

SIGNIFICANCE OF SHATAVARI TAILA MATRA BASTI IN MANAGEMENT OF SANDHIGATA VATA WSR TO OSTEOARTHRITISArchana Singh¹, Ashutosh Dwivedi², Sanjeev Khuje³¹Asst. Prof., Dept. of Rog Nidan Evam Vikriti Vigyan, Govt. Ayurveda College, Rewa, Madhya Pradesh, India²Asst. Prof., Dept. of Swasthviritta Evam Yoga, Govt. Ayurveda College, Rewa, Madhya Pradesh, India³Asso. Prof. & Head, Dept. of Rog Nidan Evam Vikriti Vigyan, Govt. Ayurveda College, Rewa, Madhya Pradesh, IndiaCorresponding Author: archi04singh@gmail.com<https://doi.org/10.46607/iamj2110042022>

(Published Online: April 2022)

Open Access

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Article Received: 27/03//2022 - Peer Reviewed: 01/04/2022 - Accepted for Publication: 02/04/2022

**ABSTRACT**

Sandhigata Vata can be correlated with Osteoarthritis in modern medical science certain extent. The disease Osteoarthritis is the most common form of chronic disorder of synovial joints. It is characterized by progressive degenerative changes in the articular cartilages over the years, mostly involving the weight bearing joints. An estimated 10% to 15% of all adults aged over 60 have some degree of Osteoarthritis, with prevalence higher among females than males. In Ayurveda *Basti* (medicated enema) is considered the best treatment for *Vata Vyadhi*, and *Shatavari Taila* has the distinct property of *Vata Shamana* and *Snehana*. In this article, a detailed review of *Shatavari Tail*, its content and mode of action as *Matra Basti* has been presented to achieve effective relief in various symptoms of osteoarthritis.

Keywords: *Matrabasti*, *Shatavari Taila*, *Sandhigata Vata*, Osteoarthritis.**INTRODUCTION**

Osteoarthritis (OA) arises as the most prevalent joint disease associated with pain and disability in past few years. According to the Global Burden of Disease 2010 study, osteoarthritis of the hip and knee

joint was ranked as the 11th highest contributor to global disability.¹ Incidence of the disease increasing continuously due to the practice of erratic lifestyle and unwholesome food habits. As it is a degenerative

disorder the prevalence of the disease is set to increase in parallel with the increase in the number of people aged 60 years and older and the rise in obesity across the world. However, the detailed molecular mechanisms of initiation and progression of OA remain poorly understood many anatomical studies demonstrated that OA is not exclusively a disorder of articular cartilage but also affects adversely the whole joint specially peri-articular bone, synovial joint lining, and adjacent supporting connective tissue elements. Being a degenerative disease OA worsens over time, resulting in chronic pain and stiffness in joints, and can become severe enough to make it difficult in performing daily tasks. Disability due to pain and other symptoms of OA leads to depression and sleep disturbances in the affected person, therefore, reducing productivity. Currently, apart from surgery or joint replacement, there are no interventions available to restore the degraded joint structure. So, it becomes essential to develop more effective treatment strategies for OA, and measures that can prevent or slow down the degenerative progression of the disease. In Ayurveda, it can be correlated with *Sandhigata Vata* described under the heading of *VataVyadhi* and can be effectively managed with the treatment principles of Ayurveda.

Aims & Objectives:

The aim of this concise-review paper is

1. To understand the Pathophysiological aspect of *Sandhigata Vata*.
2. To evaluate the effectiveness of *Shatavari Taila Matra Basti* as a measure in the management of *Sandhigata Vata*.

Material & Methods:

The review of various *Ayurvedic Samhitas* and their commentaries had been performed and an online database was searched using the keywords '*Sandhigata Vata*, osteoarthritis, and *Matrabasti*'.

