

A Comprehensive Review of Sandhivata In Ayurveda With Reference to Osteoarthritis

Dr. Vanita Shankarrao Munde¹, Dr. Jyoti V. Chopde², Dr. Sandesh. L. Chokhar³

¹PG Scholar

²Guide

³HOD

S.V.N.H. Ayurvedic Mahavidalaya and Chikitsalaya, Shivajinagar,
Rahuri Factory, Ahmadnagar.

Received : 13 Sept. 2024

Accepted : 29 Sept. 2024

Abstract

Sandhivata, one of the most prevalent disorders described in Ayurveda, is analogous to osteoarthritis (OA) in contemporary medicine. It is a degenerative joint disorder that primarily affects the elderly and is characterized by the degradation of cartilage, leading to pain, stiffness, and limited mobility. In Ayurveda, Sandhivata is primarily caused by vitiation of Vata Dosha, leading to the degeneration of the Dhatus, especially Asthi (bone) and Sandhi (joints). The condition is aggravated by factors such as improper diet, sedentary lifestyle, and aging. The present review focuses on the Ayurvedic perspective of Sandhivata, exploring its etiology (Nidana), pathophysiology (Samprapti), clinical features (Lakshana), and treatment approaches (Chikitsa) with specific reference to osteoarthritis. Classical Ayurvedic texts such as Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya offer detailed descriptions of this disorder. Ayurvedic treatment modalities include Panchakarma therapies like Virechana (therapeutic purgation), Basti (medicated enema), and the use of Rasayana (rejuvenation) therapies, along with internal administration of herbal medicines such as Guggulu, Ashwagandha, Rasna, and Shallaki, known for their anti-inflammatory and analgesic properties. These therapies aim to balance Vata Dosha, rejuvenate the joints, and restore mobility. Modern research has shown that Ayurvedic treatments for Sandhivata can help reduce inflammation, improve joint function, and slow the progression of osteoarthritis. This review provides a comprehensive understanding of Sandhivata in Ayurveda, correlating its concepts with osteoarthritis and examining the potential of integrative approaches for its management.

Keywords: Sandhivata, osteoarthritis, Vata Dosha, Ayurveda, joint degeneration, Panchakarma, Rasayana, Guggulu, Ashwagandha, Shallaki

Author Correspondence

Dr. Vanita Shankarrao Munde

S.V.N.H. Ayurvedic Mahavidalaya and Chikitsalaya,
Shivajinagar, Rahuri Factory, Ahmadnagar
Email : Vanitamunde1994@gmail.com

Introduction

Osteoarthritis (OA) is one of the most common joint disorders, especially affecting individuals over the age of 50.¹ Around 15% of the Indian population is affected by arthritis. Despite advancements in sanitation and nutrition, which have contributed to longer life expectancy, the prevalence of arthritis has continued to rise.² Sandhivata is a Vatavyadhi affecting people in the Vridhavastha.³ It is a degenerative disease characterized by the breakdown of cartilage in the joints, leading to pain, stiffness, and loss of function. According to Ayurveda, this condition is closely linked to Sandhivata, where “Sandhi” means joint and “Vata” refers to the vitiated Vata Dosha responsible for the degenerative changes in the joints. Ayurvedic texts have long recognized joint disorders like Sandhivata, describing the condition in detail.⁴ The ancient seers outlined specific causative factors, pathology, and management techniques that have stood the test of time. A thorough understanding of Sandhivata from an Ayurvedic lens provides a unique perspective on osteoarthritis management, combining preventive care, dietary modifications, and natural remedies.

Etiology (Nidana)

According to Ayurveda, the primary cause of Sandhivata is the imbalance of Vata Dosha, particularly due to aging.⁵ Other contributing factors include:

1. Prakruti (Constitution): Individuals with a Vata Prakruti are more prone to developing Sandhivata due to their predisposition to dryness, stiffness, and degeneration of body tissues.
2. Aharaja Nidana (Dietary factors): Consumption of dry, cold, and light foods that aggravate Vata Dosha, irregular eating habits, and a diet lacking in essential nutrients contribute to the onset of Sandhivata.
3. 3. Viharaja Nidana (Lifestyle factors): Sedentary lifestyle, excessive physical exertion, improper postures, and prolonged exposure to cold climates can trigger or worsen Sandhivata.⁶
4. Manasika Nidana (Psychological factors): Stress, anxiety, and fear are also believed to aggravate Vata Dosha, contributing to joint deterioration.⁷

Types of Sandhivata (Osteoarthritis)

Although specific classifications of Sandhivata are not explicitly mentioned in Ayurvedic texts, it can be understood based on the following criteria:

1. According to Samprapti (Pathogenesis)

- Dhatukshaya-janya Sandhivata: This type arises due to the degeneration of tissues, which is the most common form.

