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## Critical Appraisal of Osteoarthritis in Ayurveda-A Review

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#### **ABSTRACT**

**Background:** Sandhigata Vata in Ayurveda is the most common type of lifestyle disorder whose symptoms mimic Osteoarthritis in conventional medicine. Ayurveda is the evergreen science of medicine and has been showering its valuable treasures to mankind since our emergence, still the same is continue with more and more global support. Since this medical science treats on the whole it differs and occupies its special place to other medical branches which give attention to presenting signs and symptoms of the patients. The affection of Sandhi by vitiated Vata, the chief phenomenon in the Samprapti of Sandhigata Vata which is one of the types of Marma and forms a part of Madhyam Roga Marga thus the involvement of Marma, Madhyam Roga Marga, Vata Dosha, and Dhatu Kshaya make disease Kasthta Sadhya. Aim and To review the encore classical knowledge about Sandhigata Vata Material and Methods: The review is based on a critical analysis of the information collected from Bruhattrayi, Laghutrai, Nighantu, various textbooks of Panchakarma, multiple research articles from databases e.g. Pubmed, Google scholar; various P.G.& Ph.D. thesis. **Result and observations:** The compiled information is critically discussed under different heads such as the Etymology of Sandhi-Gata-Vata, historical Glimpses of Sandigata Vata From Classical Texts Of Ayurveda, Etiology of Sandhigata Vata(Hetu), Purva Roopa, Rupa, Upshaya, Samprapti, Sadhya Asadhyata, Chikitsa Siddhanta of SandhigataVata (Treatment modalities). Discussion: SandhigataVata is a diseased condition in which vitiated Vata affects "Sandhi'. Nidan (predisposing causes), first acts on *Dosha* and vitiates them, the vitiated *Dosha*, in turn, acts on Dushya i.e Dhatus and causes disease. It can be well treated with the Panchkaarma procedure along with Snehana Swedana as a Poorvakarma. Conclusion: The increasing incidence and prevalence rate of Sandhigata Vata (Osteoarthritis) can be minimized and the disease is halted in its early stages and the main stage to live a nice life with the help of various treatment modalities in Ayurveda.

Keywords: Sandhigata Vata, Laghutrayee, Bruhat Taryi, Panchakarma, Ayurveda

#### INTRODUCTION

According to Ayurveda, simple freedom from disease is not health. For a person to be healthy he should be mentally and spiritually happy and an imbalance of Doshika is termed as Roga. Among Tridosha Vata is responsible for all Cheshta and all diseases. In old age, *Dhatu* being to undergo kshaya, which leads to Vata prakopa and makes the individual more prone to diseases[1]. Among them, Sandhigata Vata stands top of the list. In modern science, Osteoarthritis is the most common cause of joint pain. It is a silently progressive joint disease. It is reported that degenerative changes in the joints arise generally from age of 30yr by the age of 65yrs. Almost 80% of people may have radiographic evidence of Osteoarthritis although only 25% of people may have symptoms. Osteoarthritis is a major cause of morbidity and disability, limiting activity and impaired quality of life, especially among the elderly. Primary complaints of patients with Osteoarthritis are pain and difficulty in joint motility. The etiology of multifactorial pain is including inflammatory and non-inflammatory causes. The disease is managed by NSAIDs, Analgesic drugs, physiotherapy, corticosteroids, and finally with the help of

surgical intervention like Knee Replacement Surgery. The above remedies are very costly and cause unwanted effects. Even the surgical treatment does not provide complete relief.

#### **AIM & OBJECTIVES**

However, the classical concept of *Sandhigata Vata* and its *Chikitsa* has remained unexplored due to scattered, limited textual references, and inadequate clinical data. Therefore, it is losing its significance from its ample application in Panchakarma practices. A novel attempt has been made through this paper to clear up the doctrine effect of Panchkarma in *Sandhigata Vata* based on the scientific background.

#### **MATERIAL & METHODS**

Considering above said need, various literature is searched from *Bruhattrayi*, *Laghutrai*, *Nighantu*, various textbooks of Panchakarma, multiple research articles from databases e.g. Pubmed, Google scholar; various P.G.& Ph.D. thesis.

