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

Gunjan Sabarwal1*, Vikas Prajapati2, Shivakumar S Harti3, Medha Sanjay Kulkarni4

*1PG Scholar, 3Associate Professor, 4Professor, Dept. of Swasthayavritta, All India Institute of Ayurveda, India.
2PG Scholar, Department of Kriya Sharir, Ayurveda & Unani Tibbia College, India.

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. Ashwinikumara had recorded their skill in treating joint diseases and its mention can be found in Rigveda.[5] Samhitagramathas and Samgrahagramathas 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 Strotasdushi causes were analyzed and[7] the following inference can be drawn-
Sandhivata comes under vatavayadhik 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 sopha, Sandhishola (pain in joints), Asthishosha (degeneration).[12]
- In Ashtangangrha 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 Agantuva it can be classified in two varieties.
   i) Nija- Due to vitiation of Vata by Dhatukshaya, Avarana etc
   ii) Agantuva- Due to trauma

Samprapti

From the onset of Dosha Dushya Dushit 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 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 Khavaigunya kut sandhi. This localized Vayu due to its Ruksha, Laghu, Kharadi Guna results in Sandhivata.

2. Avaranajanya
In obeese 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 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

| Dosha   | Vata, Shleshakkapha |
|---------|----------------------|
| Dushya  | Asthi, Majia, Meda   |
| Srotas  | Asthivaha, Majavaha, Medovaha |
| Srotodushti | Sanga     |
| Agni    | Manda          |
| Udbhavasthana | Pakvashaya   |
| Roga Marga | Madhyam      |
| Vyadhiswabhava | Chirkalik     |
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.

AHAHRA

- 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.   | Annavarga    | Godhuma, Raktashali, Masha      |

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

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

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. |
| Snehana          | +      |       | +     | +      | +      |
| Swedana          |        | +      | +     | +      | +      |
| Upanaha          | +      | +      | +     | +      | +      |
| Bandhana         | +      |       | +     | +      |        |
| Abhyanga         |        |         |       | +      | +      |
| Agnikarma        | +      | +      | +     |        | +      |
| Mardana          | +      | +      |       | +      | +      |
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 *Vatavayadhi* and are also effective in OA. Snehanbasti will not only help in decreasing pain but will also promote strength. Studies done with *Shheer balatala 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 *Bhrimghana* effect and stopped further deterioration of *Dhatus* 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*, *Bala*, *Shunthi* have proven results in Sandhivata.

- **Kwath** preparations like *Maharasnadikkwath*, *Rasnaspatakkwath* 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.

**REFERENCES**

1. Prof. (Dr) K.Satyalakshmi Clinical naturopathy-Yoga A manual for Physician and Students First Edition 2017, National Institute of Naturopathy, Ministry of Ayush, Bapu Bhavan, Pune Chapter-34, Page No- 385.

2. Pal CP, Singh P, Chaturvedi S, Pruthi KK, Vij A, Epidemiology of knee osteoarthritis in India and related factors. Indian J Orthop 2016:50:518-22.

3. Akinpelu AO, Alonge TO, Adekana 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

4. Agnivesha, Dridabala Charak Samhita- Vidyotani Hindi commentary by Kashinath shastri and Pandit Gorakhanath chaturvedi, Part-2, Chaukabhama Bharati academy, Varanasi 2015, chapter chikitsa sthana 28/37, page No. 783.

5. Rugveda Sanhita, edited by H.H.Wilson Ravi prakasharya ary 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, Chaukhammba Bharati academy, Varanasi 2015, chapter chikitsa sthana 28/15-17, page no.779.

7. Agnivesha, Dridabala Charak Samhita- Vid yotani Hindi commentary by Kashinath shastri and Pandit Gorakha nath chaturvedi, Part -1, Chaukhammba Bharati academy, Varanasi 2015, chapter sharir sthan 5/27.

8. Vagbhata, Ashtangahridaya Sutrasthana chapter 1 sloka 7- Varanasi: Krishnadas Academy; 1982. P.7

9. Vagbhata, Ashtangahridaya Sutrasthana chapter 1 sloka 7-Varanasi: Krishnadas Academy; 1982. P.7

10. https://www.cdc.gov/

11. Agnivesha, Dridabala Charak Samhita- Vidyotani Hindi commentary by Kashinath shastri and Pandit Gorakha nath chaturvedi, Part – 2, Chaukhammba Bharati academy, Varanasi 2015, chapter chikitsa sthana 28/37, page No.– 783.

