



Review Article

A REVIEW ON SANDHIVATA (OSTEOARTHRITIS) AND ITS MANAGEMENT THROUGH AYURVEDA

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ABSTRACT

In the present era *Sandhivata* is the most common disease affecting a large population. *Sandhivata* term is derived from words as “*Sandhi*” and “*Vata*”. When *Vata* lodges in *Sandhi* (joints), it is characterized by pain, swelling, and restriction of joint movement. The clinical presentation of *Sandhivata* closely mimics with the disorder called Osteoarthritis which is the second most common rheumatologic problem. *Sandhivata* is the disease mentioned in Ayurveda and is a type of *Vatavyadhi* which most commonly occurs in *Vridhavastha* due to *Dhatukshaya*.

Sandhivata is one of the challenging diseases for the clinicians due to its chronicity, incurability, complications etc. The allopathic treatment provides the symptomatic relief but the underlined pathology remains untreated due to absence of effective therapy and also giving rise to many side effects, toxic effects and adverse reactions. The treatment procedure described in Ayurveda focuses not only on drugs but also lifestyle modification thus having a holistic approach in its management. So, the present study deals with systemic review of *Sandhivata* and the aim of this work is to review and highlight the effectiveness of different Ayurvedic interventions in patients with osteoarthritis (OA).

KEYWORDS: *Sandhivata*, *Vridhavastha*, Ayurveda, Osteoarthritis.

INTRODUCTION

About 15% of people in India suffer from arthritis. The incidence of arthritis has increased despite the increase in life expectancy produced by improved sanitations and nutrition^[1]. Osteoarthritis is amongst the commonest rheumatologic problem and its prevalence is 22% to 39% in India. OA is more common in women than men.^[2] This disease mostly affect the age of 40 years. Almost all persons by age 40 have some pathologic change in weight bearing joints.^[3]

Sandhivata is a *Vatavyadhi* affecting people in the *Vridhavastha*.^[4] The disease is characterized by *Dhatu kshaya* and *Lakshanas* reflective of vitiated *Vata* hence the diet and treatment includes *Dravyas* which have *Brimhana*, *Shoolahara*, *Stambhahara* and *Balya* properties. The disease *Sandhivata* was not mentioned as such in Vedic literature. *Ashwinikumaras* had recorded their skill in treating joint diseases and its mention can be found in *Rigveda*^[5]. *Samhitagranthas* and *Samgrahagranthas* except *Sharangadharasamhita* had described the disease *Sandhivata* with *Lakshana* and *Chikitsa* under *Vatavyadhi*. Many research work and detailed description of the disease can be found in the contemporary science but to date, medicine has not

discovered a definitive treatment for OA and due to this the use of alternative therapies are on the rise.

AIMS AND OBJECTIVES

To explain the role of *Pathya-Apathya*, drugs and *Panchakarma* therapy enumerated in ancient Ayurvedic texts which will be beneficial in management of *Sandhivata*.

MATERIALS AND METHODS

As the study is a review study, the available literature *Samhitas* and other books are searched for the disease and analyzed to get a comprehensive concept in the management of *Sandhivata*.

Electronic Databases: Complementary and Alternative Medicine (CAM), PubMed, Google scholar, MEDLINE etc, were searched.

Observations

Etiology

The etiology of the disease has not been mentioned directly but if one looks into the *Nidana* of *Vatavyadhi*^[6] and since it is the disease affecting joints and causing degeneration, *Ashtivaha Strotasdushti* causes were analyzed and^[7] the following inference can be drawn-

Sannikrishta Hetu- *Ativyayama* (excess of physical exercise), *Abhighata* (injury to joint), *Marmaghata* (injury to vital point of the joints), *Pradhavana* (running) etc.

Viprakrishta Hetu -

- ❖ *Rasa* - *Kashaya*, *Katu*, *Tikta*
- ❖ *Guna* - *Rooksha*, *Sheeta*, *Laghu*
- ❖ *Aharakrama*- *Alpahara*, *Vishamashana*, *Adhyashana*, *Pramitashana*
- ❖ *Manasika* - *Chinta*, *Shoka*, *Krodha*, *Bhaya*
- ❖ *Viharaja*- *Atijagarana*, *Vishamopacara*, *Ativyavaya*, *Shrama*, *Divasvapna*, *Vegasandharana*

Other Causes

Living in *Jangaladesha* is another causative of *Vataprakopa*.^[8]

During the end of *Greeshmaritu*, *Varsharitu* and *Shishira kala*.^[9]

Risk Factors^[10]

Injury or over use- Knee bending and repetitive stress on a joint, can damage a joint and increase the risk of OA.