#### RESULTS AND OBSERVATIONS

The compiled information related to the above aim is described under different heads and subheads in a descriptive as well as tabular and schematic manner.

#### • Etymology of Sandhi-Gata-Vata

Etymology is the science that deals with the origin and development of the meaning of the word. *SandhigataVata* has its origin from a combination of three words i.e 'Sandhi', 'Gata', and 'Vata'.

Sandhi: The word 'Sandhi' is derived as

'SAM+DHA+KIH' -----Amarkosha

'SAMYOGA: SLESHA'

-----Manusmrithi

According to *Vachaspatyam*, the word *Sandhi* is derived from the root "*Dha*' when prefixed by '*Sam*' and suffixed by '*Kih*' which gives rise to the word '*Sandhi*' which means the joint union.

#### Gata:

The term 'Gata' is derived from the root 'Gam' means going to, arrived at, situated in, directed to.

#### Vata:

The term 'Vata' originated from the root 'Va-Gatigandhanyoho' which when suffixed by 'ktan' gives rise to the word 'Vata' which means to blow, to go, to move, to smell, to strike, to hurt, to enlighten<sup>8</sup>.

Thus SandhigataVata means provoked *Vata* located in *Sandhi*.

# Historical Glimpses of Sandigata Vata From Classical Texts Of Ayurveda

Ancient Ayurvedic literature and other allied Indian literature have references describing SandhigataVata.

#### 1) **VEDIC PERIOD:**

#### a) Rigveda:

It contains a *Rucha* describing the emission of *Dosha* from *Asthi* and *Asthi* sandhi (Rig 10/164/2)

#### b) Atharvaveda:

In *Atharvaveda*, one reference is available regarding *Sandhi Vikirti*. It said *Sandhi Vikirti* is caused by Sleshmavikriti and it can be cured by prayer (AV:1/12/3). *Asthi* and *Sandhi* are described as *Mulasthana* of *Balas* (*Shleshma*) (AV: 6/14/1).

#### 2) PAURANIK KAL:

In Mahagarud Puran, SandhigataVata is described as symptoms like Jalpurnadruti Sparsha and Shotha caused due to provoked Vata. (Maha Garud Puran 2/9/1).

#### 3) **UPANISHAD KAL:**

Symptoms resembling SandhigataVata are described in Garbhopanishad (Garbhopanishad 1/40).

#### 4) SAMHITA KAL:

#### a) Charaka Samhita:

Charaka describes Acharya SandhigataVata under the 'VataVyadhi Chikitsa' Chapter he denotes it as 'Sandhigata Anila'. There he mentioned its symptoms but not the treatment whereas in Chikitsasthana he describes the use of Kshira and Ghrita management of Asthi Pradoshaja Vikara of which SandhigataVata is one. (Ch.Chi 28/27). Charaka also describes Bala as' Vaat Haranam' in Agrya Sangraha. (ch.su.25)[2].

#### b) Sushruta Samhita:

Acharya *Sushruta* described *SandhigataVata* under the *Vata Vyadhi* chapter in *Nidansthana* (Su. Ni. 9). In *Chikitsasthana* he described the management of *SandhigataVata* (Su. Chi.4/8).

#### c) Asthanga Samhita:

Acharya *Vriddha Vagbhata* and *Vagbhata* accepted symptoms given by Acharya *Charaka* and the line of treatment

given by Acharya *Sushruta* (Nidan/Vatavadhi 15/14).

#### d) Bhela Samhita:

Acharya *Bhela* describes 'Sandhivichyuti' as resembling SandhigataVata under Asthi-MajjagataVataVyadhi in Chikitsa Sthanam (Bh. Chi. 24/47-49).

#### e) Harita Samhita:

Acharya Harita does not mention about *SandhigataVata* but mentioned *Sneha*, *Upanaha*, *Mardan*a, etc. for *Vata Vyadhi* (H.S. 3/23).

#### 5) MEDIVAL PERIOD

#### a) Madhav Nidan

Acharya Madhavkar mentioned *SandhigataVata* under the chapter of *Vata Vyadhi*. He quoted new symptoms like *Sandhinasha* (M.N.22/14).