Sandhigata Vata (Vitiated Vata seated in Joints):

When aggravated *Vata* gets accumulated in joints and causes destruction and damage to different components of joints such as articular cartilage, subchondral bone, synovial tissue, and meniscus resulting in pain, swelling, and difficulty in

movement, the condition is known as *Sandhigata Vata* (compared to osteoarthritis in modern medicine).² In Ayurveda it is firstly described by *Acharya Charaka* under *Vatavyadhi* as *Sandhigata Anila* manifest as *Shotha* (swelling) which on palpation feels like a bag filled with air and *Shula* during *Prasarana* and *Akunchana* (pain during flexion and extension of the joints).³ *Acharya Sushruta* also mentioned *Shula* and *Shotha* as symptoms of the disease leading to the reduction of the movement of the affected joint (*Hanti*).⁴ *Madhavakara* adds *Atopa* (crepitus in joint) as an additional feature of *Sandhigata-vata*.⁵

The US Centers for Disease Control and Prevention and the Mayo Clinic listed modifiable and non-modifiable risk factors for osteoarthritis, which are comparable to the etiological factors of *Vata Vyadhi* in Ayurveda. The most important OA risk factors are age, gender, obesity, joint trauma/sports injuries, certain occupations that brought repetitive stress on a particular joint, genetics, bone deformities, metabolic disease (i.e. diabetes), endocrine disorders, and having previously rheumatic diseases such as RA and gout.⁶

The risk of developing *Vata Vyadhi* increases, the same as incidences of most types of arthritis increase with age, and OA is certainly no exception. Females are significantly at higher risk of developing OA. Aging, Gender, Metabolic disorders, and endocrine disorders vitiate the *Vata Dosha* following the pathogenesis of diminution of nourishment of tissues i.e., *Dhatukshayajanya Vata prakopa*, whereas overweight, bone deformities, injuries, repetitive stress on a particular joint, having a history of rheumatic diseases such as RA and gout vitiates the *Vata Dosha* by damaging the structure of the joint.

The pathologic underpinnings of this disease are attributed to the vitiation of *Vata* and *Kapha Dosha*, affecting the *Asthi* (bone), *Sandhi* (joint), *Mamsa* (muscle), and *Snayu* (ligament). The pathogenesis of *Sandhigata Vata* can be summarized under the headings of *Nirupastambhita Vata* and *Upastambhita Vata*. When the *Vata* gets vitiated because of its causative factors without the

involvement of *Avarana* of *Kapha dosha* it is known as *Nirupstambhita Vata*, and when it accumulates in the *Sandhi* manifest as *Nirupastambhita Sandhigata Vata*. Whereas when there is an involvement of *Avarana* of *Kapha Dosha* in vitiation of *Vata* it is known as *Upstambhita Vata*, and when it accumulates in the *Sandhi* manifest as *Upastambhita Sandhigata Vata*. *Acharya Charaka* has followed the treatment principle of *Vatavyadhi* (repeated use of *snehana*, *svedana*, *basti*, and *mrudu virechana*) for the management of *Sandhigata vata*, whereas *Acharya Sushruta* has described specific treatment i.e. *snehana*, *upanaha*, *agnikarma*, *bandhana*, and *unmardana* for *Sandhigata Vata*.^{7,8} So, comprehensive management of this condition in Ayurveda comprises a judicious combination of *Bahya chikitsa* (external therapies such as *Janu Basti*, *Abhyanga*, *Agnikarma*, *Jalaukavacharana*, *Basti* etc.) and *Abhyantara Chikitsa* (internal medication include *Churna*, *Kashaya*, *Vati*, etc.). Active lifestyle, maintaining healthy body weight, exercise, *yogasana* may help to slow down the progression of *Sandhigata-vata* and thus may help to improve pain and joint function.⁹

To find the various effective measures for *Sandhigata Vata*, *Matra Basti* can be an imperative choice, as *Acharya Charaka* has mentioned in *Agradravayas "Basti Vata Haranam Shrestham"* *Matra Basti* is a svariant of *Anuvasana Basti*, administered in small doses regularly. It is a much more economical and convenient as well as safest and uncomplicated form of *Basti* compared to *Sneha Basti* and *Anuvasana Basti*.

Matra Basti –

Amount: According to *Acharya Chakrapani*, *Sneha Basti* contains 6 *Pala* of *Sneha*, *Anuvasana Basti* contains 3 *Pala* of *Sneha*, and *Matra Basti* contains 1½ *Pala* of *Sneha*. From the above references, it can be said that the dose of *Matra Basti* is approximately 60 ml.

Elimination Time: The normal *Pratyagamana Kala* of *Sneha Basti* is 3 *Yama* i.e., 9 hours. As *Matra Basti* is the type of *Sneha Basti*, its *Pratyagamana Kala* (time for elimination) is also 3 *Yama* i.e., 9 hours.

