



## LITERATURE REVIEW ON SANDHIGATA VATA W.S.R TO OSTEOARTHRITIS IN AYURVEDA

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**ABSTRACT** In the present era, sandhivata is one of the most common diseases affecting a large population. The word Sandhivata is derived from “Sandhi” and “Vata”. When the vitiated vata localizes in sandhi i.e. joint, it is termed classically as sandhigata vata. It is one, among the eighty nanatmaja vata vyadhis. It has been studied in close proximity to Osteoarthritis. Sandhivata most commonly occurs in vridhaavastha due to dhatukshaya, mostly affecting the weight bearing ones. Here, vata afflicted due to nidana sewana, localizes in kha baigunya; sandhi, manifesting pain, swelling and restriction of movement locally.

**KEYWORDS :** Sandhivata; Osteoarthritis; Vatavyadhi

### INTRODUCTION

Sandhigata vata is a type of vata vyadhi which commonly occurs in old age due to vata vitiation and depletion of body tissues (dhatus). The disease was first described by Acharya Charaka by the name of 'Sandhigata Anila' in Vata Vyadhi, Sandhivata is accepted by Acharya Chakrapani as gulpha vata or sandhigata vata. Acharya Sushruta has described the diseases in vatavyadhi chapter under the subheading of sandhigata vata [1].

In modern science, janusandhigata vata is correlated with Osteoarthritis of knee. It is degenerative joint disorder which is strongly associated with ageing and is a major cause of pain and disability in older people. It is most common form of arthritis that effects all joints, especially weight bearing and frequently used joints. The disorder is characterized by progressive deterioration and loss of articular cartilage accompanied by remodelling of bones and soft tissue on and around the involved joints due to an active response of chondrocytes in articular cartilage and inflammatory cells in surrounding tissues [2].

Primary OA is the most common one, occurring in old age and mostly affecting weight bearing joints (knee and hip), trapezio-metacarpal joint and DIP joints. While secondary OA occurs at any age after adolescence and mostly involves the hip joint. Underlying primary disease of the joint leads to the degeneration, congenital maldevelopment, post-traumatic irregularities, obesity, avascular necrosis, mal-alignment (Bow legs) or internal defragment of knee (loose body). Clinical features include involvement of major joints of lower limb, frequently bilateral.

**Table 1: Aharaj Nidana.**

| Aharaj Nidana                                             | Charak [4] | Y.R.[5] | M.N[6] | B.P[7] |
|-----------------------------------------------------------|------------|---------|--------|--------|
| Rooksha Ahara Sevana (Dry food items)                     | +          | +       | +      | +      |
| Shita Ahara Sevana (Cold food items)                      | +          | +       | +      | +      |
| Alpa Ahara Sevana (In small quantity)                     | +          | +       | +      | -      |
| Laghu Ahara Sevana (Light diet),                          | +          | +       | +      | +      |
| Virudha Ahara Sevana (Incompatible food)                  | +          | -       | +      | +      |
| Tikta, Katu Ahara Sevana (Bitter or pungent in taste )    | +          | -       | +      | -      |
| Pramitha Ahara Sevana (Intake of food in improper amount) | -          | -       | -      | +      |

**Table 2: Viharaj Nidana.**

| Viharaj Nidana                                    | Charak | YR | M.N | B. P |
|---------------------------------------------------|--------|----|-----|------|
| Ratri Jagaranam (Staying awake at night)          | +      | +  | +   | +    |
| Vishama Chesta (Improper activities)              | +      | +  | +   | +    |
| Athi Maithuna (Excessive sexual activity)         | +      | +  | +   | +    |
| Athi Vyayamam (Excessive exercise),               | +      | +  | +   | +    |
| Vegadharana (Suppression of natural urges)        | +      | +  | +   | +    |
| Abhigathata (Accidental fall)                     | +      | +  | +   | +    |
| Vipareeta Chestha                                 | +      | +  | +   | -    |
| Plavanam (Swimming)                               | +      | +  | -   | -    |
| Sukhalpatha                                       | -      | +  | +   | +    |
| Divaswapnam (Day sleep)                           | +      | +  | +   | -    |
| Poorvavayu Sevana (Confronting wind from east)    | +      | +  | +   | -    |
| Anuchitha Roopena Chestha (Irrelevant activities) | +      |    | +   | -    |