#### b) Sharangdhara Samhita:

Sharangdhara has defined *Sandhi* as a joint of two bones surrounded by *Kapha* (Sha .S.P.K.37)

#### c) Yoga Ratnakara:

In this Samhita, SandhigataVata is quoted as MajjAsthigata Vata and

Snayusandhigata Vata. He has mentioned different 'Lepa Chikitsa' along with Pathya-Apthya for SandhigataVata.

#### d) Chakradatta & Bhaishajya Ratnavali:

The disease has been described from the management point of view.

#### e) BhavaPrakasha:

Acharya *Bhavmishra* in Madhyam Khand describes *Sandhigata Vata* as that of *Sushruta* (Bhav. M./24/258).

f) Sahastrayogam-in this samhita ksirbala taila mention as vata chikitsa. The term Ksira Bala Taila denotes that the preparation contains Kshira, Bala, and Taila.

The name "Kshira Bala Taila" was first mentioned in Sahasra Yoga (1600-1800 AD,) an authentic Ayurvedic text of Kerala. (Sa. Yo. 5thTaila Prakarana/12).

#### • Etiology of Sandhigata Vata(Hetu)

Chakrapani in his commentary on (Ch. Su. 20/12) stated that in *Nanatmaja Vyadhi* vitiated *Dosha* with its symptoms contaminate a particular organ producing *Vyadhis* like *Nakhabheda* etc.There are 80 *Nanatmaja Vyadhi* of *Vata* explained in Samhita. Amongst this *Khudavata* i.e

SandhigataVata is one. Vayu gets vitiated by its properties like Raukshaya (Roughness), Shaityam(cold), Laghavam, Gatim, and Anavasthivatvam[3].

Charaka in Chikitsasthan had mentioned reasons like Ruksha, Sheeta, Alpa, Laghubhojana, excessive coitus, vigils faulty therapeutic management, excessive physical exercise, etc. for vitiation of Vata. Sushruta along with these reasons also cited that excessive use of Katu, Tikta, Kashaya, Ruksha, Laghu-Anna, and Vegadharana (retention of specific urges) causes vitiation of Vata. Harita also described similar causes like Charaka and Sushruta. Trauma as a causative factor is especially cited by Harita.Madhavkar. Vagbhata, and Yogratankar also have described the same causes as Charak Samhita.

In *Chikitsasthanam Charaka* had distinctly mentioned two types of causes of *Vataprokopa*.39

- 1) Dhatukshayajanya.
- 2) Margavarodhajanya.

Dhatu Kshaya means emaciation of Dhatu i.e wasting of Sara. Margavarana is an obstruction to Gati of Vata leading to its aggravation. While especially commenting about the DhatuKshaya Chakrapani stated

that it is nothing but *Snehadigunashunyata* of *Dhatu* which is responsible for vitiation of *Vata* and produces diseased condition. When *Pitta* and *Kapha* are obstructed by *Ama* it is called *Avarodha-Margavarodha*. In Sutrasthanam, *Charaka* stated the reasons for *Kshaya* as follows:

- 1) Dietic Reasons- Anashana, Ruksha, Alpa, Pramitashana.
- 2) Viharjanya-Ativyayam, Ativatatapsevan, Kala-generally related to old age and Aadan Kala, Bhutopghata, Atiprajagram, Abhighata.
- 3) Mansik- Chinta, Bhaya, Shoka.
- 4) Kaphativartan, Shonitativartan, Malativartana, Shukrativartana.

Vitiated *Vata* contaminates *Rasa Raktadi Dhatu* producing *Dhatugatavata*. By contaminating a particular organ it produces *Avayavgatavata*. Affliction of *Sira*, *Snayu* it causes *Siragata* and *Snayugata Vata*. (Ch. Chi 28).

#### • Purva Roopa

Purva Rupa's are prodromal symptoms. When the vitiated *Doshas* extends and spread over to parts other than their place due to a pathological event i.e *Sroto Vaigunya*, it begins the specific disease

about those structures. In this stage, the prodromal symptoms occur.

