



Review Article

A REVIEW ON JANU SANDHIGATA VATA (KNEE OSTEOARTHRITIS)

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ABSTRACT

At the moment, the most prevalent ailment dominating the citizenry is *Janu Sandhigata Vata*. The term *Sandhigata Vata* Stated in words like "*Sandhi*" and "*Vata*" are used to explain the *Sandhigata Vata* concept. When the joint, or *Sandhi*, is embedding by *Vata*, it manifests as *Shotha* (swelling), *Sandhi shula* (pain), and restriction in joint movement. Clinical symptoms of *Janu Sandhigata Vata* are almost identical to those of the condition known as osteoarthritis in contemporary science. According to Ayurveda, Acharays has also explained in a type of *Vatavyadhi* as a *Janu Sandhigata Vata* (knee osteoarthritis) which is dominating role in old age, commonly due to *Vata Prakupita* and *Dahtaukshaya*. In the present realm of is difficult task for the therapist cause of their chronicity (according to nature of disease or according to patient ignorance in the initial stage of the disease), uncorrectable in late phase. Today, there are many treatments available in modern medicine, including pain relievers, anti-inflammatory drugs, muscle relaxants, calcium and vitamin D supplements, steroids, and physical therapy. However, these treatments can have limited success and may cause side effects if used for a long time. Ayurveda provides different options for treating *Janu Sandhigata Vata*, such as *Panchakarma*, *Raktamokshna*, *Agnikarma*, and various Ayurvedic medicines.

INTRODUCTION

Sandhigata Vata (osteoarthritis) is common among the elderly and obese people and this infliction in the knee joint is called as *Janu Sandhigata Vata*. The dominance of *Vata Dosha* is seen in the pathogenesis of *Janu Sandhigata Vata* as described in *Sushruta Samhita*. It may be correlated with disease osteoarthritis (O.A) in modern system of medicine. Osteoarthritis is the commonest form of joint disease that causes pain and disability in advancing years of life.

Acharya Sushruta also explained *Shula, Shoth*, in this disorder. The pathologic undergoes of this disease are quality to the aberration of *Vata* and *Kafa Dosha*, affected the *Asthi* (bone), *Janu Sandhi* (knee joint), *mamsa* (muscle), and *Snayu* (ligament).

In India, the prevalence of OA ranges from 22% to 39%, with women more likely than men to develop the condition^[1]. The age range for osteoarthritis prevalence was about 50 to 70 years old ^[2]. In India, 15% of the population has osteoarthritis due to diet-related imbalance^[3]. Due to an imbalance between cartilage degeneration and regeneration, osteoarthritis is a heterogeneous group of conditions that manifest clinically as joint pain and crepitus, radiologically reduced joint space, osteophytes, and a variety of deformities. It is characterized by focal loss of cartilage with peri-articular bone response. Degenerative alterations in the joint's articular cartilage and the consequent growth of new bone at the articular edge are characteristics of osteoarthritis, also known as osteoarthrosis. In articular cartilage, the rate of degradation outpaces the rate of repair^[4,5]. Risk factors significant in the development of Osteoarthritis have been discovered, including age, gender, body weight, recurring stress, and hereditary characteristics^[6]. Ayurveda prefers a combination of cost-effective, a, localised and generalised therapy like external therapies (*Bahya Chikitsa- Janu Basti, Abhyanga,*

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Jalaukavacharana, Agnikarma, Upnaha, Swedana) and internal therapies (*Abhyantara Chikitsa*). *Abhyantara Chikitsa* explains form of *Churna* (powder of a single herb/combination of herbs), *Kashaya* (decoction), *Vati* (pills), *Avleha, Asava, Arista* (syrup) etc.

AIM AND OBJECTIVE

To evaluate the *Samprapti* (pathophysiology) and *Nidana* (causes) in addition to the various Ayurvedic modalities for the treatment of *Janu Sandhigata Vata* (osteoarthritis).

MATERIALS AND METHOD

All of the references for *Janu Sandhigata Vata* were gathered from Ayurvedic Samhitas as well as contemporary literature and online resources (such as Google Scholar, Medline, PubMed, and others) that were utilized to examine the suggested applications of treatment for managing *Janu Sandhigata Vata* or OA.

