

## ROLE OF SHODHAN BASTI AND JANU PIDZICHIL IN THE MANAGEMENT OF SANDHIGATA VATA (OSTEOARTHRITIS OF KNEE JOINT)

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### ABSTRACT

Vata is the most prevalent dosha in *sandhigata vata*. Specifically, *Sandhigata Vata* affects joint degeneration and inflammation. In *Sandhigata Vata*, joints such as the movable knee joint (*Janusandhi*) becomes tiresome. Arthritis in Ayurveda is a disease involving the vitiated *Vata Dosha* in one or the other form, although the other *Dosha Pitta* and *Kapha* are also constantly implicated being disturbed in variable degrees. *Mamsa* (Muscle tendon ligaments), *Asthi* (bone and joints), and *Rasa-Rakta* (blood) are the three primary *dhatu*s affected. Arthritis develops when these tissues suffer from one or more of the before mentioned Doshas, primarily Vata. *Aahar-vihar* (Unhealthy food and activity), circulating endotoxins (*Ama*), and disrupted metabolism (*Agnidushti*) are the main causes. Due to its *ruksha* and *Laghu* property, vata gets vitiated, that cause an imbalance in the *Kapha dosha* and reduces the amount of synovial fluid, which lubricates and cushions joints. When this depletion occurs, the joints cartilage wears away, resulting in osteoarthritis, which affects the large

weight-bearing joints and causes friction pain and reduces joint motion. *Sandhigata Vata* is the commonest form of articular disorder. It is a type of *Vatavyadhi* which mainly occurs in *Vridhastha* due to *Dhatukshaya*, which limits everyday activities such as walking, dressing, bathing etc. It being a *Vatavyadhi*, located in *Marmasthisandhi* and its occurrence in old age makes it *Kashtasadhya*. *Vata Dosha* plays main role in the disease. *Shula Pradhana*

*Vedana* is the cardinal feature of the disease associated with *Sandhishotha* with *Vata Purna Druti Sparsha*, lack of movements of the joints or painful movement of the joints. **Material and Methodology:** For five days, *Sarwang Abhyanga-Swedana* and internally administered *Shodhan basti* are given. *Shodhan basti* made with 400ml of *Dashmool kawatha* and 100ml of *Narayan oil* was given in the morning. A special therapy known as “*pizhichil*” is used to treat conditions pertaining to the *Shareerika* (body) and *Manasika* (Mind) doshas. This treatment has been around since antiquity and was highly favored by the ancient monarchs. For this reason, *Pizhichil therapy* is also referred to as "King's Treatment." Another name for it is *Sarvanga dhara*. *Sarvanga* signifies the “entire body, whereas *dhara* denotes pouring. The procedure “*pizhichil*” involves sprinkling medicinal oil over the body in a rhythmic stream from a height of four *angula* (Inches). One of the *bahir- parimarjana chikitsa* (External therapies) and a form of *snehayukta swedana karma* (Sudation therapy) is *pizhichil*. After completion of the therapy, significant improvement was seen in pain, swelling, range of movement and walking distance. The patient was successfully managed with *Shodhan basti* and *Janu Pizhichil* therapy. In the current scenario patients took *panchakarma* procedures and after treatment found good results.

**KEYWORDS:** - *Sandhigata vata*, Osteoarthritis, *Shodhan basti*, *Janu pizhichil*.

## INTRODUCTION

Acharya Charaka was the first person who described the disease separately named “*Sandhigata Anila*”, but has not included under 80 types of *Nanatmaja Vyadhi*.<sup>[1]</sup>

Acharya Sushruta has described the disease *Sandhigatavata* under *Vatavyadhi* chapter. He has given its symptoms and the line of treatment. He added a new symptom i.e. ‘*Hanti Sandhi*’ in the symptoms shown by Acharya Charaka previously.<sup>[2]</sup>

Acharya Vagbhatta said *Vatavyadhi* as “*Maharoga*”. Thus, making individual prone to *Vatavyadhi*s, among them *Sandhigatavata* stands top in the lists. Clinical Features are *Vatapurna Druti Sparsha*, *Prasaranakunchana Vedana*,<sup>[3]</sup> *Sandhi Shoola*,<sup>[4]</sup> *Atopa*.<sup>[5]</sup>

Knee osteoarthritis (OA) is the most common type of arthritis and is a major cause of disability which reduced the quality of life. The clinical features of *Sandhigatavata* is described in various.