Charaka mentioned *Purva Rupa* of *Vatavyadhi* as follows: In this stage, the prodromal symptoms of *Vatavyadhi* cannot be seen practically, because, in the early stages of *Vatavyadhi*, the proportion of vitiated *Dosha* is minimal.

#### • Rupa

Rupa is the characteristic symptomology of the disease. It occurs as a result of *Dosha Dushya Samurchhana*. As per Sushruta, pain is due to vitiated *Vata*, which is the main symptom of *SandhigataVata* Charaka stated signs and symptoms associated with SandhigataVata are:

- Vatapurnadrutisparsha this is a classic sign of Sandhigata Vata with Shotha(swelling),.Aakunchana Prasaranayoh Shulam(pain while flexion and extension of joint).
- Sandhihanan is the term used by Sushruta along with Shula and Atop, Dalhana in his commentary on Sushruta stated, that Sandhihanana means patients are not able to flex or extend the joint. Sandhihanan indicates anatomical as well as functional deformity. Anatomically it

may be *—Sandhivishlesha* or *Sandhichyuti* i.e joint displacement. Functionally it may be *—Sandhigraha-* joint stiffness.

Madhavakara in Madhav Nidan described the following symptoms and signs.

- 1) Sandhihanana.
- 2) Sandhishula.
- 3) Sandhi Atop –a term used to describe *Sandhi Sphutana*.

The classical features of *Sandhigata Vata* described by different Acharyas are described in table no.1[4,5,6].

#### • Upshaya

*Upshaya* is *Sukhanu badha* – a feeling of relief due to medicine, diet control, and a change in routine lifestyle. Upashaya is helpful to rule out any ambiguity in a diagnosis.

#### • Samprapti

It means the pathogenesis of the disease. It is the process of *Dosha-Dushya Samurchhana* occurring in a place, say organ, Dhatu, etc; where *Khavaigunya* is there i.e the place where the *Dosha-Dushya Samurchhana* taking place should be susceptible to imbalance and results in the further manifestation of Disease. *Vaghbata* 

has explained well how the *Samprati* occurs. *SandhigataVata* being *VataVyadhi*, *Samprapti* of *VataVyadhi* can easily be applied to *SandhigataVata*[6].

Charaka has mentioned that vitiated Vata due to Hetusevana and Sthanvaigunya produces disease. This vitiated Vata accumulates in Rikta (i.e Snehadhi Gunashunyatvadi) Srotas resulting Vatvyadhi. Samprapti (Pathogenesis) Sandhigatvata is shown in fig.no.1.

#### • Sadhya Asadhyata

While describing Sadhya Asadhyatva of Vata Vyadhi Charaka had stated that Khudavatata, i.e. SandhigataVata described by Chakrapani being Gambhir Sthangata Vyadhi is hard to recover completely. Gambhir Sthanagatva is related to Madhyam Marga. Acharya had classified it into 3 types of Vyadhi depending on their location as

- 1) Koshtagata (Abhyantara Rogamarga)
- 2) Shakhagata (Bahya Rogamarga)
- 3) Marmasthi Sandhigata (Madhyam Rogamarga).

All these *Margabheda* are described to explain the prognosis of disease invading

that particular Marga. SandhigataVata if it is not chronic (Nav Avastha) without any complication (Nirupdravata) and also if Rugna Bala is better than Vyadhi Bala, then the disease is attainable (Sadhya or Kashtasadhva). Thus while treating SandhigataVata. Roga Avastha, (Nav, Jirna), Rugna Bala, Nirupdravata, and Vyadhi Bala all these factors should always be kept in mind.