Etiology

Nidana (Causative Factors)- 2 Types of Hetu

1. **Sannikrishta hetu-** *Ati Vyayama* (excessive physical activity), *Abhigata* (knee joint injury), *Marmaghata (Janu)*, *Pradhavana* (running activity).

2. **Viprakrishta hetu - Rasa** (*Kashaya, Katu, Tikta*), *Guna* (*Rooksha, Sheeta*), *Laghu Ahara- Alpahara, Vishmashana, Adhyashana, Manasika (Chinta, Shoka, Krodh) Viharaja, Atijagarana, Ativyavaya, Sharma* (physical activity), *Divasvapna, Vegasandharana*. [7]

3. Risk Factors

- Age (*Ayu*)
- Obesity (*Sthoulya*)
- Occupation factors
- Genetics

The characteristics of *Janu Sandhigata Vata*, according to Acharya Charaka, are *Vatapurna-dratisparsha* (tenderness), *Shotha* (swelling), and *Prasarana Kunchanpravritisavedna* (pain during extension and flexion) [8].

हन्ति सन्धिगतः सन्धीन् शूलशोफौ करोति च ।

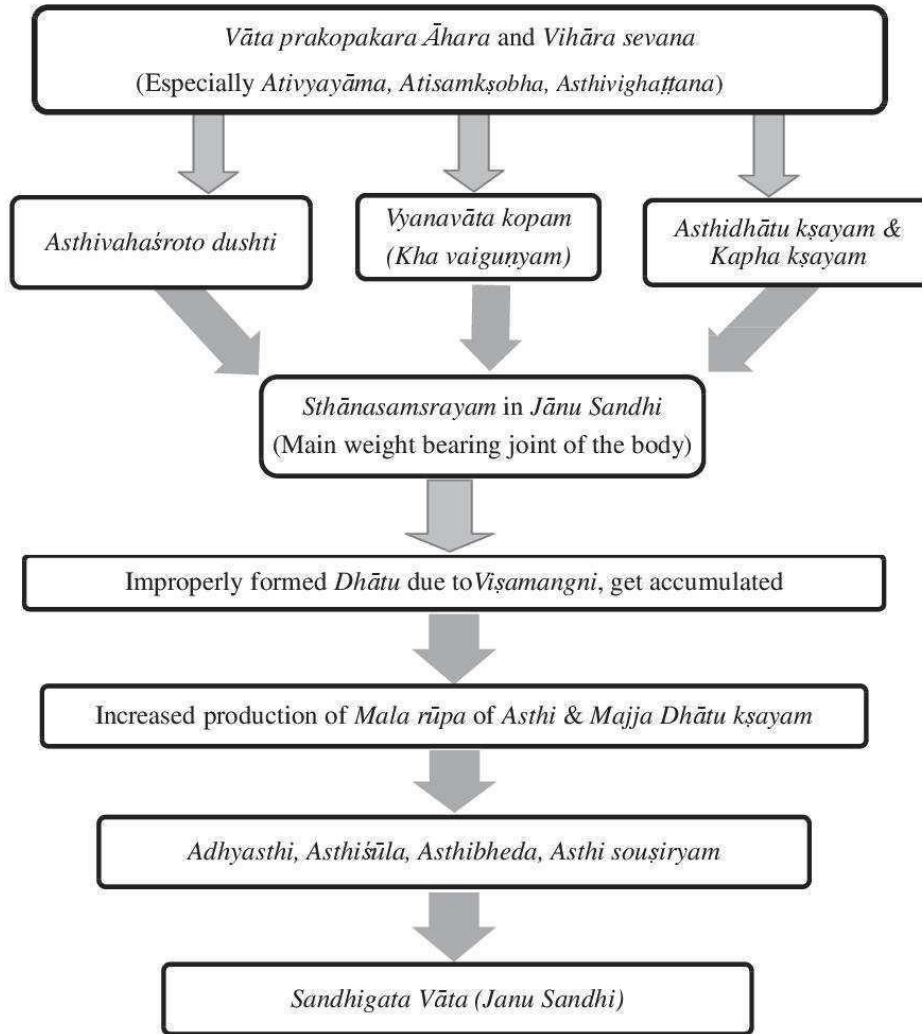
अस्थिशोषं प्रभेदं च कुर्याच्छूलं च तच्छ्रितः ॥ (Su.Ni.1/28) [9]