Ayurvedic ancient text which is characterized by *Shula* (Joint pain), *Shotha* (Swelling),

*Prasaarana Aakunchanayo Pravruttscha Vedana* (painful joint movement) and *Vatapurnadriti sparsa* (Coarse crepitation), resembles with Osteoarthritis. Main causative factors responsible for *Sandhigata Vata* are *Ruksha aahara*, *Atimaithuna*, *Ativyayama* (Excessive exercise/work), *Sheeta bhojana* (Cold food/drinks), *Dhatukshaya* and *Roga Atikarshanal*. This condition closely resembles with knee osteoarthritis. Osteoarthritis is the most common form of arthritis. It is strongly associated with ageing, and is a major cause of disability in older people. According to modern science loss of estrogen during menopause increase the woman risk of getting osteoarthritis. Osteoarthritis is degenerative in nature.

Knee Osteoarthritis is evident to entangle the group of distinct overlapping diseases having various mechanical, biochemical causes including different genetic predispositions with similar biologic, morphologic or clinical outcomes. Instead of involving degeneration of articular with low-grade chronic inflammation of cartilage, disease processes involve the entire joint including subchondral bone, capsule, periarticular muscles and synovial membrane. In Ayurveda degeneration occurs mainly due to the aggravation of Vata. when this vitiated Vata positioned in knee joint ensue the condition of *Sandhivata*.

## MATERIAL AND METHOD

Place of Study- OPD and IPD of Department of Panchakarma of pt. khushilal sharma govt. ayurvedic hospital and institute Bhopal.

### Case presentation

A female of 61yr age attended the OPD of Panchakarma of pt. khushilal sharma govt. ayurvedic hospital and institute Bhopal having IPD number 20222061 with chief complaints of severe pain in both knee joints with stiffness, crepitus, finding extreme difficulty in walking, squatting, climbing and standing for long hours in the past 3 years. Pain worsens usually in evening hours and got slight relief in rest. She had diagnosed with knee osteoarthritis. She had undergone many allopathic treatments but got benefits only for the short time.

### History of

- Hypothyroidism
- HTN

### Personal history

Name- XYZ

Pulse- 75/min

Age-61 years

Sex- Female

Marital Status- Married

Temperature- 98.1<sup>0</sup>F

Occupational- Housewife

Appetite- Normal

Bowel- 1 time/day Bladder- Clear

Allergy-Not Specific

### **General examination**

B.P.=130/80mmHg

P/R = 76/min

Pallor -ve

Icterus-ve

Cyanosis-ve

Clubbing-ve

Oedema ++ve in both knee joint

Temperature-98.6° F.

CVS:- S1, S2 audible, no added sound present

Respiratory system: -Normal vesicular breath soundno added sound.

Per abdomen: -soft, non-tender, no signs of organomegaly present

CNS- Higher function normal.

### **Reflexes**

Upper Limb-Normal

Lower limb- Knee Jerk -DiminishedPlantar response –Flexor

Muscular Atrophy –Present

involuntary movement –Absent

Hamstring power (R)-4/5, (L) –4/5

Quadriceps power(R)-4/5, (L) –4/5

### **• Ashtavidha pariksha**

- Nadi- Vata kaphaja (76/min)
- Mala- Sama
- Mutra- Prakrita
- Jivha -Aliptha
- Shabda- Spasta
- Sparsha- Sama shitosha,
- Drika – Prakrita
- Akriti- sthoulya

### **In dashavid pariksha**

- 1) Prakrit- Vata Kapha Prakriti
- 2) Vikrati-
- 3) Sara -Madhyama Sara (Medium purity of body tissue)
- 4) Samhanana- Madhyama
- 5) Pramana- Sama Pramana (Equal body proportions)
- 6) Satmaya- Avara Satmya (Homologation)
- 7) Satva- Madhyama Satva (Medium mental strength)
- 8) Ahara shakti- Madhyama Ahara Shakti (Medium food activity and digestive power)
- 9) Vyayam shakti- Avara Vyayama Shakti (Least physical endurance)
- 10) Vaya- Madhya Vayah (Medium age)

### **Investigations**

Hb-11.8gm%

ESR- 30/hrs

HBsAg- Neg.