There is no harm if *Matra Basti* is retained in the body, because while discussing *Anuvasana Basti*, *Acharya* has explained that it does not injure the body, even in the event of its being retained in the body for a whole day. Also, the dose of *Sneha* in *Matra Basti* is very small which can get easily absorbed in the body without coming out. It is believed that *Sneha Basti* should retain in the body. If *Basti* returns much earlier, it cannot produce the described *Sneha* effect in the body.¹⁰

Restrictions: The *Matra Basti* does not demand any regimen of diet or behavior. It can be given at any time and in all seasons without any restriction. Whereas, *Acharya Vriddha Vagbhata* has restricted the day sleep after being treated with *Matra Basti*.¹¹

Matra basti in Sandhigata Vata:

Numerous research works have been carried out to study the effect of different treatment strategies for *Sandhigata Vata*. According to a scientific review on *Janu Sandhigata Vata* and osteoarthritis, in which all research work recorded under the AYUSH Portal System, Ministry of AYUSH, Government of India, and PubMed conducted till January 2016 were reviewed, reported that out of all, 13 articles were of Ayurveda medical system. Out of these 13, in 12 *Panchakarma* is taken as a treatment, in which 4 studies included *Matra Basti*.¹² According to an inference of one more clinical study on *Sandhigata Vata* "Sarvang Abhyanga-Swedana and *Matra Basti* serve all the needs which are required for the *Shamana* of *Sandhigata vata*".¹³ Another clinical trial on *Karpasasthyadi Taila Matra Basti* in *Janu Sandhigata Vata* showed highly significant results.¹⁴ According to various reviews it can be concluded that *Matra Basti* is beneficial for joints as it lubricates the joints and strengthens the structures. In the case of *Sandhigata Vata* it relieves pain and associated conditions. It also helps in preventing the progression of the disease process and degeneration.^{15,16,17} *Basti Chikitsa* is considered the most potent treatment of *Vata Vyadhi*. *Matra Basti* has a special place among all the *Bastis* and is highly praised because of its extensive and multi-dimensional use. It can be administered at any time. It doesn't cause any

complications. There are no restrictions identified for the administration of *Matra Basti*. It can be administered in small doses daily until the pain and associated symptoms related to osteoarthritis get relieved.¹⁸

Shatavari Taila: *Shatavari Taila* has the great property of *Vata Shamana* and *Snehana*, it applies to all types of *Vata Vyadhi*. The *Aushadha dravyas* used in *Shatavari Taila* are easily available and less costly. *Acharya Yogaratnakara* & in *Bhaishjyarnavali* it is indicated that *Shatavari Taila Sneha Basti* produces a significant effect in *Sandhigata Vata*.¹⁹

Table 1: Contents of *Shatavari Taila*:²⁰

S.No.	Drug	Botanical Name	Amount
1	<i>Kushtha</i> (Indian Costus tree)	<i>Desmostachya bipinnata</i> Stapf	40 grams
2	<i>Devadaru</i> (Heartwood)	<i>Cedrus deodara</i> (Roxb.)	40 grams
3	<i>Ela</i> (Cardamom)	<i>Elettaria Cardamomum</i>	40 grams
4	<i>Priyangu</i> (Perfumed cherry)	<i>Callicarpa macrophylla</i> Yahl	40 grams
5	<i>Tagara</i> (Indian Valerian)	<i>Valeriana wallichii</i>	40 grams
6	<i>Dalachini</i> (Cinnamomum bark)	<i>Cinnamomum zeylanicum</i> Blume.	40 grams
7	<i>Tejapatra</i> (Indian bay leaf)	<i>Cinnamomum tamala</i>	40 grams
8	<i>Renuka</i> (Chaste tree)	<i>Vitex negundo</i> Linn.	40 grams
9	<i>Nakhi</i> (Creeping fig)	<i>Capparis zeylanica</i>	40 grams
10	<i>Jatamansi</i> (Spikenard)	<i>Nardostachys jatamansi</i> DC.	40 grams
11	<i>Sarja (Rala)</i>	<i>Vateria indica</i> Linn.	40 grams
12	<i>Sugandhbala</i> (Indian Valerian)	<i>Valeriana wallichii</i>	40 grams
13	<i>Raktachandana</i> (Red Sandl wood)	<i>Pterocarpus santalinus</i> Linn.	40 grams
14	<i>Vacha</i> (Sweet flag)	<i>Acorus Calamus</i>	40 grams
15	<i>Shailaiya/Chharilla</i> (Stone Flower)	<i>Parmelia perlata</i> Huds.	40 grams
16	<i>Ushira</i> (Khus)	<i>Vetiveria zizanioides</i> (Linn.)	40 grams
17	<i>Manjishtha</i> (Indian Madder)	<i>Rubia cordifolia</i> Linn.	40 grams
18	<i>Sarala</i> (Chir pine)	<i>Pinus roxburghii</i>	40 grams
19	<i>Agaru</i> (Eagle wood)	<i>Aquilaria agallocha</i>	40 grams
20	<i>Nagabala</i> (Country Mallow)	<i>Grewia Hirsuta</i>	40 grams
21	<i>Rasna</i> (Pluchia)	<i>Pluchea lanceolata</i>	40 grams
22	<i>Asvagandha</i> (Winter cherry)	<i>Withania somnifera</i>	40 grams
23	<i>Shatavari</i> (Wild carrot)	<i>Asparagus racemosus</i>	40 grams
24	<i>Punarnava</i> (Spreading hogweed)	<i>Boerhaavia diffusa</i> Linn.	40 grams
25	<i>Mishreya</i> (Fennel fruit)	<i>Foeniculum vulgare</i> Mill	40 grams
26	<i>Saindhava Lavana</i> (Rock salt)	<i>Sodium Chloride</i>	40 grams
27	<i>Tila taila</i> (Sesame oil)	<i>Sesamum indicum</i> Linn.	4 litres
28	<i>Shatavari Kwath</i> (Decoction)	<i>Asparagus racemosus</i>	4 litres
29	<i>Godugdha</i> (Cow milk)	-	4 litres