	Symptoms	Ch.Sa	Su.Sa	A.S.	A.H	B.P	M.N
1.	<i>Sandhi Shula</i>	+	+	+	+	+	+
2.	<i>Sandhi Shotha</i>	+	+	+	+	+	
3.	<i>Vātapuruaduti sparsa</i>	+		+	+		
4.	<i>PraSharaua -akunchanayo pravutti cha vedana</i>	+		+	+		
5.	<i>Hanti Sandhi</i>		+			+	+
6.	<i>Atopa</i>						+

Samprapti

For *Sandhigatavata*, no particular *Samprapti* has been explained. Thus, it may be concluded that the general *Samprapti* of *Vata Vyadhi*[10] and the *Samprapti* of *Sandhigatavata* are the same. According to Acharya Charaka, *Nidana Sevana* aggravates *Vata*, and this *Prakupita Vata* accumulates in *Rikta Srotas*, resulting in a variety of localized and widespread illnesses. *Samprapti* is the process via which *Dosha* becomes unbalanced and thus causes disease manifestation. Since treating the breakdown of *Samprapti* is the core of Ayurvedic practice *Chikitsa*, understanding *Samprapti* is necessary for effective treatment. Since no particular *Samprapti* for *Janu Sandhigata Vata* has been identified, its course is likely to be similar to that of other *Vata*-related illnesses. Acharya Charaka states that improper substance intake can worsen *Vata*, which can then accumulate in *Rikta Srotas* and cause a variety of localized and widespread ailments. Based on the *Vata* aggravating variables, the *Samprapti* of *Sandhigata Vata* can arise through *Dhatukshyajanya, Avaranjanya, or Svanidana Sevenajanya*. Given that *Sandhigata Vata* is essentially a degenerative illness linked to age, the most frequent cause is *Dhatukshaya* brought on by aging (*Vridhdhavastha*). *Vata* localizes in the joints, upsetting *Kapha*'s stabilizing qualities, which are chiefly concerned with upkeep and support. The condition will only show symptoms in the affected joint if *Vata* is concentrated in that one; if it affects more than one joint, the symptoms may spread to other joints.

**Samprapti Ghatakas
Sadhya- Asadhyata**



Janu Sandhigata Vata is a type of joint disease that mainly affects older people. It involves the bone marrow, vital points in the body, the middle part of the body, and bones. It's considered difficult to cure.

Management of Janu Sandhigata Vata

In Ayurveda the primary goal should be lifestyle modification because *Nidanaparivarjana* is the first line of treatment. This can be accomplished by dietary modification, regular exercise, and therapeutic procedure.

1.	Pathya Aahara	Godhuma, Mamsa, Raktashali, Godugdha, Ajadugdha, Ghrita, Draksha, Ama, Madhuka, Usna Jala, Madhura-Amla-lavana
2.	Pathya Vihara	Atapa Sevana, Mridu Shayya, Ushnodaka Snana etc.
3.	Apathya Aahara	Yava, Kodrava, Chanaka, Kalaya, Sheeta Jala, Ati Madya Pana, Sushka Mamsa, Katu-Tiktakashaya Rasa pradhana ahara
4.	Apathya Vihara	Chinta, Ratri Jagarana, Vega Vidharana, Sharma, Anashana, Vyavaya, Vyayama, Chankramana, Kathina Shayya

It was Acharya Sushruta who was the first to give a thorough explanation of *Chikitsa*. In particular, he supported the use of therapies like *Agnikarma*, *Bandhana*, *Snehana*, *Upanaha*, and *Unmardana* for *Vata* illnesses that affect the bones, joints, and ligaments [11].

Jalaukavacharana

Jalaukaavacharan is another treatment for joint discomfort that Acharya Charak mentioned.[12] *Jalaukavacharana* performed hypothetically in managing *Sandhigata vata* clinically improved symptoms *Shoola*, *Shotha* and *Prasaranakunchana Vedana* [13]. Bloodletting by *Jalauka* is used in a variety

of inflammatory conditions. The saliva of the leech is introduced into the patient's tissue as it feeds on blood. There are two main approaches to *Snehana*: 1) Internal application (*Snehapana*) and 2) External application (*Abhyanga*). Both techniques are useful for curing *Sandhivata*.