RT-PCR- Neg

HIV I & II -Non reactive

Lipid profile- Normal

S. Uric acid- 5.6mg/dl

BSL (F)- 101.4 mg/dl

### **Samprapti (Pathophysiology of the disease)**

The contributory factors listed above result in *Vataprokopa* (Vitiating of Vata) and *Rasa dushti* (inadequate blood plasma generation), which propagate.

Vata dosha is found throughout the body, clogging several pathways and pressing against joints. Blockage causes degenerative changes in joints, which leads to *Sandhivata*.

### Assessment criteria

The overall improvement like reduction in pain, swelling and improvement in joint movements were graded based on the following scales.

#### 1. Swelling

Grade 0	No swelling
Grade 1	Slight swelling
Grade 2	Moderate swelling
Grade 3	Severe swelling

#### 2. Tenderness

Grade 0	Normal	Absent or no tender
Grade 1	Mild	Tender
Grade 2	Moderate	Tenderness and wincing
Grade 3	Severe	Tenderness, wincing and withdrawal

#### 3. Crepitus

Grade 0	Normal	No crepitus
Grade 1	Mild	Crepitus complained by patient but not felt on examination
Grade 2	Moderate	Crepitus felt on examination
Grade 3	Severe	Crepitus felt and heard on examination

#### 4. Pain on joint movements

Grade 0	No pain
Grade 1	pain without wincing of face
Grade 2	pain wincing of face
Grade 3	prevent complete flexion
Grade 4	does not allow passive movement

### Treatment Protocol and Mode of action of various panchakarma therapies in knee Osteoarthritis

Total 30 days of *panchakarma therapy* was planned for the patient according to her condition given in table no.1. External treatment in the form of *Janupidzichil* with *Kottumchukadi oil* + *Rumasyliniment*, *Dashang lep*, *Baluka pottali sweda* on affected joints and *Sarwang Abhyanga-Swedana* and internally *Shodhan basti* is given for 5 days. *Shodhan basti* with

*Dashmool kawatha* -400ml +*Narayan oil*-100ml each on.

The constituents of *Shodhan basti* are given in table no.2. The *Shodhan basti* given just Before meal.

**Table no. 1: Panchakarma procedure given.**

Sr.No.	Procedure	Dose	Duration
1	Shodhan basti manner- 1) Dashmool kawatha-2) Narayan oil-	400ml100ml	5 days
2	Janupidzichil with Kottumchukadi oil + Rumasyliniment	-	30 days
3	Dashang lep	Local application	30 days
4	Baluka swedan	As per require	30 days

### **Brihat Panchamula (The five tree roots)**

S.n.	Botanical Name	Common Name	Family
1	<i>Aegle marmelos</i>	<i>Bilva</i>	<i>Rutaceae</i>
2	<i>Premna obtusifolia/Clerodendrum phlomidis</i>	<i>Agnimantha</i>	<i>Verbenaceae</i>
3	<i>Gmelina arborea</i>	<i>Gambhari</i>	<i>Verbenaceae</i>
4	<i>Oroxylum indicum</i>	<i>Shyonak</i>	<i>Bignoniaceae</i>
5	<i>Stereospermum suaveolens</i>	<i>Patala</i>	<i>Bignoniaceae</i>
6	<i>Desmodium gangeticum</i>	<i>Shalparni</i>	<i>Fabaceae</i>
7	<i>Uraria picta</i>	<i>Prishniparni</i>	<i>Fabaceae</i>

### **Laghu panchamoola (5 Roots/Whole plant of shrubs)**

Moola is Roots, and Dash is Ten. *Dashmoola* thus signifies 10 roots. *Brihat Panchmoola* refers to the roots of five trees, while *Laghu Panchmoola* refers to the roots of shrubs. To prepare dashmoola, combine equal portions of these roots. The 10 herbs that make up Dashamoola are Brahati, Gokharu, Kantakari, Prishniparni, Shalaparni, Patala, Agnimantha, Shyonaka, and Gambhari. The *Dasmoola*, sometimes called *Tridosha nashak*, is a vata, pitta, and kapha balancer. This medication works effectively for treating inflammation, or *Vata Vyadhi*.