Table 2: Properties of Contents of *Shatavari Taila*:²¹

Drug	Rasa	Guna	Virya	Vipaka
<i>Kushtha</i>	<i>Madhura, Kashaya</i>	<i>Laghu</i>	<i>Shita</i>	<i>Madhura</i>
<i>Devadaru</i>	<i>Tikta</i>	<i>Laghu, Snigdha</i>	<i>Ushna</i>	<i>Katu</i>
<i>Ela</i>	<i>Madhura, Katu</i>	<i>Laghu, Ruksha</i>	<i>Shita</i>	<i>Katu</i>
<i>Priyangu</i>	<i>Tikta, Kashaya</i>	<i>Ruksha</i>	<i>Shita</i>	<i>Katu</i>
<i>Tagara</i>	<i>Katu, Tikta, Kashaya</i>	<i>Laghu, Snigdha</i>	<i>Ushna</i>	<i>Katu</i>
<i>Dalachini</i>	<i>Madhura, Katu, Tikta</i>	<i>Laghu, Rukshna, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>
<i>Tejapatra</i>	<i>Madhura, Katu, Tikta</i>	<i>Laghu, Ruksha, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>
<i>Renuka</i>	<i>Katu, Tikta</i>	<i>Laghu</i>	<i>Shita</i>	<i>Katu</i>
<i>Nakhi</i> ²²	<i>Kashaya, Katu, Madhura</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>
<i>Jatamansi</i>	<i>Tikta, Kashaya</i>	<i>Laghu</i>	<i>Shita</i>	<i>Katu</i>
<i>Sarja (Rala)</i>	<i>Katu, Tikta, Kashaya</i>	<i>Snigdha, Ushna</i>	<i>Ushna</i>	<i>Katu</i>
<i>Sugandhbala</i>	<i>Katu, Tikta, Kashaya</i>	<i>Snigdha, Ushna</i>	<i>Ushna</i>	<i>Katu</i>
<i>Raktachandana</i>	<i>Madhura, Tikta</i>	<i>Guru, Ruksha</i>	<i>Shita</i>	<i>Katu</i>
<i>Vacha</i>	<i>Katu, Tikta</i>	<i>Laghu, Tikshana</i>	<i>Ushna</i>	<i>Katu</i>
<i>Ushira</i>	<i>Madhura, Tikta</i>	<i>Laghu, Snigdha</i>	<i>Shita</i>	<i>Madhura</i>
<i>Manjishtha</i>	<i>Madhura, Tikta, Kashaya</i>	<i>Guru</i>	<i>Ushna</i>	<i>Katu</i>
<i>Sarala</i>	<i>Madhura, Katu, Tikta</i>	<i>Laghu, Snigdha, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>
<i>Agaru</i>	<i>Katu, Tikta</i>	<i>Laghu, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>
<i>Nagabala</i>	<i>Madhura, Kashaya</i>	<i>Guru, Snigdha</i>	<i>Shita</i>	<i>Madhura</i>
<i>Rasna</i>	<i>Tikta</i>	<i>Guru</i>	<i>Ushna</i>	<i>Katu</i>
<i>Asvagandha</i>	<i>Tikta, Kashaya</i>	<i>Laghu</i>	<i>Ushna</i>	<i>Madhura</i>
<i>Shatavari</i>	<i>Madhura, Tikta</i>	<i>Guru, Snigdha</i>	<i>Shita</i>	<i>Madhura</i>
<i>Punarnava</i>	<i>Madhura, Tikta, Kashaya</i>	<i>Rukshna</i>	<i>Ushna</i>	<i>Madhura</i>
<i>Mishreya</i>	<i>Madhura, Katu, tikta</i>	<i>Laghu, Ruksha</i>	<i>Shita</i>	<i>Madhura</i>
<i>Saindhava</i> ²³	<i>Lavana, Madhura</i>	<i>Guru, Snigdha</i>	<i>Shita</i>	<i>Madhura</i>
<i>Tila taila</i> ²⁴	<i>Madhura</i>	<i>Suksma, Guru, Sara</i>	<i>Ushna</i>	<i>Madhura</i>
<i>Shatavari</i> ²⁵	<i>Madhura, Tikta</i>	<i>Guru, Snigdha</i>	<i>Shita</i>	<i>Madhura</i>
<i>Godugdha</i> ²⁶	<i>Madhura</i>	<i>Guru, Snigdha</i>	<i>Shita</i>	<i>Madhura</i>