### Poorva Roopa (Primordial Symptoms)

Acharyas described Avayakta as the poorva roopa of vata vyadhi. Avayakta means which is not manifested clearly. Hence, mild sandhi shoola (joint pain) or shotha (inflammation) which occurs before the clear-cut manifestation of disease may be taken as poorva roopa of sandhigata vata [8].

### Rupa (Manifested Symptoms)

The classical signs and symptoms of sandigata vata are as below: According to Charak Samhita, vatapurna dratisparsha (tenderness), shotha (swelling), prasarana kunchan pravriti savedna (Pain during extension and flexion of joints) are sign and symptoms of sandigata vata [9]. According to Sushruta Samhita, hanti sandhi (stiffness), sandhi sophra, sandhi shoola (pain in joints), asthishosha (degeneration) are sign and symptoms of sandigata vata.

**Table 3: Rupa Of Sandhigata Vata According To Various Acharyas**

| Lakshanas                               | Charak | Sushruta | Astanga Sangraha [11] | Astanga Hridaya | Madhav Nidana |
|-----------------------------------------|--------|----------|-----------------------|-----------------|---------------|
| Sandhi Shola                            | -      | +        | -                     | -               | +             |
| Shotha or Shopha                        | -      | +        | -                     | -               | -             |
| Vatapurna Druti Sparsa                  | +      | -        | +                     | +               | +             |
| Hanti Sandhin                           | -      | +        | -                     | -               | -             |
| Prasaranaakuncana yoho Pravrttisavedana | +      | -        | +                     | +               | -             |
| Atopa                                   | -      | -        | -                     | -               | +             |

|               |   |   |   |   |   |
|---------------|---|---|---|---|---|
| Shareera      | - | - | - | - | - |
| Gandhaliptata | - | - | - | - | - |
| Anga Peeda    | - | - | - | - | - |
| Romaharsha    | - | - | - | - | - |

According to Astanga Sangraha, vatapurna drutisparsha, sophā, sandhigataanela are sign and symptoms of sandhigata vata.

**Hanti Sandhin:** In the commentary Nibandha Sangraha and Atanka Darpana, they give the explanation that, hanti sandhin means abhava in prasarana akunchana etc functions of the Sandhi. In Madhukosha commentary, it means complications of sandhi like sandhi vishlesha, sandhi sthambha etc. Gayadasa gives opinion about sandhi vishlesha as there will be difficulty of movement without the dislocation.

**Sandhi Shoola:** Shoola is the main symptom of the vata vitiation. All the Acharyas have mentioned that without the vitiation of Vata, there is no shoola. Sandhi shoola is the main symptom in the sandhigata vata. Sandhi shoola is produced due to the effect of ashrayee khatu kshaya (asthi) resulted due to the vitiation of vata.

**Aatopa Or Sandhi Sputana:** This specific symptom is explained by Acharya Madhava. Shabda is the indriyārtha which indicates the predominance of qualities of vata. Sandhigata Vata is localized vata vyadhi in which Prakupita Vayu affects Sandhi. This Sthana Samshraya is the result of strotoriktata present at sandhi; that means akasa mahabhoota is increased at the site of sandhi. This aatopa can be correlated to the crepitus in a joint.