### **Basti introduction**

*Basti* is the *Sanskrit* name for urinary bladder. In ancient times there were no plastic bags or syringes were available. So Ayurveda scholars (the rishis) used urinary bladder of goat/buffalo to administer the medicines through Anal route. Therefore the word, *Basti* was coined from the word *Bast*.

*Basti* is unlike Western enemas or colonics. Enemas only cleanse the rectum and sigmoid

colon (Only the lower eight to ten inches of the colon) causing an evacuating effect. Colonics remove feces blocks but may weaken the mucus membranes and dry the colon. This further balances Vayu's normal elimination process. *Basti*, however, treats the entire length of the colon from the ileocecal valve to the anus.

*Basti* is not about removing the fecal materials from the last part of intestines. The role of *Basti* is much more deeper and important than anything else.

### **Method of mixing and preparing the *Niruha Vasti dravyas* or medicines**

*Basti dravya* or enema medicine is prepared by combining many things. Interesting thing is that many things which basically are not easily miscible and having different densities are mixed so as to make a homogenous liquid.

### **The basic ingredients needed to prepare *Basti* medicine are:**

*Saindhava lavana* - Rock salt

*Makshika or madhu* - Honey

*Sneha* - Medicated oil or ghee or both

*Kalkam* - Herbal paste

*Kashayam or kwatham* - Decoction of herbs

(In some *vasti dravyas* milk, meat soup etc are mixed, the quantity of which is summed up in the quantity of *kashaya* taken)

First, the honey is mixed with rock salt and grinded in a mortar until they mix up properly. Later the oil or ghee or both is added to the mixture and thoroughly mixed. Later *kalka* is added and mixed and finally *Kashaya* is added to the mixture and grinded well until they form a homogenous mixture. The whole mixture should be put in a transparent container and left for few minutes. The contents should not be settled in different layers. This is the test for homogeneity. Now the *Basti dravya* is ready to be administered.

**Kalka:-** The paste of herbs to be mixed in the *basti* medicine is explained and mentioned in the context of preparing specific *basti* medicines. Generally the soft powder of the *Kashaya churna* (course powder used to prepare the decoction for *niruha basti*) itself is taken, mixed with water and made into paste. If the *kalka* has not been specified, *Puto Yavanyadi Kalka'* is to be used. It is a paste made up of *Yavani* (*Trachyspermum ammi*), *Madana* (*Randia dumetorum*), *Bilwa* (*Aegle marmelos*), *Kushta* (*Saussurea lappa*), *Vacha* (*Acorus calamus*),



Shatahva (*Anethum sowa*), Musta (*Cyperus rotundus*), Pippali (*Long pepper*) mixed with Honey, ghee, Oil, Jaggery and salt.

### Mode of action of asthapana basti

**Meal's impact on *asthapana basti***- The intended effect won't be obtained if *Asthapana Basti* is taken after meal, which is not advised because *Basti* won't stay in the large intestine for a muhurta period. Food in the stomach causes the stomach wall to dilate, the gastric reflex to develop, and the colon to begin peristalsis movement. As a result, the patient will not experience the intended effects of *basti* and will instead experience an early onset of vomiting.

### Meal's impact on *anuvasana basti*

Because *Anuvasana Basti* is less in quantity, it is recommended to be given immediately after eating. Peristalsis begins in the colon when food enters the stomach and triggers the gastro-coloneal response. The GIT is where this physiology takes place. The distal colon, or splenic flexure, may be reached as a result of the gastro-colon reflex. Because oil makes up the majority of *Anuvasana Basti's* composition, it is denser and more viscous than *Niruha Basti*, which prevents it from traveling as far because of its tiny amount, higher viscosity, and peristalsis. Oil neutralizes the *ruksha* and *sheeta guna* of vata because of its *snigdha* and *ushna* properties.

Usually, the urge to defecate arises after a meal when a large movement brought on by peristalsis pushes *Basti* into the rectum. Because there is less of it in *Anuvasana Basti*, the urge to urinate does not become strong. The average turn around time for *Anuvasana Basti dravya* is three *yama*. Sometimes *basti* retains for up to twenty-four hours or longer due to its low *Anuvasana* content, which results in a poor defecation reflex.