One of Acharya Sushruta's four categories of *Sweda* is *Upanaha*. This method acts as a primary treatment as well as a preparatory measure by encouraging sweating and relieving stiffness and heaviness.

Agnikarma

When applied to the afflicted joint, *Agikarma* can significantly reduce pain. Currently research work related to *Agnikarma* was found with significantly analgesic effect on pain [14]. There is includes probable mode of action [15]. *Agnikarma* with electrocautery having satisfactory result in the sign and symptoms of *Janusandhigata Vata*. [16]

Bandhana is applying *Vatashamaka* herb leaves firmly to the injured joint. This method lessens swelling that resembles an inflated bag by preventing *Vata* from becoming aggravated.

Unmardana is a massage method that provides pressure to the injured joint, aiming to relieve swelling and enhance blood circulation. Because it targets problems in the medium channel of the disease,

Basti

Basti is thought to be the most effective treatment for *Sandhivata*. Because of the patient's advanced age and reduced tissue, *Sneha Basti* is frequently chosen in cases with *Sandhivata*. Currently research is giving evidence base effect by *Janubasti* with guidance of USG. [17]

Yogasana

Regular *Yogasana* practice can also help prevent and manage *Sandhivata* because it can help with weight loss and posture, both of which are important aspects of the condition.

Shamana Aushadh

- There are various formulas that work well for treating *Sandhivata*. Particularly advantageous are *Guggulu* preparations like *Vatariguggulu*, *Yograj guggul*, *Trayodashangaguggulu*, and *Rasnadi guggulu*.
- Additionally, single herbs like *Ashwagandha yoga*, *Shallaki* preparation, *Bala*, *Shunthi*, and *Haridra* have proven positive outcomes.
- Moreover, *Kwath* preparations such *Rasnasaptak kwath*, *Erandmuladi kwath*, *Maharasnadi kwath*, and *Dashmool kwath* are beneficial for therapy.

DISCUSSION

Sandhivata is described in length in all the main Samhitas, including the *Sangrahasantra*, as a component of *Vatavyadhi*. They list several *Nidanans* concerning food, lifestyle, and mental aspects that can cause *Vata* imbalances. *Sandhivata* usually impacts the *Vridhdhavashta* stage, where *Vata* gets worsened due to tissue depletion (*Dhatukshya*). Since *Vata* is found in the bones, the link between *Vata* and *Asthi* is very important. *Panchkarma* modalities are very much effective for vitiated *Vata Dosha* and *Dhatukshya* along with modifying the dietary habit. The most prevalent type of arthritis, osteoarthritis, is a degenerative disease marked by the breakdown of articular cartilage as a result of a number of risk factors, such as age, gender, obesity, significant joint injuries, repetitive stress, genetic predisposition, history of inflammatory joint problems, and metabolic disorders. *Agnikarma* and *Jalaukavacharana* is gives significantly result for symptoms like *Shula* (pain), *Shoth* (swelling). In the context of *Sandhivata*, heightened *Vata* originates from *Dhatukshya* and disperses throughout the body, concentrating in the knee joint, or *Janusandhi*, where a deficiency (*Khavaigunya*) already exists. The characteristics of *Vata*, which are dry, light, subtle, abrasive, and devoid of moisture, contrast dramatically with the heaviness, unctuousness, coldness, stickiness, and softness associated with the presence of *Sleshakakapha* in the joints. When *Vata* gets overly heated, it disrupts *Kapha* balancing function and causes *Sandhivata* to arise.

CONCLUSION

The main strategy for treating *Sandhivata* is to increase the amount of *Shleshakakapha* in the joints and decrease the exacerbated *Vata dosha* in order to improve joint mobility. Although this ailment is a degenerative disorder commonly associated to aging and may persist throughout a person's life, implementing lifestyle modifications together with *Shodhana* and *Shamana* therapies can help control symptoms successfully in the early stages, hence increasing overall quality of life.

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