



ISSN 2456-3110

Vol 9 · Issue 7

July 2024

Journal of
**Ayurveda and Integrated
Medical Sciences**

www.jaims.in

JAIMS

An International Journal for Researches in Ayurveda and Allied Sciences



Maharshi Charaka
Ayurveda

Indexed

Evaluation of the effect of *Go-Ghrita Janu Basti* along with *Ashwagandha Churna* in the management of *Sandhigata Vata* w.s.r. to Osteo-Arthritis - A Clinical Pilot Study

Mamta Dhurve¹, Shivani Paliwal², Babita Dash³

¹Post Graduate Scholar, Dept. of Panchkarma, Pt. Khushilal Sharma Govt. (Auto) Ayurveda College & Institute, Bhopal, Madhya Pradesh, India.

²Post Graduate Scholar, Dept. of Panchkarma, Pt. Khushilal Sharma Govt. (Auto) Ayurveda College & Institute, Bhopal, Madhya Pradesh, India.

³Lecturer, Dept. of Panchkarma, Pt. Khushilal Sharma Govt. (Auto) Ayurveda College & Institute, Bhopal, Madhya Pradesh, India.

ABSTRACT

Sandhigata Vata is described under *Vatavyadhi* in all *Samhitas* and *Sangraha Granthas*. In *Jaraavastha*, *Deha Dhatus* undergo *Kshaya*, leading to *Vata Prakopa* and making individual prone to many degenerative diseases. *Sandhigata Vata* is one among them, which obviously correlated with osteoarthritis due to its maximum symptomatic similarities. It is a degenerative and chronic articular disorder affecting mainly the weight bearing joints in advancing age. Being a degenerative joint disorder, the concept of Ayurvedic treatment mainly focus on *Snehana*, *Swedana* and use of *Rasayana* drugs to maintain the joint mobility. A pilot study was conducted on 10 patients to evaluate the effectiveness of *Janu Basti* with *Go-Ghrita* and *Ashwagandha Churna* as *Shaman* drug in *Sandhivata*. The study duration was 21 days. After the treatment, patient experienced significant relief and observed visible reduction in predominant symptoms.

Key words: *Sandhigata Vata*, *Osteoarthritis*, *Janu Basti*, *Go-Ghrita*, *Ashwagandha Churna*.

INTRODUCTION

Acharya Charaka has described *Sandhivata* as a disease under the chapter *Vatavyadhi* in the name of "*Sandhigata Anila*" with the symptoms of *Sotha* in *Sandhi*, *Vata Purna Druti Sparsh* (palpable as an air filled bag), *Akunchan Prasarano Pravratishcha Vedana*^[1] (pain on flexion and extension), and in the later stage *Hanti Sandhigatah* (Disability in joints). It is very

common in geriatric age group of people due to *Vata Prakopa* and *Kshaya*.^[2] This disease is identical to that of osteoarthritis, which is a chronic, degenerative joint disorder mostly affect the weight bearing joints. The most commonly affected joints are knee, ankle, lower spine and shoulder. The disease is characterized by focal loss of articular cartilage, osteophytes formation at the joint margin. Osteoarthritis is getting worst from young age to old age and has become a worldwide problem in present era. Osteoarthritis of knee joint was found to be more prevalent in female (31.6%) than in male (28.1%), Nearly 45% of women over the age 65 year have symptoms, while 70% over 65 years show radiological evidence of osteoarthritis. According to WHO, 9.6% men and 18.0% of women age over 60 years have symptomatic osteoarthritis worldwide. 80% of those have limitation in movement and 25% cannot perform their major daily activities of life. At present there are so many limitations found while treating OA in Allopathy system of medicine. Usually different kind of NSAIDs, steroid injection, sometime surgeries are

Address for correspondence:

Dr. Mamta Dhurve

Post Graduate Scholar, Dept. of Panchkarma, Pt. Khushilal Sharma Govt. (Auto) Ayurveda College & Institute, Bhopal, Madhya Pradesh, India.