Age- The disease is more common as the age advances.

Gender- Women are more likely to develop OA than men, especially after the age of 50.

Obesity- The chances increases with increase in weight as extra weight puts more stress on joints.

Genetics- People having family history are more likely to develop OA.

Occupational factors- Men whose jobs require knee bending and at least medium physical demand had a higher rate of radiographic evidence of knee OA and more severe radiographic changes.

Clinical Features

Sandhivata come under *vatavyadhis* and so may not present any *Poorvaroop* (pre-clinical symptoms).

The classical signs and symptoms are as below-

- The *Lakshana* of *Sandhivata* are described in *Charakachikitsasthana* as- *vatapurnadratisparsha* (tenderness), *shotha* (swelling), *Prasarana kunchanpravritisavedna* (Pain during extension and flexion of joints).^[11]
- In *Sushruta Nidansthan Lakshana* are described as *Hanti sandhi* (stiffness), *Sandhi sofa*, *Sandhishola* (pain in joints), *Asthishosha* (degeneration).^[12]
- In *Ashtangasangraha* and *Hridya*, the *Lakshana* are described as- *Vatapurnadrati*.
- *Madhav nidan* has described the *Lakshan* of *Sandhivata* as *Hantisandhi*, *Sandhishool*, *Sandhiaatop* (crepitus).

Types

The *Bheda* of *Sandhivata* are not described in texts however it can be understood on the basis of the following-

1. According to *Samprapti*:

i) *Dhatukshayajanyasandhivata* as degeneration occurs most commonly.

ii) *Avaranajanyasandhivata*: The primary cause is *Avarana* of *Kapha* by *Vayu*.

iii) Both *Kshaya* as well *Avarana*

2. In the line of *Nija* and *Agantuja* it can be classified in two varieties.

i) *Nija*- Due to vitiation of *Vata* by *Dhatukshaya*, *Avarana* etc

ii) *Agantuja*- Due to trauma

Samprapti

From the onset of *Dosha Dushya Dushti* till the evolution of the *Vyadhi* there occur various pathological stages which is explained by *Samprapti*.

1. *Dhatukshaya janya*-

Vata Dosha is predominant in old age and *Kapha* is decreased also the *Agni* gets impaired due to which the *Dhatu*s produced are not at their best which ultimately leads to the degeneration. As *Kapha* is decreased the *Shleshakkapha* in joints also depletes resulting in *Kshaya* of *Asthisandhi*. If further one continues indulging in *Vata* aggravating factors the *Sthanasamshraya* of *Prakupita Vata* takes place in the *Khavaigunyayukta sandhi*. This localized *Vayu* due to its *Ruksha*, *Laghu*, *Kharadi Guna* results in *Sandhivata*.

2. *Avaran janya*

In obese usually *Sandhivata* occurs in the weight bearing joints. As *Meda dhatu* is produced in excess it will cause obstruction and does not nourishes the *Uttrotar dhatu*s leading to *Kshaya*. The excessive fat will cause *Avarana* of *Vata*^[13]. This vitiated *Vata* when settle down in joints will produce *Sandhivata*.

Table 1: Samprapti Ghataka

<i>Dosha</i>	<i>Vata, Shleshakkapha</i>
<i>Dushya</i>	<i>Asthi, Majja, Meda</i>
<i>Srotas</i>	<i>Asthivaha, Majavaha, Medovaha</i>
<i>Srotodushti</i>	<i>Sanga</i>
<i>Agni</i>	<i>Manda</i>
<i>Udbhavasthana</i>	<i>Pakvashaya</i>
<i>Roga Marga</i>	<i>Madhyam</i>
<i>Vyadhiswabhava</i>	<i>Chirkalik</i>

Management of Sandhivata

As in Ayurveda the first line of treatment is *Nidanaparivarjana* so the first aim should be lifestyle modification which can be achieved through change in dietary habits, *Yoga* and regular exercise.

