

**CRITICAL ANALYSIS ON SANDHIGATAVATA AND IT'S
MANAGEMENT THROUGH AYURVEDA W.S.R TO
OSTEOARTHRITIS**

^{*1}Dr. Rishabh Gupta, ²Dr. Tripti Nigam, ³Dr. S. N. Tiwari and ⁴Dr. Pravanjan Acharya

^{1,2}M.D, Scholar, Department of Samhita Siddhanta.

³M.D, Ph.D. Associate Professor, Department of Samhita Siddhanta.

⁴M.D, Ph.D, HOD and Professor, Department of Samhita Siddhanta.

Govt. Auto. Ayurved College, Rewa (M.P).

ABSTRACT

In the present era, sandhigataavata is the most common disease affecting a large population. Sandhigataavata term is derived from words as 'sandhi' and 'vata'. Sandhigataavata a degenerative disorder of the joints especially affecting weight bearing joints like knee joint, elbow joint etc results in restricted movement and painful in the affected joint, obesity, malnutrition, old age, working pattern etc are the affecting (contributing) factors for manifestation of sandhigataavata. Sandhigataavata is the disease mentioned in ayurved and is a type of vatavyadhi which most commonly occurs in vriddhavastha due to dhatukshaya. In jaravastha, all dhatus undergo kshaya thus leading to vataprakopa and making individual prone to many disease. Acharya

charak was the first person who described the separately named "Sandhigataanila". The trouble of sandhi by prakupita vata is the main phenomena in samprapti of sandhigataavata. Sandhi come under the madhyam roga marga. Dhatu kshaya and vata dosha figures disease kashtasadhya so, this study deals with systemic evaluate of sandhigataavata and the purpose of this work to check and highlight the effectiveness of various ayurvedic interventions in osteoarthritis patients.

KEYWORDS: Sandhigataavata, vatavyadhi, vriddhavastha.

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***Corresponding Author**

Dr. Rishabh Gupta

M.D, Scholar, Department of
Samhita Siddhanta, Govt.

Auto. Ayurved College,
Rewa (M.P).

INTRODUCTION

Osteoarthritis (OA) is the most common joint disease affecting human beings. The prevalence of the disease is progressively increasing parallel to the increase in the life expectancy. In India, the reported prevalence is 4-6 % in rural population and 10-12 % in urban areas.^[1]

OA is uncommon in adults below 40 yrs and very common in people above 60 yrs of age. It is more common in females compared to males.^[2]

Sandhigatavata is one of the vatavyadhi which affects the people in vriddhavastha.^[3]

Sushruta has described the disease in vatavyadhi chapter as sandhigatavata^[4], while Charaka has described sandhigatavata under vatavyadhi as sandhigata anila (Anila is the synonym of vata).^[5] Diseases that are caused by the pathological vata dosha.

The prakupita vata is combined with other vitiated doshas, rakta, ama etc and resides in the joint to produce the disease. As a disease related to madhyam roga marga sandhigatavata is kasta Sadhya (difficult to treat) or asadhya (impossible to treat). Based on the symptomatology and nature of the disease sandhigata vata is very similar to OA the most common degenerative joint disease in the elderly.

No specific nidana for sandhigatavata has been explained in classical Ayurvedic texts therefore, the general hetu of vatavyadhi can be regarded as an etiological factor responsible for the generation of sandhigatavata. Common hetus (causal factors) of vatavyadhi mentioned by Acharya Charak.^[6]

AIM AND OBJECTIVE

- To analyse the role of nidanas in the pathogenesis of sandhigata vatavyadhi.
- To explain the role of pathya-apathya, panchkarma medicines and therapies were mentioned in ancient times that will be helpful in dealing with sandhigatavata.

MATERIAL AND METHOD

Acharya Charak, Sushruta, Ashtanga Hridaya and Ashtanga Sangraha, Yogaraj Nigraha, Bhavaprakash and Sharangdhar, Bhaisajya Ratnavali and other modern books or published articles on osteoarthritis or sandhigatavata.

Etiology – The etiology of the disease has not been mentioned directly, but looking at the nidana of vatavyadhi^[7] and since it is the disease that affects the joints and causes degeneration, the causes of asthivaha strotas dushti have been discussed^[8] and the following conclusion can be drawn.

Sannikrishta hetu

- Ativyayama (excessive physical exertion).
- Abhighata (joint injury).
- Marmaghata (vital joint injury).
- Pradhavan (running).

Viprakishta Hetu

- Rasa – Kashaya, katu, tikta
- Guna – rooksha, laghu, sheeta
- Veerya – sheeta
- Aahar krama – alpahara, vishamashana, adhyashana, pramitashana.
- Manasika – bhaya, krodh, chinta, shoka.
- Viharaja – atijagarana, vishamopacara, ativyavaya, shrama, divaswapna, vegsandharana.

Other Causes – Vataprakopa is due to living in jangala desh^[9] and at the end of Greeshma ritu, varsha ritu, shishira ritu.^[10]

Risk factors

1. Injury or over use – Knee flexion and repetitive stress on the joint can damage the joint and increase the risk of osteoarthritis.
2. Age – The disease is more common in old age.
3. Gender – Women are more likely to develop osteoarthritis than men, especially after the age of 50.
4. Obesity – The chances increase with increase as you gain weight because the extra weight puts stress on your joint.
5. Genetic – People with a family history are more prone to develop osteoarthritis.
6. Occupational factors – Men whose work required knee flexion and atleast moderate physical exertion had higher rates of radiographic evidence of knee osteoarthritis and more severe radiographic changes.^[11]

Samprapti – From the beginning of dosha dushya dushti to the development of vyadhi, there are various pathological stages explained by samprapti.