E-mail: mamtadhurve54@gmail.com

Submission Date: 12/05/2024 Accepted Date: 21/06/2024

Access this article online

Quick Response Code



Website: www.jaims.in

DOI: 10.21760/jaims.9.7.3

used to manage the disease, but all these have their own-side effect such as peptic ulcer, skin rashes, dizziness, GI disturbance, renal disease etc.^[3] Hence these medicines cannot be used for longer period and are not safe as a treatment of osteoarthritis. Therefore, in today's time there is need to find out such effective and safe Ayurvedic treatment which has been mentioned in the ancient text.

In Ayurveda, all types of *Chikitsa* mentioned in *Vatavyadhi* can be applied for *Sandhivata* like *Sthanik Snehana* and *Swedana*. Many Research works for *Sthanik Abhyanga* has been done for *Sandhigata Vata* in past with *Sthanik Abhyanga* which had decent results. But in the present study, *Go-Ghrita* has been used for the external *Snehan* instead of oil and *Janu Basti* along with the oral intake of *Rasayana* drug i.e., *Ashwagandha Churna*.

AIM AND OBJECTIVES

To evaluate the efficacy of *Janu Basti* with *Go-Ghrita* along with *Ashwagandha Churna* in the management of *Sandhigata Vata*.

MATERIALS AND METHODS

In the present study, 10 Patients attending OPD and IPD of Pt. Khushilal Sharma Govt. Ayurvedic Hospital Bhopal with clinical sign and symptoms of *Sandhivata* were selected for the study.

Criteria for Diagnosis

Diagnosis of *Sandhigata Vata* (Osteoarthritis) has made on the basis of signs and symptoms as described in the Ayurvedic classics and modern medicine texts.

- Sandhi-Shoola* (pain in joint)
- Sandhi-Shoth* (swelling in joint)
- Sandhi-Graha* (stiffness)
- Sparsh-Asahyata* (tenderness)
- Akunchan-Prasarnayo Vedana* (pain during Flexion and Extension)
- Sandhi-Sphutana* (crepitus)

Inclusion Criteria

- Patients between the age group 41-60 years of either sex.
- Patients BMI ≥ 18.5 Kg/M² and ≤ 24.9 Kg/M²
- Those who have given written consent to participate in the study.

Exclusion Criteria

- Pregnant women and lactating mothers.
- Severe mental illness.
- Patients having, any type of Malignancy, Chronic Renal failure, acute illness likes CVA, MI, and Severe Hypertension and Hormonal imbalance.
- Knee replacement surgery

Study Duration - 21 Days

Treatment Regimen

Procedure	Duration	Drugs/ Procedure	Dose	Time
<i>Sthanik Abhyanga</i> ^[4]	21 days for 20 minutes	<i>Go-Ghrita</i> ^[5,6]	As per requirement	Before Meal
<i>Janu Basti</i>	21 days for 20 minutes	<i>Go-Ghrita</i> ^[5,6]	As per requirement	Before Meal
<i>Shamana Drug</i>	21 days	<i>Ashwagandha Churna</i> ^[8] (Mool)	5 gm twice a day with milk	After meal

Gradation of Subjective Parameters^[9]

Sandhi Shoola (Pain)

Symptoms	Score/ grading
No pain	0
Mild pain, no difficulty in walking	1
Slightly difficulty in walking due to pain	2
Severe difficulty in walking	3

Sandhi Shoth (Swelling)

Symptoms	Score/ grading
No swelling at all	0
Swelling noticeable, but not masking the bony prominence	1
Swelling sufficient to cover the bony prominence	2
Swelling with positive fluctuation	3

Sandhi Graha (Stiffness)

Symptoms	Score/ grading
No stiffness	0
Mild stiffness	1
Moderate stiffness	2
Severe stiffness more than 10 min	3

Akunchan Prasarne Vedana (Pain during flexion and extension)

Symptoms	Score/ grading
No pain	0
Pain without winching of face	1
Pain with winching of face	2
Prevent complete flexion	3
Does not allow passive movement	4

Sparsh Asahyata (Tenderness)

Symptoms	Score/ grading
No tenderness	0
Patient say tenderness	1
Winching of face on touch	2
Does not allow to touch the joint	3

Sandhi Sphutan (Crepitus)

Symptoms	Score/ grading
No crepitus	0
Palpable crepitus	1
Palpable but not audible	2
Audible crepitus	3

Criteria for overall assessment

The total effect of the therapies will be graded as follows:

Complete remission : 100% relief

Marked improvement : <100% to ≥75% relief

Moderate improvement : <75% to ≥50% relief

Mild improvement : <50% to ≥25% relief

No improvement : < 25% relief

Statistical Analysis

After completion of the treatment, results were statistically analyzed in the terms of mean score, standard deviation (SD), standard error (SE), paired t – test and p value at various levels.