- Avarana-janya Sandhivata: This type is caused by the obstruction (Avarana) of Kapha by Vata.

- Combined Kshaya and Avarana: This type involves both tissue depletion (Kshaya) and obstruction (Avarana).

2. Based on Nija (Internal) and Agantuja (External) Causes

- Nija (Internal): Caused by the vitiation of Vata due to tissue depletion (Dhatukshaya) or Avarana.

- Agantuja (External): Arising from trauma or external injuries.

Samprapti (Pathogenesis) of Sandhivata

From the initial imbalance of Doshas and Dushyas to the development of disease (Vyadhi), multiple pathological stages occur, as explained by Samprapti.

1. Dhatukshaya-janya (Tissue Degeneration):

In old age, Vata becomes predominant while Kapha decreases. This leads to impaired digestion (Agni), resulting in the production of weakened Dhatus (tissues), which eventually causes degeneration. The reduction of Kapha, particularly Shleshaka Kapha (lubricating synovial fluid), in the

joints contributes to the deterioration of bones and joints (Asthi Sandhi). If an individual continues to indulge in Vata-aggravating factors, the aggravated Vata finds a weak spot (Khavaigunya) in the joints. Due to its inherent qualities—dryness (Ruksha), lightness (Laghu), and roughness (Khara)—this localized Vata results in Sandhivata.

2. Avarana-janya (Obstruction) :

In obese individuals, Sandhivata commonly affects weight-bearing joints. The excess Meda Dhatu (fat tissue) creates an obstruction, preventing proper nourishment of the subsequent Dhatus, leading to tissue depletion. This excess fat also causes an Avarana (obstruction) of Vata, and when this vitiated Vata settles in the joints, Sandhivata manifests.⁸

In osteoarthritis, the pathology is similar, where the wear and tear of joint cartilage lead to inflammation, stiffness, and pain, primarily due to mechanical and biochemical stress on the joints. Both conditions result in joint deformities, reduced mobility, and functional impairment over time.

Clinical Features (Lakshana)

The symptoms of Sandhivata, as described in Ayurvedic texts, align closely with those of osteoarthritis. These include:

1. Sandhi Shula (Joint pain): Aggravated by movement and relieved by rest.⁹
2. Sandhi Stambha (Joint stiffness): Particularly in the morning or after prolonged periods of inactivity.
3. Sandhi Shotha (Joint swelling): In some cases, there may be mild swelling due to Vata-induced dryness and degeneration.
4. Hanti Sandhi Gati (Difficulty in joint movement): Decreased range of motion and joint deformities over time.¹⁰

Risk Factors for Osteoarthritis (OA)¹¹

1. **Injury or Overuse:** Repeated stress or overuse of joints, such as frequent knee bending, can

lead to joint damage and elevate the risk of developing OA.

2. **Age:** The likelihood of developing OA increases with age, making it more common in older individuals.
3. **Gender:** Women are more prone to OA than men, particularly after the age of 50.
4. **Obesity:** Excess body weight adds extra strain on joints, especially in weight-bearing areas, increasing the risk of OA.
5. **Genetics:** A family history of osteoarthritis can make an individual more susceptible to the condition.
6. **Occupational Factors:** Jobs that involve frequent knee bending or moderate physical demands can raise the risk of knee OA, as seen through radiographic evidence and more severe joint changes.

Management (Chikitsa)

Ayurvedic management of Sandhivata aims at balancing Vata Dosha, nourishing the joints, and improving mobility. The treatment plan is holistic, encompassing dietary, lifestyle, and therapeutic interventions. The following approaches are commonly employed:

1. Shamana Chikitsa (Palliative Care)

- Herbal formulations: Various herbs and formulations are used for their anti-inflammatory, analgesic, and tissue-rejuvenating properties. Key herbs include:
 - Guggulu (Commiphora mukul): Known for its anti-inflammatory and Vata-balancing effects.¹²
 - Ashwagandha (Withania somnifera): Helps in reducing inflammation and restoring joint strength.
 - Shallaki (Boswellia serrata): Effective in reducing inflammation and promoting joint health.

- Rasna (*Pluchea lanceolata*): A well-known herb for managing joint pain and stiffness.¹³
- Medicated oils and ghee: External application of medicated oils such as Mahanarayana Taila or internally consumed medicated ghee like Mahatikta Ghrita helps in lubricating joints and improving mobility.¹⁴

2. Panchakarma (Detoxification Therapies)

Panchakarma therapies play a crucial role in eliminating toxins, balancing Doshas, and rejuvenating the body:

- Virechana (Therapeutic Purgation): Eliminates aggravated Doshas and helps in balancing Vata.
- Basti (Medicated Enema): One of the most effective treatments for Vata-related disorders, Basti helps in nourishing the tissues and reducing inflammation in the joints.¹⁵

3. Rasayana Therapy (Rejuvenation)

Rasayana drugs help in tissue regeneration and slowing down the degenerative process. Herbs like Ashwagandha, Amalaki (*Embllica officinalis*), and Shatavari (*Asparagus racemosus*) are commonly used to strengthen the bones and joints.