# • Chikitsa Siddhanta of SandhigataVata (Treatment modalities )

The general concept of Chikitsa of *Vata Vyadhi* applies to the management of *Sandhigata Vata*. *Chikitsa Siddhanta* i.e. treatment principles of *Sandhigata Vata* explained in *Brihattrayi* is tabulated in table no.2.[7]:

#### **DISCUSSION:**

In Ayurveda, *SandhigataVata* is described as a *Vata-Vyadhi* and it is also believed that any type of pain cannot be without *Vata*. From the period of Acharya *Charaka* onward, the disease *Sandhigata Vata* has been identified as a separate clinical entity. Acharya *Charaka* has described the disease first by the name '*Sandhigata Anila*' under *Vata Vyadhi*. He quoted symptoms of *Shotha* like palpable as air-filled bag

(Vatapurana Dritivata Sparsha) and pain on flexion and extension (Akunchana Prasarana Vedana)[8].

Acharya *Sushruta* has described Pain (*Shula*), Swelling (*Shotha*), and restriction of movements (*Hanti Sandhigata*) for *Sandhigata Vat*a. Madhavkara mentioned *Atopa Lakshana* when *Vata* seat in *Pakvashaya*.

In modern medicine these symptoms of joint denote Osteoarthritis. Osteoarthritis is a degenerative joint disorder with the symptoms of pain, joint swelling, restricted and painful movements of the joint along with joint instability afterward. Thus due to these similarities, *SandhigataVata* and Osteoarthritis can be correlated as a single entity[9].

#### **❖** Nidan of Sandhigata Vata

The *Nidan* of *SandhigataVata* can be classified under different heads:

- Aahar: Anashana, Adhyashana,
   Vishamashana, Vishtambhi Bhojan,
   Pramitashana, Shushkbhojana,
   Kshudhitambupana, Sushka-Mamsa,
   Tikta Varak, Uddalak, Kordusha, etc.
- Vihar: Balavatnigraha, Ativyavaya,Prapatana, Pradhavan, Langhana,Plavana, Pratarana, Prajagarana,

Bharvarana, Gaj-Rath, Turag,
Aticharana, Vishamopchara,
Rakatatistravana, Vaman-Virechanadi
Panchakarmatiyoga, Bhramana,
Attuchyabhashana, Sahas, Kriyatiyoga.

- ➤ Kalatah:Cold, cloudy, windy and rainy season,Aparatra, Annajirantakala.
- Rasatah: Katu, Tikta, Kashaya Rasa-Sevanadhikya.
- Gunatah: Ruksha, laghu, Shita pradhan dravya Sevanadhikya.
- Anya:- Dhatukshaya, Rogatikarshana, Amadosha, Marmopaghata.

Charaka in Vimansthana had mentioned the following causes for *Asthivaha Sroto Dushti:* 

- 1) *Vyayam* Excessive exercise.
- 2) Ati Sankshobha- Any trauma to Asthi
- 3) Ativighattana
- 4) Vatkar Aahar Vihar Sevana.

All these Nidanas cause vitiations of *Vata* and *Asthi Dhatu Khavaigunya* leading to *Asthi Ashrita Vyadhi*. Vaghbhata described that *Asthitoda* i.e pain is produced in *Asthikshaya*[10].

#### \* Pathogenesis of Sandhigata Vata

The Pathogenesis of Sandhigata Vata can be stated as follows: In SandhigataVata Agni Dushti and related Vataprakopa is obvious. Dhatvagni Dushti of Meda

Dhatvagni and Asthi Dhatvagni hampers Asthiposhana. Because the Prasad Ansha of Meda formed from Meda Dhatvagni nourishes Meda as well as forms Sukshma Asthi Poshak Ansha. There is the involvement of Asthi Dhatu in the form of Kshaya in SandhigataVata. This Asthi Kshaya takes place due to Asthivaha Sroto Dushti by vitiated Vata[11,12,13].

#### **\*** Treatment Principle:

While treating SandhigataVata all the factors of Samprapti i.e Dosha, Dushya, Agni both Jatharagni and Dhatvagni, Desh, Bala (Vyadhi Bala and Rugna Bala), Kala (Chayadi Avastha Kala), Prakriti (both Rugna Prakriti and Vyadhi Prakriti), Vaya, Satva (tolerance threshold of disease), Satmya, and Aahar. All these factors should be scrutinized properly and then medicine should be given.