### Mode of action of janu pizhichil

In this *therapy* oil is poured continuously maintaining a fixed temperature & stream, That cause vasodilation of vessels which increases blood flow. Because of this action blood carries more oxygen and nutrients to body tissues that helps in healing process of injured areas of body.

This therapy serves as *swedana* as well as *snehana*. *Taila dhara*, also known as *pidzhichil*, works in accordance with its pressure, the medicine's pharmacological activity, the timing of the treatment, and the medicine's rhythmic steaming. Since humans are made up of various

cell types, each of which has a cell membrane made of phospholipids, lipid-soluble medications can easily pass through cell membranes. This is especially true when the procedure begins and the medicated oil is poured from a height of 4 inches. Absorption of the medication occurs very quickly and can penetrate the epidermis.

Once it penetrates the cell membrane, it partially rejuvenates the cell membrane and organelles, substituting their aging components with new ones. The temperature that is maintained during the therapy causes vasodilatation, which increases blood flow through the area to provide the required nutrients and oxygen while also removing waste products due to the increased blood supply. The medicine's therapeutic effect will cause the metabolism to rise, which will raise the amount of waste products that the cells produce.

The skin contains a multitude of sensory receptors that react to various stimuli, including touch, contact, temperature changes, and pain. By relaxing the muscles surrounding the nerves, the skin relieves pressure on the nerves, allowing the nerves to resume their normal function of sending messages to and from the brain and enhancing the function of the muscles and organs. Because the increased blood supply maintains the ideal conditions for muscle contraction, it also causes muscles to relax and boosts the efficiency of muscle activity.

#### **Probable mode of action of *kottamchukadi taila***

It has *Aama pachana* (Improves digestion power and digest the toxins released from undigested food) effect when taken internally and has *lekhaniya* effect when used externally. It does *Doshavilayana* (Liquefaction of dosha) and *srotoshodhana* which helps in relieving *margavarana* (Obstruction of channels) of Vata. It will reach to *sukshma srotas* (Minute channels) and thus help in pacifying *Vata dosha*. *Ushna*, *Ruksha* and *Tikshna* (Sharp) properties help in pacifying *sheeta* (Cold)– *snigdha* (Unctuous) properties of *Kapha* efficiently.

*Lekhaniya* guna is owned by *Kushtha* and *Vacha*. The action of *Shigru*, *Lashuna*, *Devadaru*, and *Rasna* is *shula prashamana* (Pain relief). According to the notion, when applied externally, taila aids in the formation of lipoidal bonds with other medications, facilitating the absorption of drug molecules. As a result, it speeds up the administration of transdermal drugs. By causing heat, it enhances local lymphatic and blood circulation, which in turn enhances local tissue metabolism. By altering the release of several inflammatory mediators, such as histamine, among others, it decrease inflammation. It decrease pain by physically relaxing

local stiffness through heat. It has also been reported that *Vacha*, *Lashuna*, and *Chinchapatra Rasa* have analgesic properties and *Kushtha*, *Vacha*, and *Shigru* have anti-inflammatory properties.

## OBSERVATIONS

S. N.	Joints	Swelling			Tenderness			Crepitus			Pain on joint movement		
		BT	AT	Follow Up	BT	AT	Follow Up	BT	AT	Follow Up	BT	AT	FollowUp
1	Rt. Knee	2	1	0	2	1	0	2	1	1	3	1	0
2	Lt. knee	3	1	0	2	1	0	2	2	2	3	1	1
3	Total score	5	2	0	4	2	0	4	3	3	6	2	0

## RESULT

In the right knee joint the grade for swelling decreased from 2 to 1 after treatment and to 0 during follow up, tenderness decreased from grade 2 to 1 after treatment and to 0 during follow up, crepitus from 2 to 1 to after treatment and to remain to 1 during follow up and pain on joint movement decrease from 3 to 1 after treatment and to 0 during follow up.

In the left knee joint the grade for swelling decreased from 3 to 1 after treatment and to 0 during follow up, tenderness decreased from grade 2 to 1 after treatment and to 0 during follow up and pain on joint movement decrease from 3 to 1 after treatment and remains to 1 during follow up. The crepitus in left joint did not have any effect after treatment.