RESULT

S N	Symptoms	Mean		Difference	% of Relief	SD	SE	t	P
		BT	AT						
1.	Pain	2.7	0.6	2.100	77%	0.699	0.221	7.584	0.0001
2.	Swelling	1.30	0.1	1.200	92%	0.316	0.100	3.343	0.0086
3.	Stiffness	2.50	0.5	2.000	80%	0.527	0.166	7.746	0.0001
4.	Tenderness	1.10	0.00	1.100	100%	0.000	0.000	2.400	0.0399
5.	Crepitation	1.700	0.500	1.200	70.5%	0.527	0.166	9.000	0.0001

6.	Pain during flexion and extension	2.5	0.7	1.800	72%	0.674	0.213	9.000	0.0001
----	-----------------------------------	-----	-----	-------	-----	-------	-------	-------	--------

Pain

In pain, the mean was 2.7 before treatment which was reduce to 0.6 with the percentage of relief (77) which is Statistical Highly significant with p value 0.0001.

Swelling

In Swelling, the mean was 1.30 before treatment which was reduce to 0.1 with the percentage of relief (92) which is Statistical Highly significant with p value-0.0086.

Stiffness

In Stiffness, the mean was 2.50 before treatment which was reduce to 0.5 with the percentage of relief (80) which is Statistical Highly significant with p value-0.0001.

Tenderness

In Tenderness, the mean was 1.1 before treatment which was reduce to 0.00 with the percentage of relief (100) which is Statistical Highly significant with p value-0.0399.

Crepitation

In Crepitation, the mean was 1.7 before treatment which was reduce to 0.500 with the percentage of relief (70.5) which is Statistical Highly significant with p value-0.0001.

Pain during flexion and extension

In Pain during flexion and extension, the mean was 2.5 before treatment which was reduce to 0.7 with the percentage of relief (72) which is Statistical Highly significant with p value-0.0001.

DISCUSSION

Discussion of Disease

The most prevalent type of Arthritis is OA. It is a major cause of discomfort and disability in the elderly and

closely linked with aging. Hip OA affects 25% of persons and knee OA affects up to 45% of people at some time in their lives. This is characterized by localized articular cartilage loss, proliferation of new bone, and joint shape remodelling. Certain large and tiny joints are the preferred targets of OA. The two main major joints implicated are the knee and the hip. Obesity, advanced age, female sex, significant joint trauma, repetitive stress, genetics, history of inflammatory joint diseases, metabolic and endocrine disorders are risk factors linked to osteoarthritis. Among the *Nanatmaja Vata Vikara* listed by *Acharya Charaka* is *Vata Khudatata*. *Khuda Vata* is mentioned in the *Kashta Sadhya Vata Vyadhi* list. *Chakrapani* defines "*Khudavata*" as a "*Gulpha Vata*" or *Sandhigata Vata* while making a statement on it. Therefore, *Sandhigata Vata* is a *Nanatmaja Vata Vikara*, according to *Chakarapani* and according to *Sushruta*, this is the *Haani* stage of *Madhyama Vaya*.

Rupa of *Sandhigata Vata* has been explained by *Acharya Charak* are *Sandhishula*, *Sandhishotha*, *Akunchana Prasarana Janya Vedana* and *Hanti Sandhi Gati*. Here *Sandhishula* and *Sandhishotha* occurs due to *Vataprakopa*. A specific type of *Shotha* i.e. *Vatapurna Driti Sparsha* is described which indicates *Vata* dominancy of *Shotha*. *Akunchana Prasaranjanya Vedana* and *Hanti Sandhi Gati* generally occur due to *Kaphakshya* and *Vata Prakopa*.