DISCUSSION

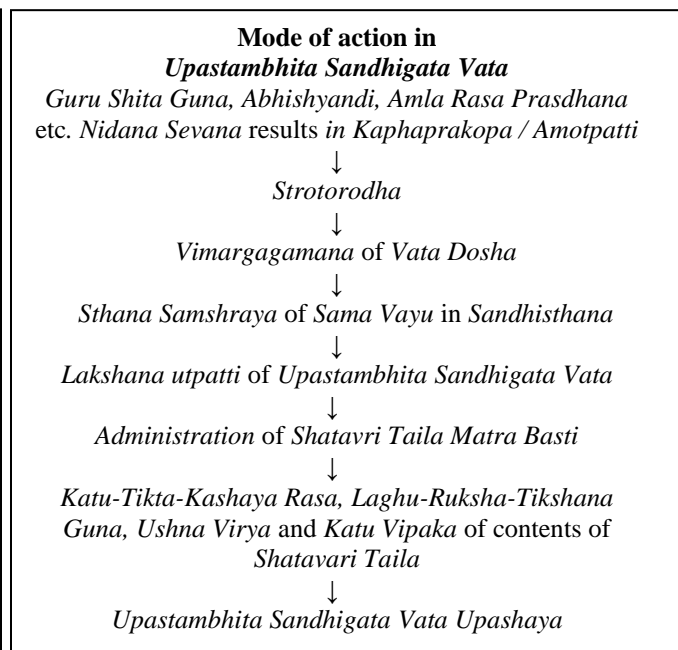
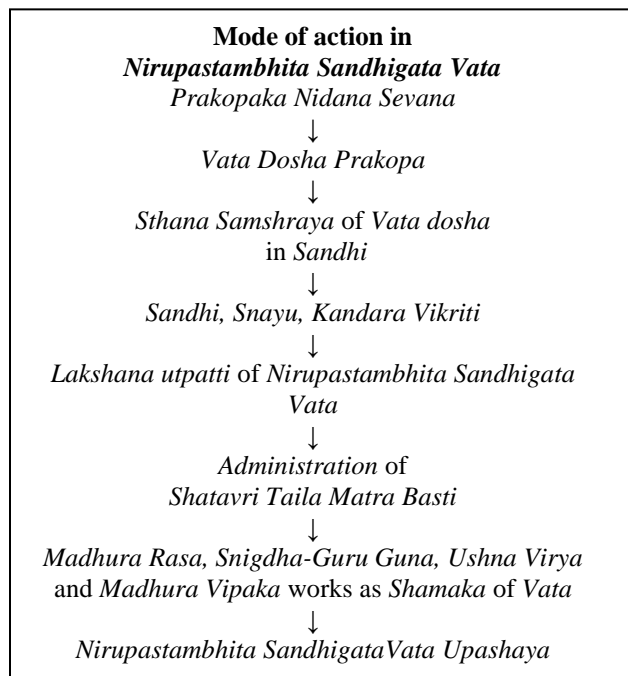
In *Vridhastha*, all *Dhatu*s undergo the process of *Kshaya*, thus resulting in vitiation of *Vata Dosha* and individuals become prone to many diseases especially the disease due to *Vata Dosha*. *Sandhigata Vata* is the most common degenerative disorder of the elderly, as *Sandhi* is also accepted as the natural site of *Vata Dosha*, vitiated *Vata* depletes the strength of the joint and due to *Dhatu Kshaya* i.e., depletion of *Asthi Dhatu* damage also occurs in joints. *Sandhigatavata* manifests with its classical sign and symptoms such as *Shula*, *Shotha*, *Stambha*, *Akunchana Prasarana Vedana*, *Sparsha-asahyata*, *Sphutana*, etc. at the joints. Modern medical science has its limitation in managing this progressive