- 1. Dhatukshaya janya** - Vata dosha predominates with old age and kapha is reduced and agni is weakened so that the dhatus that produced are not proper, eventually leading to degeneration. Since kapha is reduced by the shleshak kapha in the joints is also reduced by, resulting in Asthisandh Kshaya. If further continues to indulge in vata aggravating factors, so that Sthanasamshraya of Prakupita Vata takes place in Khavaigunyayukta sandhi. This localized Vayu due to its Ruksha, Laghu, Kharadi Guna results in Sandhigatavata.
- 2. Aavarana janya** - In obese people, Sandhigatavata is usually found in the weight-bearing joints Since Meda Dhatu is produced in excess, it causes obstruction and does not nourish the Uttrotar Dhatu leading to Kshaya. Excess Fat causes Aavarana of Vata.^[12] This vitiated Vata, when lodged in the joints, creates Sandhigatavata.

Table 1.1: (Samprapti ghatak).

Dosha	Vata, shleshak kapha
Dushya	Asthi, majja, meda
Strotas	Asthivaha, majjavaha, medovaha
Strotodushti	Sanga
Agni	Manda
Udbhava sthana	Pakvashaya
Roga marga	Madhyam
Vyadhi swabhava	Chirkalik

Clinical changes – Sandhigatavata come under the category of vatavyadhi so can not exhibit any poorvaroop (Pre clinical symptoms).

The classical sign & symptoms are as below.

- The lakshana of sandhigatavata are explained in charak chikitsa sthana which are vatapurnadratisparsha (tenderness), shotha (inflammation), prasarankunchanpravritisavedna (pain during extension and flexion of joints).^[13]
- In sushrut Samhita, lakshana of sandhigatavata is hanti sandhi (stiffness), sandhisopha (swelling), sandhishoola (pain in joints), asthishosha (degeneration).^[14]
- In ashtang sangraha and hridaya, the lakshana are described as vatapurnadrati.
- In madhav nidan the lakshana of sandhigatavata is hantisandhi, sandhishool, sandhiaatop (crepitus sound from joints).

Management – As in ayurveda, the first line of treatment is nidana parivarjana, so the first goal should be a lifestyle modification that can be achieved through changes in dietary habits, yoga, and regular exercise.

Aahara

- It is recommended to follow the vatahara, madhura, amla, lavana and snigdha diet.^[15]
- Shunthi is described under vatanashak gana so it should be included in our daily diet.^[16]
- Ghritpan is advised to reduce vata.^[17]

Rasayan improves and restores the process of conservation so, they should be taken regularly. Some useful rasayan in sandhigatavata are – lashuna, methika, kshira ghrit abhyasa.

Table 1.2: Pathya varga.

S.No.	Aahara varga	Pathya
1.	Annavarga	Godhuma, Raktashali, Masha
2.	Dugdhavarga	Gau dugdha, Aja dugdha
3.	Mamsavarga	Kukkuta, Matsaya
4.	Phalvarga	Amla, Draksha
5.	Shakvarga	Shigru, Rasona, Patola
6.	Madyavarga	Amlakanjika

Table 1.3 Apathya varga.

S.no.	Aahara varga	Apathya
1.	Annavarga	Yava, Chanak
2.	Dugdhavarga	Dadhi
3.	Phalvarga	Jambu
4.	Shakvarga	Udumbara
5.	Madyavarga	Naveen madya
6.	Mamsavarga	Shushka, Mamsa

YOGA – The positive effect of yoga on the physiological and psychological state in the treatment of chronic disease has been proven. Many studies have been shown that the effect of yoga on osteoarthritis patients is greater than those who only do physical therapy.^[18] According to the American college of rheumatology, strong recommendations for exercise have been made for patients with osteoarthritis of the knee and or hip particularly those who are overweight or obese. Conditional recommendations have been made for balance exercise, yoga, cognitive, behavioral therapy etc.^[19]

Panchakarma procedure

Panchakarma as per different acharyas

Treatment	A.Sa.	A.Hr.	Bh. Pr.	Yo.Ra.	Su.Sa.
Snehana			+	+	+
Swedana	+		+	+	
Upanaha	+	+	+	+	+
Bandhana	+	+			
Abhyanga		+			
Agnikarma	+	+			+
Mardana	+		+	+	+

Leech therapy is also very effective in relieving symptoms of osteoarthritis. Active compounds present in leech saliva and their local releases (i.e. into synovial fluid) have anti-inflammatory properties.^[20]

Basti chikitsa is considered as the best and half cure for vatavyadhis^[21] and also effective for osteoarthritis. Snehana basti not only relieves pain but also increases strength. Studies done with ksheer bala taila basti have been shown to be significant in reducing sandhigatavata symptoms.^[22]

In our study, rajayapana basti helped to reduce the symptoms of osteoarthritis due to its rasayan and bhringhana effects, while also preventing the decline of dhatus and improving quality of life.^[23]

Drugs for Osteoarthritis

- Single drugs like nirgundi^[24], ashwagandha, bala, sunthi^[25] have proven results in sandhigatavata.
- Guggulu preparations like vatari guggula^[26], yograj guggula, trayodashang guggula are beneficial.^[27]
- Kwath preparations like maharasnadi kwath, rasnasaptak kwath^[28] are beneficial.

CONCLUSION

Osteoarthritis or sandhigatavata, depending on its progressive condition, requires specific treatment to cure it. The treatment of sandhigatavata is mainly done by reducing the allevated vata dosha and increase the shleshaka kapha in joints so that movements of joints should be increased. Since it is age related degenerative disease. It can persist for life but life style changes and treatment can reduce sandhigatavata symptoms and the disease can be controlled in its primary stage to lead a good quality of life.

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