AAHARA

- ❖ *Vatahara, Madhura, Amla, Lavana* and *Snigdha* diet should be given.^[14]
- ❖ *Shunthi* is described under *Vatanashakgana* so it must be included in our daily diet.^[15]
- ❖ *Ghritpan* is advised to alleviate *Vata*.^[16]
- ❖ *Rasayana* enhances and restores the process of conservation, so they must be taken regularly. Some *rasayana* useful in *sandhivata* are- *Lashuna, Methika, Kshira-ghritaabhyasa*.

Table 2: Pathya Ahara

S.No	Aharavarga	Pathya
1.	Annava	Godhuma, Raktashali, Masha

2.	Phalvarga	Amla, Draksha
3.	Dugdhavarga	Gau and Ajadugdha, Ghrita
4.	Madyavarga	Amlakanjika
5.	Mamsavarga	Kukkuta, Matsaya
6.	Shakvarga	Shigru, Rasona, Patola

Table 3 Apathya Ahara

S.No	Aharavarga	Apathya
1.	Annava	Yava, Chanaka
2.	Phalvarga	Jambu
3.	Dugdhavarga	Dadhi
4.	Madyavarga	Naveenamadya
5.	Mamsavarga	Shushkamamsa
6.	Shakvarga	Udumbara

Some dietary preparations mentioned in Ayurveda which is helpful in *Sandhivata*.

Table 4: Some Dietary Preparations

Dietary preparation	Properties	Reference
<i>Dadima-amlakayusha</i>	<i>Vatahara, Rasayana</i>	<i>Madanpala Nighantu dhanyakritannadivarga 11/20</i>
<i>Kambalikayusha</i>	It is an anabolic promoter of strength and pacifies <i>Vata</i>	<i>Kashyap khillasthana 4/54</i>
<i>Lashunayusha</i>	<i>Rasayana</i> and pacifies <i>Vata</i>	<i>Kashyap khillasthana 4/64</i>
<i>Masurayusha</i>	Indicated in <i>Vatavyadhi</i>	<i>Shodhal Nighantu kritannavarga</i>
<i>Methi seeds chat</i>	<i>Deepana, Pachana, Vatahara, Kledahara</i>	<i>Bhojankutuhalam, Shimbivarga</i>

Yoga

Yoga has proven positive effect on both physiological and mental status in treatment of chronic conditions. Many studies have shown that effect of *Yoga* in the patients of OA is higher in patients than one doing physical therapy alone. The results have shown greater decrease in pain, morning stiffness, and anxiety in the patients of the experimental group.^[17]

As per American college of rheumatology, strong recommendations were made for exercise in patients with knee and/or hip OA especially who are overweight or obese. Conditional recommendations were made for balance exercises, *yoga*, cognitive behavioural therapy etc.^[18]

Panchakarma Procedures

Table 4: Panchkarma as Per Different Acharayas

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

- ❖ Leech therapy is also very effective in giving symptomatic relief in osteoarthritis. The active compounds in leech saliva and their local release (that is, in the synovial fluid) has anti-inflammatory properties.^[19]
- ❖ *Basti Chikitsa* which is considered as half treatment and is best for *Vatavyadhis*^[20] and are also effective in OA. *Snehanbasti* will not only help in decreasing pain but will also promote strength. Studies done with *Ksheer balataila basti* were found significant in reducing the symptoms of *Sandhivata*.^[21]
- ❖ In a study *Rajayapana Basti* has helped in reducing the symptoms of OA due to its *Rasayana* and *Bhringhana* effect and stopped further deterioration of *Dhatu*s and increased the quality of life.^[22]

DRUGS FOR OSTEOARTHRITIS

- ❖ *Guggulu* preparations like *Vatariguggulu*^[23], *Yograj guggul*, *Trayodashangaguggulu* are beneficial^[24].
- ❖ Single herbs like *Ashwagandha*, *Nirgundi*^[25], *Bala*, *Shunthi*^[26] have proven results in *Sandhivata*.
- ❖ *Kwath* preparations like *Maharasnadikwath*, *Rasnasaptakkwath*^[27] are helpful.

CONCLUSION

The treatment of *Sandhivata* is mainly done by reducing the alleviated *Vata dosha* and increase the *Shleshakakapha* in joints so that movement of joints can be increased. Since this is an age-related degenerative disorder, it may persist for lifetime but through change in lifestyle and treatment the symptoms of *Sandhivata* can be reduced and the disease can be stopped in its primordial and primary stage to lead a good quality of life.

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