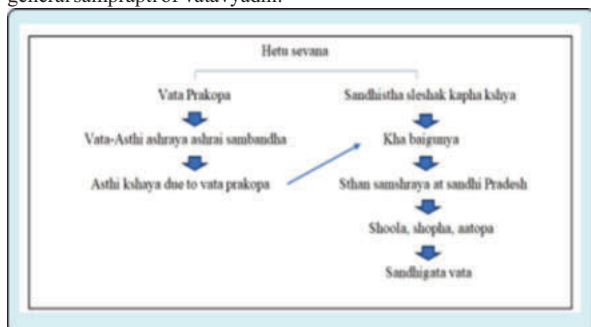
**Prasarana Akunchana Pravrtti Savedana:** There is a natural elasticity or contractility in the joint by virtue of which the movement in different direction can be performed. This is destroyed due to the vitiated vata, as a result the patient is not able to move his joint freely especially in the extension and contraction. There will be severe pain, if the affected person tries to move. This phenomenon has been explained by different terminologies such as Stambha etc.

**Sandhi shotha:** It is one of the main symptoms in sandhigata vata. Acharya Sushruta has explained it as Sandhi shophā where shophā is the swelling which is ekadesha sthitha. In the commentary of shotha, Acharya Arunadatta explains that the swelling looks like the airfilled bag. In Ashtanga samgraha, Vagbhata includes shophā as one of the vyana vata vikara

**Vata Purna Druti Sparsha:** Sparsha is of two types, ushna sparsha and sheeta sparsha. In Yogarathnakara, there is reference that the person who is suffering from vata roga will have sheeta sparsha. In Sandhigata Vata, the joints appear like air filled bag and cold upon touch.

### Samprapti (Pathophysiology)

No specific samprapti has been explained for Sandhigata vata. So, the samprapti of sandhigata vata is assumed to be the same as that of general samprapti of Vatavyadhi.



### Samprapti Ghatakas.

- Nidana: Vata prakopaka nidana
- Dosha: Vata esp. Vyana vayu, Shleshaka kapha
- Dushya: Asthi, Majja, Meda
- Srotas: Asthivaha, Majjavaha and / or Medovaha
- Srotodusti: Sanga
- Agni: Mandagni
- Dosha Marga: Marmasthi Sandhi
- Roga Marga: Madhyam
- Udbhavasthana: Pakvashaya
- Vyaktasthana: Asthi – Sandhi

**Table 4: Diagnosis Of Sandhigata vata Based On Various Factors.**

| Factors      | Jaanu sandhigata vata           | Amavata                                        | Vatarakta      | Koshtruksa shirsha |
|--------------|---------------------------------|------------------------------------------------|----------------|--------------------|
| Amapradhanya | Absent                          | Present                                        | Absent         | Absent             |
| Jvara        | Absent                          | Present                                        | Absent         | Absent             |
| Hridgaurava  | Absent                          | Present                                        | Absent         | Absent             |
| Prone Age    | Old age                         | Any age                                        | -              | -                  |
| Vedana       | At prasarana                    | Vrischik dansha vata and sanchari              | Mushika        | Tivra              |
|              | Akunchana                       |                                                | Damshavat      |                    |
|              | Pravritti                       |                                                | Vedana         |                    |
| Shotha       | Vatapurna driti sparsha         | Sarvang and sandhigata                         | Mandala yukta  | Koshtruksa         |
|              |                                 |                                                |                | shirshvat          |
| Sandi        | Weight bearing joint (knee jt.) | Starts from small jt. Later effects big sandhi | Small sandhi   | Only janu          |
| Upashaya     | Abyanga                         | Ruksha svedana                                 | Rakta shodhana | Rakta shodhana     |

### Chikitsa of Sandhigata Vata

The main aim of the chikitsa is promotion and preservation of health in healthy individual, and elimination of the disease i.e. curative treatment. Although Acharya Charaka has not mentioned about specific chikitsa, the general vatavyadhi chikitsa can be taken into consideration. Acharya Sushruta was the first to mention the treatment principles of sandhigata vata i.e.

- Snehana
- Upanaha
- Agnikarma
- Bandhana
- Unmardana

### Snehana

Snehana is the first and foremost phase of treatment in vatavyadhi. (Vata snehana mitravat) Taila is the best vatahara dravya. Different combination of chatur snehas i.e. ghrita, taila, vasa and majja are also very effective in sandigata Vāta.