Thus vitiation of *Vata* in *SandhigataVata* occurs by property of *Ruksha* and *Shita* therefore management of *Sneha* and *Ushna* property *Dravya* will alleviate *Vayu*. This is the basis for the treatment of *Nirupathambhita Vata Dosha*[13,14].

Classical management of AsthiAshrita Vyadhi explained by Charaka is Panchakarma and administration of Basti

of Ghrita and Milk processed with Tikta Rasa. Use of Tikta Rasa with Snigdha Dravya is also advocated. Here Acharya emphasized the use of Tikta Rasa. It is said that Tikta Rasa vitiates Vata. Charaka also mentioned that Tikta Rasa is responsible to manifest Vata Vyadhi. Tikta Rasa vitiates Vata by its property of Ruksha; Khara and Vishada. These properties are involved in Shoshan of Dhatu and producing Rukshata, and Kharata in Srotas. Arundatta in his commentary of Ashtang Hridaya Sutrasthan, explains the mode of action Tikta Rasa in 'Samprapti Bhang' in Asthyashrita Vyadhi[15,16]. Here he states that Tikta Rasa being Khara Ruksha and Shoshan property will help in the formation of Asthi Dhatu. During the Asthi Dhatu Utpatti, the Sukshma Asthi Poshak Ansha produced by Meda Dhatvagni contains Prithvi, Agni, and Vayu Mahabhuta. Asthi Dhatvagni transforms Asthi by producing Kharatva i.e hardness which is an essential feature of Asthi i.e bone. Thus Khara and Ruksha Guna of Tikta Rasa will help in building the Kharatva in Asthi. But Ruksha Guna vitiates Vata therefore Arundatta states that Snigdha Dravya should be used along with Tikta Rasa to alleviate Vata ( A.Hr.Su Arundatta commentary)[16].

Charaka emphasized the use of Sneha for the management of Nirupasthambhita VataVyadhi. He stated Ghrita (Sarpi), Taila, Vasa, Majja, and Paya (Dugdha) as Sneha Dravya.

Thus the purpose of Asthi Poshana by using Tikta Rasa and alleviation of Vata by using Sneha can be possible for the treatment of SandhigataVata. Based on this principle using Tikta Rasa processed with Snigdha Dravya like Kshira, the study was planned in patients of SandhigataVata. Hence Guduchi Siddha KshiraBasti might play a role in alleviating Vata and Asthi Poshana, bringing 'Samprapti Bhang' of SandhigataVata[17].

Treatment modalities have been developed well in Ayurveda for osteoporosis. *Basti* acts very tremendously in *Sandhigata vata* as it acts on the nervous system. It has been proven that Basti acts through the nervous system or enteric receptors. As it has been seen that osteoporosis has the destruction of the bone, *Ayurveda* enhances bone health by the supplementation of *asthiposhaka ahara*. In this way, osteoporosis can be treated with various ayurvedic treatment modalities.

In Ayurvedic classics, our Acharya has given so many special therapeutic

procedures for specific diseases along with thousands of medications. Panchakarma is very unique therapeutic procedure because of its preventive, promotive, prophylactic, and rejuvenating properties as well as radical providing a cure. Among Panchakarma, Basti karma is such a Chikitsa that is applicable in all *Vata* Vyadhi. According to Sushruta, it can be used in Kapha and Pitta Roga by using different ingradients<sup>2</sup>. SandhigataVata is a Vatik disorder and Vata also controls and regulates the other two Dosha, Dhatu, Malas, and the whole body. Since Vata is controlled by Basti all these factors are automatically regulated and total body equilibrium is achieved<sup>3</sup>. Acharya Charaka mentioned common treatment for Vata Vyadhi i.e. repeated use of Snehana and Svedana, Basti and Mridu-Virechana<sup>4</sup>. Subsequently, Acharya Charaka advised Panchakarma therapy, especially Kshira Basti. Charaka describes Bala as' Vaat Haranam' in Agrya Sangraha. (ch.su.25) and kshir is described in Asthi pradoshaj vyadhi chikitsa (ch. su.28/27). So kshirbala taila is selected for *matra Basti* as per reference of sahastrayogam[18].