## DISCUSSION

### Discussion of disease

Osteoarthritis is one of the most frequent rheumatic diseases, with a prevalence of 22 percent to 39 percent in India. Women are more likely than men to develop OA. This disease primarily affects people over the age of 40. By the age of 40, almost everyone has some pathologic change in their weight-bearing joints. *Sandhivata* is a *Vatavyadhi* that affects people in the *Vridhavadhastha*.

All Dhatus undergo *Kshaya* in *Vridhavadhastha*, resulting in *Vataprakopa* and exposing the individual to a variety of ailments. *Sandhigata Vata* is the most prominent of them. In controlling this disease, allopathic treatment has its own set of limitations. It is very symptomatic and has troublesome side effects, and it can provide either conservative or surgical treatment. Whereas, the management and techniques indicated in Ayurvedic classics

can be more effective in treating such illnesses. *Dhatukshaya* and *Lakshanas*, which reflect vitiated Vata, are present in the ailment, hence *Dravyas* with *Brimhana*, *Shoolahara*, *Stambhahara*, and *Balya* characteristics are included in the diet and treatment. The *Ashwinikumaras* had documented their ability to treat joint problems, which is mentioned in the *Rigveda*. Except for *Sharangadhara samhita*, all *Samhitagranthas* and *Samgrahagranthas* detailed the ailment *Sandhivata* with *Lakshana* and *Chikitsa* under *Vatavyadhi*. Many research studies and extensive descriptions of the condition can be found in modern science, but medicine has yet to develop a definite treatment for OA, leading to an increase in the use of alternative remedies.

### Samprapti

From the onset of *Dosha Dushya Dushti* till the evolution of the *Vyadhi* there occur various pathological stages which is explained by *Samprapti*.

#### 1. Dhatukshaya janya

Vata Dosha is predominant in old age and Kapha is decreased also the Agni gets impaired due to which the Dhatus produced are not at their best which ultimately leads to the degeneration. As *Kapha* is decreased the *Shleshak kapha* in joints also depletes resulting in *Kshaya* of *Asthisandhi*. If further one continues indulging in Vata aggravating factors the *Sthanasamshraya* of *Prakupita Vata* takes place in the *Khavaigunyayukta sandhi*. This localized Vayu due to its *Ruksha*, *Laghu*, *Kharadi Guna* results in *Sandhivata*.

#### 2. Aavarana janya

In obese usually *Sandhivata* occurs in the weight bearing joints. As *Meda dhatu* is produced in excess it will cause obstruction and does not nourishes the *Uttrotar dhatus* leading to *Kshaya*. The excessive fat will cause *Aavarana* of *Vata*. This vitiated *Vata* when settle down in joints will produce *Sandhivata*.

**Table 1: Showing pathogenesis (Samprapti ghataka) of janusandhigatavata.**

<i>Dosha</i>	<i>Vata, Shleshakkapha</i>
<i>Dushya</i>	<i>Asthi, Majja, Meda</i>
<i>Srotas</i>	<i>Asthivaha, Majavaha Medovaha</i>
<i>Srotodushti</i>	<i>Sanga</i>
<i>Agni</i>	<i>Manda</i>
<i>Dosha Marga</i>	<i>Marmasthi sandhi</i>
<i>Udbhavasthana</i>	<i>Pakvashaya</i>
<i>Roga Marga</i>	<i>Madhyam</i>
<i>Vyaktasthana</i>	<i>Asthi – janusandhi</i>

Vyadhiswabhava	Chirkalik
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**Table 2: Showing differential diagnosis.**

Factors	Janusandhi gataavata	Amavata	Kroshtukashirsha	Vatarakta
Ama	Absent	Present	Absent	Absent
Jwara	Absent	Present	Absent	Absent
Hridgourava	Absent	Present	Absent	Absent
Age	Old Age	Any Age	Any Age	Any Age
Vedana	Durning Prasaran Akunchana	Vrischikda msavat sanchari	Teevra	Mushikadamsavatpeeda
Shotha	Vatapurna Dritisparsha	Sarvashareera sandhigata	Kroustuka Shirshavat	Mandala yukta
sandhi	Weight Bearing- Knee joint	Small jointsto Big joints	Janu pradesh	Small joints
Upashaya	Snehana	Rookshasweda	Rakta Shodhana	Rakta Shodhana

**Treatment**

In Ayurveda, the treatment of *Janu-sandhigata vata* is aimed at reducing the Vata dosha and to balance the *shleshaka kapha* so that the joint spaces are adequately lubricated for the free movement of the Knee joints. For this many procedures have been mentioned like *snehana*, *swedana*, *Mridu Samshodhana*, *Basti* and *Vatahara Aushadha prayoga*, *Ahara and Vihara*. In some texts practices of *upanaha*, *agnikarma*, *bandhana*, *mardana* etc are also described. Different *Ghritas*, *Guggulu*, *Shallaki* preparations are used for Internal medicines.