4. Diet and Lifestyle Modifications

- Diet: A Vata-pacifying diet that includes warm, moist, and nourishing foods is recommended. Foods rich in healthy fats, calcium, and vitamins are encouraged, while cold, dry, and processed foods should be avoided.
- Lifestyle: Regular exercises like yoga, light stretching, and walking are recommended to maintain joint flexibility and prevent stiffness.

Modern Research and Ayurvedic Insights

Recent studies have shown the effectiveness of Ayurvedic herbs and therapies in the management of osteoarthritis. Ayurvedic formulations such as Shallaki and Guggulu have been found to possess

anti-inflammatory and cartilage-protecting properties, slowing the progression of osteoarthritis. Panchakarma treatments, particularly Basti, have been shown to improve joint function and reduce pain significantly.

Conclusion

Ayurveda offers a holistic approach to managing Sandhivata, addressing the root cause of joint degeneration through the balance of Vata Dosha. The integrative approach, combining herbal treatments, Panchakarma, and lifestyle modifications, offers an effective alternative or complementary treatment to conventional osteoarthritis management. With its focus on rejuvenation and prevention, Ayurvedic therapies can help alleviate the symptoms of osteoarthritis, improve joint health, and enhance the quality of life for affected individuals.

References :

1. Akinpelu AO, Alonge TO, Adekanla BA, Odole AC. Prevalence and pattern of symptomatic knee osteoarthritis in Nigeria: A community-based study. *Internet J Allied Health Sci Pract.* 2009; 7:3
2. ¹ Prof. (Dr) K.Satyalakshmi *Clinical naturopath yoga A manual for Physician and Students First*
3. Edition 2017, National Institute of Naturopathy, Ministry of Ayush, Bapu Bhavan, Pune Chapter 34, Page No-385
4. Agnivesha, *Dridabala Charak Samhita-Vidyotani Hindi commentary* by Kashinath shastri and Pandit Gorakhanath chaturvedi, Part-2 Chaukhambha Bharati academy, Varanasi2015, chapter chikitsa sthana 28/37, page No. 783
5. *Rugveda Sanhita*, edited by H. H. Wilson Ravi prakasha arya Dehli parimala publication, 10/163/6 page no 588.

6. Agnivesha, Dridabala Charak Samhita-Vidyotani Hindi commentary by Kashinath shastri and Pandit Gorakha nath chaturvedi, Part-2, Chaukhambha Bharati academy, Varanasi2015, chapter chikitsa sthana 28/15-17, page no.779.
7. Vagbhata, Ashtangahridaya Sutrasthana chapter 1 sloka 7-Varanasi: Krishnadas Academy; 1982. P.7
8. Agnivesha, Dridabala Charak Samhita-Vidyotani Hindi commentary by Kashinath shastri and Pandit Gorakha nath chaturvedi, Part -1, Chaukhambha Bharati academy, Varanasi2015, chapter sharir sthan 5/27.
9. Susruta Samhita of Maharshi Susruta Edited with Ayurveda Tattva Sandipika by Kaviraj Ambikadutta Shastri part 1 Sharir Sthan Chapter-15/32
10. Agnivesha, Dridabala Charak Samhita-Vidyotani Hindi commentary by Kashinath shastri and Pandit Gorakha nath chaturvedi, Part -2, Chaukhambha Bharati academy, Varanasi2015, chapter chikitsa sthana 28/37, page No.-783.
11. SusrutaSamhita of Maharshi Susruta Edited with Ayurveda Tattva Sandipika by Kaviraj Ambikadutta Shastri part 1 Nidan Sthan Chapter-1/28. Page No. 298.
12. <https://www.cdc.gov/>
13. Benefits of Guggulu. Available from: Written by Joe King, M.S.05 December, 2018. <http://www.livestrong.com/article/115826-Benefits-guggul>.
14. Bhaisajya ratnavali of kaviraj govind das sen edited with siddhiprada Hindicommentary edited 2014 chaukhamba publishing house vatvyadhirogadhikar ch.26/80 page no.525
15. Bhaisajya ratnavali of kaviraj govind das sen edited with siddhiprada Hindi commentary edited 2014 chaukhamba publishing house vatvyadhi rogadhikar ch.26/77page no.525.
16. Ganesh K. Garde Sarth Vagbhat Anmol Prakashan Pune 2004 Su 1/25 p g 05