Sandhigata Vata can also occur as a complication of some other diseases or due to *Dushti* of *Vata*, *Meda*, *Asthi* and *Majja* as main pathological factors which are generally seen among the patient of *Sandhigata Vata*. According to *Acharya Charaka*, the treatment of *Sandhigata Vata* is same as the treatment of *Asthidushti* i.e., *Panchakarma*, especially *Basti Chikitsa*. *Acharya Sushruta* has described specific treatment for the *Sandhigata Vata* for the first time i.e., *Snehana*, *Upanaha Swedana*, *Agnikarma*, *Bandhana* and *Unmardana*.

Samprapti (pathogenesis of Janu Sandhivata)

Ushna (hot), *Kapah Vatahara*, *Deepana* (Appetizer), *Pachana* (Carminative), *Sothahara*, *Vedana Sthapana* (analgesic), *Balya* (strength promoting factor) and

Rasayana Dravyas (anti-inflammatory and anti-oxidant) is essential. For this reason, the regiment like *Sneha Abhyanga* is considered to be the best treatment in *Vata Vyadhi* for his *Vedana Sthapana* property. *Ghrita* has rich in *Snigdha Guna* which reduces *Rukshta* in *Sandhis* and *Shamana* of the *Vata Dosha*.

Discussion of Drug

Ayurvedic herb is that the Sanskrit word "*Ashwagandha*" translates as "the smell of a horse," (*Ashwa* - horse, *Gandha* - smell), which refers to its ability to bring strength and stamina while nourishing the reproductive and nervous systems.

Somnifera translates as "sleep-inducing" reflecting its relaxing and calming properties that bring us energy by supporting deeper rest.

Benefits

- Supports sustained energy levels, strength, and vitality, including with physical activity.
- Supports healthy muscles and joints.
- Active constituents include alkaloids, steroidal lactones, saponins, and withanolides. *Ashwagandha* has neuroprotective and anti-inflammatory properties which may protect against cartilage damage in osteoarthritis.

Mechanism of action of *Ashwagandha* - *Ashwagandha's* mode of action is complex and not entirely understood. Researchers believe that its therapeutic properties are due to its effect on various signaling pathways and biological processes in the body, including the immune system, central nervous system, and stress response. *Ashwagandha* has been shown to reduce inflammation markers in the body and may have a protective effect against these diseases.

Discussion of therapy

Snehana - (Oleation Therapy) - It is the first line of treatment explained in the classics for *Sandhivata* as *Sneha* is antagonist to the degeneration process which is caused by excessive *Rukshta Guna* (dry quality) and *Khara Guna* (rough quality) of vitiated *Vata*. *Go-Ghrita Abhyanga* reduces the provoked *Vata*, which is

responsible for the decay in the *Dhatu*s and for manifestation of features like pain, stiffness, and cracks. According to modern studies, massage stimulates blood circulation and assists the lymphatic system, improving the elimination of waste throughout the body. Absorption through the skin can be enhanced by rubbing it on the skin. In cases of osteoarthritis, a study found significant improvement in joint movement and reduction in joint swelling with *Go-Ghrita* applications.

Absorption of Sneha

The oil applied to the body surface in different procedures of *Abhyanga*, were absorbed and distributed to the whole body and show systemic or generalized effect. The absorption as well as distribution of the oil with the herbal ingredients impregnated in it takes specific duration and the same is detailed in the following lines (Table 1).