### Swedana

Swedana karma after snehana causes liquification of stagnant doshas and relieves rigidity of Vāta. Swedana is of two type; sarvadaihiika and sthanika. Sthanika swedana is used in mono articular diseases and sarvadaihiika is advisable in multiple joints involvement.

### Vasti

Vasti is the main line of treatment in vatavyadhi. It is of two type.

**Anuvasana vasti:** It is Sneha vasti consisting of oils with or without medicinal drugs. For sandigata vata, ksheerabala taila, dashmoola taila and maharayan taila is used.

**Niruha vasti:** It is prepared of Kashaya of vatahara drugs like dashmoolaadi kwatha or ereendamooladi kwatha etc.

### Upanaha

It is a process in which application of packing of cooked leaves and mamsa etc are done on sandhis. for this purpose. Sigrū saka, kakolyadi gana dravyas, etc are used.

### Avagaha

This is a process in which whole body or only affected joint is kept in luke warm kashayas of vatahara dravyas, taila etc.

**Lepa:** It is external application of thick paste of drugs on the sandhis.

### Agni karma

The ushna (hot) guna of agni pacifies the shita (cold) guna of vata, removes the avarana effectively and stabilizes the movement of vata, and reduces the joint pain. Acharya Charaka mentioned that agni is the best treatment for shoola (pain). Acharyas have quoted that Agnikarma is superior in treating stambha (stiffness).

### Formulations

- Gugglu: Trayodasanga guggulu Rasnadi guggulu
- Yograj guggulu Maha yograj guggulu Salaki guggul
- Churna: Panchakola churna Haritaki churna
- Narsingh churna Rasnadi churna
- Rasaushadi: Vātavidhamsa rasa, Vatajankusha, Vatachintamani rasa
- Prawal pisti
- Arista: Dashmoolaarista
- Kwatha: Dashmoola kwatha, Rasnadi kwatha,
- Rasnasapta kwatha
- Snehana: Mahanarayan taila

## DISCUSSION

Sandigata vata is one of the most prevalent joint related diseases in the population. Sandigata vata is one of vatavyadhi which is mainly cause due to the dhatu kshaya (depletion of tissue) mainly in old age. It includes signs and symptoms like vatapurna dratisparsha (tenderness), shotha (swelling), prasarana kunchan pravriti savedna (Pain during extension and flexion of joints).

Pakwashaya (lower gastrointestinal tract) is the site of action for basti karma. It is the main site of Vata dosha. Hence, basti is mainly useful for the treatment of vitiated vata. It is convenient and comfortable in administration. Medicated oil and medicated decoction strengthen the joints and soft tissues and this therapy rejuvenates the tissues and eliminates the toxins from the body.

Pathya ahara vihara are mainly focused in mitigating the vitiated vata and providing adequate nourishment to dhatus. Madhura, amla, lavana rasa are vata shamaka in nature. Godughda, goghrita, mamsa rasa, shali dhanya are balya, snighda and thus promote nourishment. Plain ghee is said to contain Vitamin D which plays an important role to utilize calcium and phosphorus in blood and bone building. The administration of ghrita internally has been proved effective in Sandhigata Vata.

## CONCLUSION

Sandhigata vata is one of the most prevalent joint diseases in the population. It occurs primarily because of dhatu kshaya (depletion of tissues) in vriddhavastha (old age), which restricts daily activities such as walking, dressing, bathing, etc. Since it is one of vatavyadhi, vata shamaka different shamana and shodana therapy is done to subside the diseases. The findings showed that with the collective approach of different Shodhana procedures, including Snehana (internal oleation), Svedana (sudation) Basti (medicated enema) and Mrudu Virechana (soft purgation), upanaha, jalauka, agnikarma, avagahana and shamana treatment (Pacification) like vatahara, vedanahara dravya, sandhigata vata can be efficiently cured.

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