degenerative disease. It can provide conservative or surgical treatment, which is highly symptomatic and has various troublesome side effects. In Ayurveda, different treatment modalities such as *Snehana* (oleation), *Swedana* (fomentation), *Mridu Samshodhana*, *Basti* (medicated enema), *Vatahara Aushadha* are mentioned for such types of conditions which are quite effective in treating the symptoms and delaying the further damage of joint.²⁷

The administration of *Matra Basti* with medicated oil is one of the best effective treatments for *Sandhigata Vata*. When the *Basti* (medicated oil) is administered through the anus, it reaches first to the *Pakvashaya* (large intestine) which is the main site of *Vata Dosha*, and then it pacifies *Vata Dosha*. According to *Dalhana*

Pakvashaya is the site of *Purishadharakala* which is accepted the same as *Asthidhara Kala*.²⁸ It means the *Basti* acts directly on *Asthidhara Kala*. *Acharya Sushruta* has mentioned that 6th *Basti* nourishes *Mamsa Dhatu*, 7th *Basti* nourishes *Meda Dhatu*, 8th *Basti* nourishes *Asthi Dhatu* and 9th *Basti* nourishes *Majja Dhatu*.²⁹ Thus, through *Basti*, we achieve pacification of *Vata Dosha* and nourishment of *Asthi Dhatu*, and by this accomplish the pacification of the symptoms of *Sandhigatavata* by breaking the *Samprapti*. According to modern medical science, as *Basti* is concerned, in the trans rectal route, the rectum has a rich blood and lymph supply, and the drug can cross the rectal mucosa like other lipid membranes. Thus, by entering general circulation, *Basti* drugs act on the full body.³⁰

Mode of Action: *Madhura Rasa, Snigdha-Guru Guna, Ushna Virya, and Madhura Vipaka* of contents of *Shatavari Taila* work on *Vata Dosha* which has acquired *Upashaya* of *Nirupastambhita Sandhigata Vata* whereas *Katu-Tikta-Kashaya Rasa, Laghu-Ruksha-Tikshana Guna, Ushna Virya and Katu Vipaka* of contents of *Shatavari Taila* work on *Kapha Dosha* which removes the *Strotorodha* results in *Vata Shamana* and has acquired *Upashaya* of *Upastambhita Sandhigata Vata*. Contents of *Shatavari taila* hold properties like *Vedanasthapana* (analgesic), *Shothahara* (anti-inflammatory), *Balya, Rasayan, Sandhaniya*, etc. Most of the contents show pharmacological activities such as anti-inflammatory, analgesic, antioxidant, immune modulator, etc. By these properties, *Shatavari Taila* produces beneficial effects on *Sandhigata Vata*.



CONCLUSION

Ayurveda has emphasized various modalities of treatment of *Sandhigata Vata* including *Shamana* (palliative), *Shodhana* (detoxification), local treatments like *Upanaha* (poultice application), and *Agnikarma* (cautery), etc., showing satisfactory relief, but due to stubborn nature of the disease it does not pacifies. So, a multi-arm treatment provides a better

approach to managing the condition at different stages. In cases, where degeneration of joint tissues starts to occur administration of *Matra Basti* with medicated oil such as *Shatavari Taila* can be a better choice for treatment of *Sandhigata Vata*, as it is easy to administer, cost-effective, without any side effects, and produces prolong relief of symptoms.

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Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Archana Singh et al: Significance Of Shatavari Taila Matra Basti In Management Of Sandhigata Vata w.s.r To Osteoarthritis. *International Ayurvedic Medical Journal* {online} 2022 {cited April 2022} Available from: http://www.iamj.in/posts/images/upload/981_988.pdf