Table 1: Shows the *Abhyanga Kaala* (Penetrating time of ghee) of different *Dhatu* of the body.^[10]

SN	Name of the <i>Dhatu</i> (body tissue)	Penetrating time of oil
1.	<i>Roma Kupa</i>	300 <i>Maatra</i> (95 sec)
2.	<i>Twak</i>	400 <i>Maatra</i> (133 sec)
3.	<i>Rakta</i>	500 <i>Maatra</i> (160 sec)
4.	<i>Mamsa</i>	600 <i>Maatra</i> (190 sec)
5.	<i>Meda</i>	700 <i>Maatra</i> (228 sec)
6.	<i>Asthi</i>	800 <i>Maatra</i> (240 sec)
7.	<i>Majja</i>	900 <i>Maatra</i> (280 sec)

Absorption through skin

In humans, mainly subcutaneous absorption occurs from the body surface through the hair follicles. But the follicles in humans occupy a very small portion of the total integument to be of concerned matter. Absorption through the sweat gland and sebaceous

glands generally appears to be minor. When the medicament is rubbed on vigorously, the total quantity of substance (medicated or non-medicated oil) that is forced into the hair follicles and glands is increased. Rubbing also forces some material through the stratum corneum without molecular dispersion and diffusion through the barrier. By this explanation, we can say that massaging the skin with *Go-Ghrita* may help in the absorption of it through skin layers.

Role of *Bhrajaka Pitta* in mode of action of *Abhyanga*

Bhrajaka Pitta is located in the skin. It imparts the characteristics of color and luster, so it is termed as *Bhrajaka*. *Acharya Charaka* has also described that normal *Pitta* is basic cause for production of normal and abnormal color of the skin as well as the normal and abnormal temperature of the body. The variations in the colour of the skin are the functions of the *Bhrajaka Pitta* which is presenting in the skin. *Arunadutta* the Commentator of *Ashtanga Hridaya* described the *Bhrajaka Pitta* and its functions like *Deepana* and *Pachana*. The substances applied on the skin by *Abhyanga*, *Lepana* and *Parisheka* are being absorbed and assimilated by the *Bhrajaka Pitta*. Thus *Abhyanga*. Do their action properly only after being digested by *Bhrajaka Pitta*, as no substance can act properly without digestion. Commentator *Acharya Indu* stated that roughness and hardness of skin is reduced after proper *Abhyanga* procedure, so from the above explanation it can be said that *Abhyanga* helps to improve the quality of skin by getting digested by the *Bhrajaka Pitta*.

Acharya Bhaavprakash has also followed the elderly *Acharayas*, while describing *Bhrajaka Pitta*. He has accepted *Bhrajaka Pitta* to be seated in the skin and digest the medicines externally applied on the skin.^[11]

Go-Ghrita

Lipophilic action of *Ghrita* facilitates transportation to a target organ and final delivery inside the cell, because cell membrane also contains lipid. This lipophilic nature of *Ghrita*, facilitates entry of the formulation into the cell and its delivery to the mitochondrion, microsome and nuclear membrane. When herbs are mixed with *Ghrita* their activity and utility potentiate many times.

Pharmacodynamics

Rasa: Madhura

Guna: Guru, Snigdha, Mridu

Virya: Shita

Vipaka: Madhura

Karma: Medhya, Agni-Deepana

Mode of action of *Go-Ghrita*

It pacifies *Vata* by *Snigddha Guna*, *Pitta* by *Madhura Rasa* and *Shaityata* and *Kapha* by processing with *Kaphahara* drugs. It should be taken in small quantities for longer duration to pacify *Pitta* and in large amounts to pacify *Vata*.

Mode of action of *Janu Basti*

Janu Basti is an effective therapy for people experiencing ailments in the knee. The medicated oil used in the therapy effectively soothes pain, stiffness, and inflammation in the joints. Additionally, toxins are eliminated and joints are strengthened. The treatment involves pouring warm medicated oil on affected areas to rejuvenate the joints from within.

Helps dissipate stiffness: *Janu Basti* increases the flow of oxygen and nutrient-rich blood, and therefore helps in stiffness.

Increases circulation: Increases blood circulation around the knee; thus, strengthening and nourishing the joints.

Improves mobility and flexibility: *Janu Basti* is known to improve mobility of the knee joints (knee flexion and knee extension).

Lower inflammation: The medicated ghee possesses anti-inflammatory properties that help with inflammation and pain.

Among the disease of loco motor system, Osteoarthritis is the most commonly condition which causes wear and tear of the joints and leads to disability. It is an inflammatory disorder causes pain, swelling, restricted movements of joints. This patient suffering with excruciating pain which becomes unbearable even on mild touch and results in the formation of crepitus.

