which has occurred due to Dosha Dushya Sammurchana is the main objective of Samprapti.<sup>[11]</sup> Physician with the skill to understand Samprapti and does Samprapti Vighatana is capable of providing good treatment.<sup>[12]</sup>

Hence Janubasti one among Snigdha Sweda is done which imparts Snigdhata and when applied Ushnait does Stamba Nigrahana and Gourava Nigrahana. Janubastiis Drava Sweda, so it also imparts Kledana, Alhadana and is Sandhana Karaka. Mainly by the action of Kledana Guna the Dhatu Poshana and Sandhi which is a Marma, Marma Paripalana can be done.

Patrapinda Sweda is one among Sthira Snighdha Saagni Pinda Sweda. Due to its Sthira Guna it imparts Sthirata, Chirakarita and Stambhakaraka and by the Ushna Veerya of the drugs present in Patra Pinda Sweda like Eranda, Nirgundi, Arka, Shigru and Nimba Vata gets pacified. And due to its Snighdhata Sneha, Mardavata, Bala is established. These actions by the drugs reduce the Lakshanas of Janus Sandhigata Vata.

Upanaha means bandage.<sup>[14]</sup> The process in which drugs for Swedana is applied over a limb (Vyadi Pradesha) and then covered by any leaf or bandage is called Upanaha. Atasi Upanaha is Saagni Upanaha and Snigdha Upanaha.<sup>[15]</sup> When drugs like Atasi, Haridra, Yava, Godhuma Moorchita Tila Taila etc. The Atasi Beeja which has Ushna Veerya and Guru Snigdha Pichhila Guna does Vatahara action similarly other drugs with its Veerya acts on Brajaka Pitta which does Pachana of Ama and there in relieves Avarana thus proved effective in Sandhigatavata. It quickly removes pain and swelling of the joints and is indicated in Vataja Rogas.

### **CONCLUSION:**

In Aurveda literature Janusandhigatavata is described under Vataja Nanatmaja Vyadhi. Due to Vata dominancy in this disease Vatasya Upakramas are preferred. Thus doing Snehana followed by Swedana helps to increase absorption of the drug and improves bio availability there in. Hence the Bahirparimarjana Karma which is safe and effective is recommended to be done in larger sample.

#### REFERENCE

1 Agnivesha, Charaka Samhita, revised by Charaka and Dridabala, with Ayurveda dipika commentary of Chakrapanidatta, edited by

- Vaidya Yadavji Trikamji Acharya, Chaukhambha orientalia Varanasi, Reprint 2015, Chikitsa Sthana, Chapter 28, Page no 617.
- Dennisl kasper, Stephen L Hauser, J. Larry Jameson, Antony Kaspe, Fauci, Hauser, Longo, Joseph Loscalzo, Harrison Principle of internal medicine, 19th edition, volume 2, part 15, chapter 394 page no 2226.
- 3 Dennisl kasper, Stephen L Hauser, J. Larry Jameson, Antony Kaspe, Fauci, Hauser, Longo, Joseph Loscalzo, Harrison Principle of internal medicine, 19<sup>th</sup> edition, volume 2, part 15, chapter 394 page no 2226.
- 4 Siddharth N. Shah, M Paul Anand, ASPI R Billimoriah, Sandhya A Kamath, Dilip R Karnad, Y P Munjal, Milindy Y Nadkar, P.S. Shankar, M. E. Yeolekar API text book of Medicine, 8<sup>th</sup> edition, Volume 1, Chapter 5, page no 279.
- 5 Sushrutha, Sushrutha Samhita, Nibhandha Sangraha commentary of Sri Dalhanacharya and Nyaya Chandrika Panjika on Nidanasthana commentary of Sri Gayadasacharya, by Vaidya Yadavji Trikamji Acharya, Choukambha Surabharati Prakashan, Varanasi, Reprint-2013, Chapter no 32, Page no 513.
- 6 Agnivesha, Charaka Samhita, revised by Charaka and Dridabala, with Ayurveda dipika commentary of Chakrapanidatta, edited by Vaidya Yadavji Trikamji Acharya, Chaukhambha orientalia Varanasi, Reprint 2013, Chikitsasthana, chapter no 28, page no 618.
- 7 Dennisl kasper, Stephen L Hauser, J.Larry Jameson, Antony Kaspe, Fauci, Hauser, Longo, Joseph Loscalzo, Harrison Principle of internal medicine, 19<sup>th</sup> edition, volume 2, part 15, chapter 394 page no 2230.
- 8 Agnivesha, Charaka Samhita, revised by Charaka and Dridabala, with Ayurveda dipika commentary of Chakrapanidatta, edited by Vaidya Yadavji Trikamji Acharya, Chaukhambha orientalia Varanasi, Reprint 2013, Sutrasthana, chapter no 14, page no 89.
- 9 Agnivesha, Charaka Samhita, revised by Charaka and Dridabala, with Ayurveda dipika commentary of Chakrapanidatta, edited by Vaidya Yadavji Trikamji Acharya, Chaukhambha orientalia Varanasi, Reprint 2013, Sutrasthana, chapter no 14, page no 88.
- 10 Sushrutha, Sushrutha Samhita, Nibhandha Sangraha commentary of Sri Dalhanacharya and Nyaya Chandrika Panjika on Nidanasthana commentary of Sri Gayadasacharya, by Vaidya Yadayji Trikamji Acharya, Choukambha

- Surabharati Prakashan, Varanasi, Reprint-2013, Chapter no 32, Page no 513.
- 11 Agnivesha, Charaka Samhita, revised by Charaka and Dridabala, with Ayurveda dipika commentary of Chakrapanidatta, edited by Vaidya Yadavji Trikamji Acharya, Chaukhambha orientalia Varanasi, Reprint 2013, Sutrasthana, chapter no 14, page no 67.
- 12 Agnivesha, Charaka Samhita, revised by Charaka and Dridabala, with Ayurveda dipika commentary of Chakrapanidatta, edited by Vaidya Yadavji Trikamji Acharya, Chaukhambha orientalia Varanasi, Reprint 2013, Sutrasthana, chapter no 14, page no 420.
- 13 Sushrutha, Sushrutha Samhita, Nibhandha Sangraha commentary of Sri Dalhanacharya and Nyaya Chandrika Panjika on Nidanasthana commentary of Sri Gayadasacharya, by Vaidya

- Yadavji Trikamji Acharya, Choukambha Surabharati Prakashan, Varanasi, Reprint-2013, Chapter no 32, Page no 514.
- 14 Sushrutha, Sushrutha Samhita, Nibhandha Sangraha commentary of Sri Dalhanacharya and Nyaya Chandrika Panjika on Nidanasthana commentary of Sri Gayadasacharya, by Vaidya Yadavji Trikamji Acharya, Choukambha Surabharati Prakashan, Varanasi, Reprint-2013, Chapter no 32, Page no 513.
- 15 Sushrutha, Sushrutha Samhita, Nibhandha Sangraha commentary of Sri Dalhanacharya and Nyaya Chandrika Panjika on Nidanasthana commentary of Sri Gayadasacharya, by Vaidya Yadavji Trikamji Acharya, Choukambha Surabharati Prakashan, Varanasi, Reprint-2013, Chikitsasthana, Chapter no 4, Page no 421.

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