**Discussion of therapy****Introduction**

Basti, the prime treatment in *shodhana* is considered as one of the most important treatments for many diseases according to Ayurvedic classical literature. It is the best treatment modality for all types of *vata* diseases. *Basti Chikitsa* is a type of enema therapy that involves the administration of medicated herbal or oil-based solutions into the rectum. The term "Basti" comes from the Sanskrit word "Vasti," which means "bladder" or "bag." In Ayurveda, *Basti Chikitsa* is considered a primary therapy for a variety of health conditions, including digestive disorders, arthritis, back pain, respiratory conditions, and menstrual problems.

**Type of basti**

External	Internal
Janu Basti	Aasthapan Basti
Kati Basti	Anuvasana Basti
Manya Basti	Matra Basti

Vrana Basti	Uttar Basti
Hridaya Basti	-

Usage of animal bladder for preparation of *basti putaka* was possible and justified in earlier days, however, is not feasible and practical today. As an alternative, a plastic bag of 50 microns thickness and having 1.5l capacity is used as *basti putaka*, and is disposed of after single use. It is filled with *basti dravya*, and tied with metal *basti netra* to form *basti yantra*. *Basti netra* is a tubular structure usually made up of brass, having tapering end and wider base, which resembles cow's tail. It has three rings on external surface called as *karnika* (ridges), the last two at the bottom are used to tie the *basti putaka* with *netra*. The classical texts of Ayurveda have given liberty to the Vaidya to think and modify the instruments, line of treatment and modality wherever required, without losing its core principles. When the homogenous emulsion of *basti dravya* enters the colon with "uniform positive pressure" within short time, it reaches up to proximal colon, i.e. nearer to caecum and probably exerts procedure effect. Human colon is supposed to be sluggish in absorption and motility. It is involved in various functions, including absorption of water and electrolytes, transport of intraluminal contents, and production of short-chain fatty acids (SCFA). SCFAs (butyrate, propionate and acetate), which have an integral position in colonic health are principally synthesized in colon. We assume that due to uniform positive pressure homogenous emulsion of *basti dravya* reaches quickly to proximal colon where it probably stimulates ICCSM, which in turn initiates colonic propagating activity and chain of reactions like churning of contents in proximal colon and production of SCFA, absorption of electrolytes, water and other active principles through carrier mediated transport mechanism. Other factors like luminal distention and chemical stimuli by *niruha-basti dravya* contribute to this process. This can happen with the classical method and not by the adopted conventional method in which the tube and can cannot give sufficient pressure for *basti dravya* to reach proximal colon as a homogenous emulsion.

### Mode of action of shodhan basti

Medicines inserted through *basti* reaches the superficial layer of muscles thus purifying the intestine and nourishes the villi which enhances the absorption of nutrients and micronutrients.

### Mode of action of janu pizhichil

*Pizhichil* (Literally meaning squeezing) is a unique Ayurvedic therapy from Kerala. In this treatment, a special linen cloth is dipped into warm *Kuzhambu*, ora medicated oil mixture, and squeezed over the disease-affected areas of the patient. While simultaneously massaging those areas, care is taken to ensure no portion is missed out. *Pizhichil* is a perfect mix of *Snehana* (Oleation Therapy) and *Swedana* (Sudation Therapy).

This treatment improves blood circulation and immunity. It is very effective in the treatment of ailments like muscle cramps, paralysis, rheumatic diseases, arthritis, neurological disorders, and blood pressure issues.

## CONCLUSION

It can be concluded that *Shodhan basti* with *Dashmool kawath* for 05 days and Janu *Pizhichil* done with *Kottumchukadi Tail* for 30 days. provided a better relief in the signs and symptoms of *Janu Sandhigata Vata* mainly in pain, stiffness, tenderness, swelling, and crepitus.

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