CONCLUSION

Sandhivata is a joint disorder in *Ayurveda* which can be correlated with Osteoarthritis as per modern perspective on the basis of similarities in the symptoms, occurrence, onset and nature of the disease. It manifests mostly in women in their fourth and fifth decades of life.

In the present study, as external therapy *Janu Basti* was done. It showed significant improvement in symptoms of pain- which is statistically highly significant with the percentage of relief 77, Swelling- It has a statistically significant correlation with the alleviation percentage 92, Stiffness - which, when combined with the proportion of relief, is statistically very significant 80, Tenderness- This, when combined with the alleviation percentage, is statistically highly significant 100, Crepitation - It has a statistically significant correlation with the alleviation percentage 70.5, Pain during flexion and extension -In conjunction with the alleviation percentage, it exhibits high statistical significance 72, Range of movement and walking distance after treatment. Thus, it can be concluded that *Sandhigata Vata* can be managed well utilizing the treatment regimen of *Janu Basti* with *Go-Ghrita* and *Ashwagandha Churna* orally. It is cost effective and easily available.

REFERENCES

1. Kashinath shastri and Gorkhanath Chaturvedi Vidyotani Hindi commentary Charak Samhita Chikitsa Sthana chapter 28, sholk no. 37
2. Charaka Samhita of Agnivesa volume-2 Charaka Samhita Chikitsa Sthan (28/37) edited by Pt. Kashinath Shashtri. Chaukhamba Sanskrit Sansthan, Varanasi. Page no. 697.
3. Davidson's Principles and practice of medicine, Edited by Stuart H. Ralston, Ian D Penman, Mark W.J. Strachan, Richard P Hobson 23rd Edition Part 2 chapter no 24.

4. Sushruta Samhita, Ayurved Tatva Sandepika commentary, edited by Kaviraj Dr. Ambikadatta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi, Fourteenth Edition: 2003, Chikitsa 24/34.
5. Charaka Samhita of Agnivesa volume-1 Charaka Samhita Sutra Sthan (1/86, 87) edited by Pt. Kashinath Shashtri Chaukhamba Sanskrit Sansthan Varansi Page no. 34.
6. Bhavprakash volume-1 Shri Brahmsankar Shashtri (Ghrita Varga 4,5) Chaukhamba Sanskrit Sansthan Page no. 775.
7. Charaka Samhita of Agnivesa volume-1 Charaka Samhita Sutra Sthan (14/31-33) edited by Pt. Kashinath Shashtri, Chaukhamba Sanskrit Sansthan Varansi Page no. 201, 202.
8. Dravyaguna Vigyana, volume 2, Prof (Dr) Shanth Kumar Lukas, Chapter 83, Chaukhambha Vishvabharti Varanasi, Page no. 301-304.
9. A comparative study for evaluation of vallitarvadi gutika and shigrutwachadi gutika along with bastikarma in the management of sandhivata" (Kayachikitsa Department) Government Ayurveda Mahavidhyalaya Bhopal, Madhya pradesh (2019-2022) By Dr jitendra bhalse.
10. Vasant Patil. Shushrut Samhita vol-2 chikitsa sthan choukhamba publication p.479
11. Ramtej pandey. Bhavmishra, Bhav Prakasha Nighantu, Purvakhand. Reprint edition. Varanasi: Choukhamba subharti prakashan, 2002

How to cite this article: Mamta Dhurve, Shivani Paliwal, Babita Dash. Evaluation of the effect of Go-Ghrita Janu Basti along with Ashwagandha Churna in the management of Sandhigata Vata w.s.r. to Osteo-Arthritis - A Clinical Pilot Study. J Ayurveda Integr Med Sci 2024;7:21-27.
<http://dx.doi.org/10.21760/jaims.9.7.3>

Source of Support: Nil, **Conflict of Interest:** None declared.

Copyright © 2024 The Author(s); Published by Maharshi Charaka Ayurveda Organization, Vijayapur (Regd). This is an open-access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/unported> [CC BY 4.0]), which permits unrestricted use, distribution, and perform the work and make derivative works based on it only for non-commercial purposes, provided the original work is properly cited.