12. Susruta Samhita of Maharshi Susruta Edited with Ayurveda Tattva Sandipika by Kaviraj Ambikadutta Shastri part 1 Nidan Sthan Chapter-1/28. Page No. 298.

13. Susruta Samhita of Maharshi Susruta Edited with Ayurveda Tattva Sandipika by Kaviraj Ambikadutta Shastri part 1 Sharir Sthan Chapter-15/32

14. Bhaisajya ratnavali of kaviraj govind das sen edited with siddhiprada Hindi commentary edited 2014 chaukhamma publishing house vatvyadhi rogadhikar ch.26/1 page no.518.

15. Bhaisajya ratnavali of kaviraj govind das sen edited with siddhiprada Hindi commentary edited 2014 chaukhamma publishing house vatvyadhi rogadhikar ch.26/80 page no.525.

16. Bhaisajya ratnavali of kaviraj govind das sen edited with siddhiprada Hindi commentary edited 2014 chaukhamma publishing house vatvyadhi rogadhikar ch.26/77 page no.525.

17. Ebnezar J, Nagarathna R, Yogitha B, Effect of integrated yoga therapy on pain, morning stiffness and anxiety in osteoarthritis of the knee joint: A randomized control study. Int J Yoga. 2012 Jan; 5(1):28-36.

18. Sharon L. Kolasinski et al.2019 American College of Rheumatology/Arthritis Foundation Guideline for the Management of Osteoarthritis of the Hand, Hip, and Knee,149 Arthritis Care & Research, Volume 72, Issue 2, February 2020, Pages 149-162

19. P.K.Rai, A.K.Singh, O.P.Singh, N. P. Rai, A. K. Dwivedi Effi cacy of leech therapy in the
management of osteoarthritis (Sandhivata) April 1, 2020, IP: 47.30.131.246

20. Ganesh K. Garde Sarth Vagbhat Anmol Prakashan Pune 2004 Su 1/25 pg 05

21. Effect of Anuvasana Basti with Ksheerabala Taila in Sandhigata Vata (Osteoarthritis), Pradeep L. Grampurohit, Niranjan Rao, and Shivakumar S. Harti Ayu. 2014 Apr-Jun; 35(2): 148–15.

22. Efficacy of Rajayapana Basti in Janu Sandhigata Vata w.r.t to Osteoarthritis of Knee Joint, Ashwini H. A, Kiran. M. Goud, Lolasri SJ, Vishal K. Swamy. International Ayurvedic Medical Journal.: Volume 7, Issue 4, April – 2019. 514-518.

23. Mangal A, Shubhasree MN, Devi P, Jadhav AD, Prasad SA, Kumar K, Otta S, Dhiman KS, Clinical Evaluation of Vatari Guggulu, Maharasnadi Kwatha and Narayan Taila in the Management of Osteoarthritis Knee, PMID: 28757225 PMCID: PMC5607387 DOI: 10.1016/j.jaim.2017.02.001

24. Benefits of Guggulu. Available from: Written by Joe King, M.S.05 December, 2018. http://www.livestrong.com/article/115826-benefits-guggul.

25. Nirmal P et al, Influence of six medicinal herbs on collagenaseinduced osteoarthrosis in rats. Am J Chin Med. 2013;41(6):1407-25.

26. Paramdeep G. Efficacy and tolerability of ginger (Zingiber officinale) in patients of osteoarthritis of knee. Indian J Physiol Pharmacol. 2013 Apr-Jun; 57(2):177-83.

27. Clinical Study of Rasnapanchaka Kwath in Sandhigata Vata Vaidya Patil Arati S, Dr.Parashurami S.P, International Ayurvedic Medical Journal, Volume 4; Issue 02; January, 2016. Pp.106-115.

Cite this article as:
Gunjan Sabarwal, Vikas Prajapati, Shivakumar S Harti, Medha Sanjay Kulkarni. A Review on Sandhivata (Osteoarthritis) and its Management through Ayurveda. International Journal of Ayurveda and Pharma Research. 2020;8(6):85-89.

Source of support: Nil, Conflict of interest: None Declared

Address for correspondence
Dr Gunjan Sabarwal
PG Scholar,
Dept. of Swasthavritta,
All India Institute of Ayurveda,
India.
Email: sabarwalgunjan@gmail.com

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.