#### **CONCLUSION:**

Osteoarthritis, also known as Sandhivata (Osteoarthritis), requires specialized Sandhivata treatment to be cured. (Osteoarthritis) is mostly treated diminishing the relieved Vata dosha and increasing Shleshakakapha in the joints. Joint movement can be increased. Because this is an age-related degenerative condition, it is difficult to diagnose and may last a lifetime, but symptoms can be reduced with a change in lifestyle and therapy. The Chikitsa Sidhannt of Sandhigata can be justified as follows; In SandhigataVata there is Kshaya of Asthi Dhatu and Vriddhi of Vayu. Specific treatment for SandhigataVata is not mentioned in Brihattrayi. However general principles for treating vitiated Vata are elaborated as Snehana, Svedana, Mridu Samshodhana, Abhyanga, Mardan, Veshtana, Trasana, Seka, Madya, and Snigdha-Ushna Basti. Charaka has stated that the treatment should be done keeping in mind the Sthana, Dushya, and Avarana of Vyadhi. While describing the treatment of Ukta Anukta Vyadhi Charaka emphasized that treatment should be done concerning Dosha, and Dushya and should be opposite to Hetu.

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## Figure:

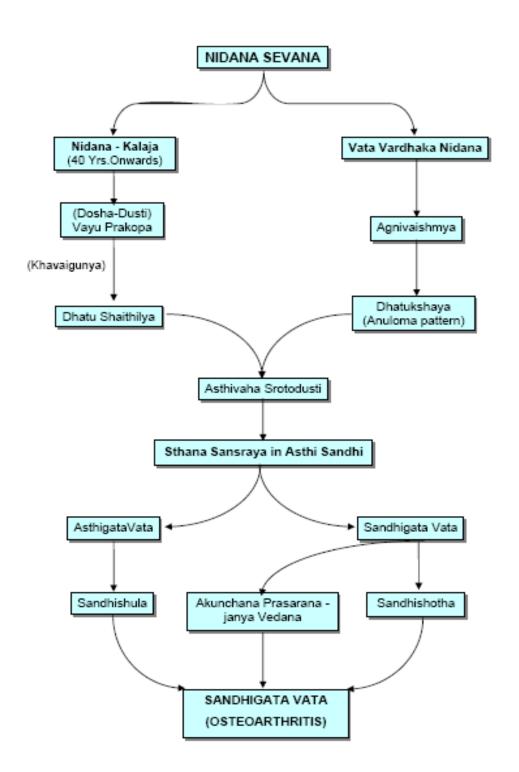


Fig.No.1.: Samprapti (Pathogenesis) of Sandhigat Vata

Table 1: Classical features of Sandhigata Vata described by different Acharyas

S.N.	Lakshana	Charaka	Sushruta	A.H	Bhav Prakasha	Madhav Nidan
1	Sandhishula	+	+	+	+	-
2	Sandhishotha	+	+	+	+	-
3	Sandhisputana	-	-	_	-	+
4	Vatapurana Druti Sparsha	+	-	-	-	-
5	Sandhi Stabdhata	I UI	KIVIS	<u>T-</u>	a -	+
6	Prasarana Akunchana Vedana	+	<b>P</b> -20	建	-	-

Table 2: Treatment principles of Sandhigata Vata as per different Acharyas

S.N.	Type of therapy	Charaka	Sushruta	Ashtang Hriday	Bhav Prakash	Vangasena
1	Snehana	+	+	+	+	+
2	Swedana	+		+	+	-
3	Madhur Amlalavan bhojan	+		+	+	+
4	Mardana	-	+	+	+	-
5	Veshtana	11-/	-	+	+	-
6	Trasana	- /	-	+		-
7	Basti	+	-	+/	+	+
8	Nasya	+	. <i>F</i>	+	+	+
9	Tarpana	+	-	-		-
10	Upanaha	-	+	-	+	-
11	Agni Karma	-	+	-	+	-
12	Bandhana	<u>-</u>	+	-	-	-
13	Brihana	+	-	-	+	-
14	Virek	+	-	-	+	-
15	Nidra	-	-	-	+	-
16	Gurupadartha	-	-	-	+	-