

**ROLE OF JALAUKAVACHARANA IN JANU SANDHIGATA VATA W.S.R. TO  
OSTEOARTHRITIS**Vd Varsha Gogate\*<sup>1</sup>, Vd Pradip Yadarao Randive<sup>2</sup> and Vd Sneha Tiwari<sup>3</sup><sup>1</sup>Professor, Dravyaguna Department SMDA College Uttarkashi Uttarakhand.<sup>2</sup>Assistant Professor *Kaumarbhritya* Department Om Ayurvedic Medical College & Hospital, Betul.<sup>3</sup>Assistant Professor *Kayachikitsa* Department of shri K.R .Pandav Ayurved College, Nagpur.**\*Corresponding Author: Vd Varsha Gogate**

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**INTRODUCTION**

Osteoarthritis, commonly known as degenerative joint disease, is a condition in which the diarthrodial joint fails. It is the most common joint disease of humans characterized by breakdown of joint cartilage. It is produced by mechanical stress on the joints and manifests as joint pain, swelling, stiffness, and other symptoms. Among elderly, knee osteoarthritis is the leading cause of chronic disability. When compared to males, the prevalence of this condition rises with age and is higher in females (25%) than in males (16%). In Allopath, huge range of treatment such as Analgesics, Anti-inflammatory, Muscle relaxant, Calcium and Vitamin-D Supplements and Steroids along with Physiotherapy are available but, have limited prognosis due to untoward effects after prolong use. This leaves a substantial space for Ayurvedic treatment which can cope-up with the sign and symptom of degenerative Knee osteoarthritis. This disease can be co-related with Janu Sandhigata Vata due to resemblance in sign and symptoms of Sandhigata Vata such as Sandhi Shula, Shotha, Stambha, etc. at the affected joints. Ayurveda offers various treatment alternatives for Sandhigat Vata such as panchkarma modalities Snehana, Swedana, Basti, Sthaniklepa, Raktamokshan, Agnikarma etc. Adjuvant to Vatakaphashamak (Vata-Kapha pacifier) and Dhatuvaradhan herbal medicines for palliative care. Further, in Sushruta Samhita, bloodletting by means of Leech has been advocated in the inflammatory condition like sandhigata vata.

Sandhigata Vata is the one of the most common Vatavyadhi which mainly occurs in Varidhavastha due to Dhatukashya and other Vataprakpoka Nidan.

Human body is made of Panchmahabhuta. As all their attributes are up present in the rakta also, the attributes being fleshy odour, fluidity, redness, movement and lightness represents Prithvi, Jala, Agni, Vaayu, and Akasha respectively. Rakta is said to be the body's mula or root, and it plays a significant role in providing "Jivan" to the body. Rakta, as vital as Jiva and one of the Prayatana, requires special attention and protection. Shudhdarakta is said to be responsible for Bala, Vara, Sukha, and Ayuhy, according to Acharya Charaka. This is all of importance about rakta in human body. So if rakta gets vitiated by any hetu, it can cause Raktapradoshajavyadhi. The therapeutic intervention suggested in samhitas is Raktamokshana. It is regarded as one of the shodhana methods. The means employed for Raktamokshana vary depending on a variety of criteria. Blood should be let out by Shinga, Jalauka, and Alabu, correspondingly, in the case of Raktaduhi by Vata, Pitta, and Kaphadosha. Raktamokshana is mostly performed nowadays by Jalaukaawacharaa and Siravyadha. The Raktamokshana has been discussed in

depth by Acharya Sushruta, Vagbhata. We find separate chapters of Raktamokshana in Sushruta Samhita and Ashtanga Sangraha. Among various methods of Raktamokshana, Jalaukaawacharaa is most convenient method. In ayurvedic text Jalaukaawacharaa is advised in many diseases.<sup>[4]</sup>

They are of two types Savisha (Poisonous), Nirvisha (Nonpoisonous). Savisha are born from the urine, excrete and putrefied (decayed) dead bodies of poisonous fish, insects in dirty water. Nirvisha have large body. They are strong, they drink blood quickly. They are voracious. They are born from putrefied (decayed), Padma (Lotus), Utpala (white lotus), Nallina (slight red lotus), Kumuda (lily), Saygandhika (highly fragrant lily), Kvalaya (red lily), Pundanke (very white lotus), Saivata (algae). They live in clean water. These live in places where more amount of fragrant water is found. They do not feed on dirty foods. There are no direct references to samprapti of januandhigatavata in Ayurvedic literature. For a better understanding of the Samprapti of Januandhigatavata, we can look at the general Samprapti of Sandhivata-Vatavyadhi. As indicated by Acharya Charaka, the Samprapti-Nidana sevana aggravates Vata, and Prakupita Vata accumulates in Riktasrotas, causing generalized and

localized diseases. As the pathogenesis proceeds, the patient may acquire clinical indications of Janu Sandhigata Vata (Osteoarthritis). When vitiated Vata Dosha forms Sthana Samsraya in the Janusandhi Knee (joint), it produces inflammation in the knee joints, resulting in discomfort, dislocation, and loss of function.<sup>[5]</sup>

### Aim

#### The role of Jalaukaavacharana in Janusandhigata Vata

### Objective

- To observe the function of Jalaukaavacharana in JanuSandhigata Vata.
- To study the different modes of management of Janu Sandhigata Vata.

### MATERIAL AND METHODS

This article contains an organized literature search of PubMed, Google Scholar and FDA database. Research work from different articles and thesis which shows the role of Jalaukaavacharana in Janu Sandhigata Vata. Because this is a research study, all relevant content is searched for disease and treatment aspects in Ayurvedic classics like the Samhitagranthas, Sangrahas, Nighantus, and other books, which is then considered and analyzed to arrive at a comprehensive concept in the management of Janu Sandhigata Vata.

### Need of study

Leech therapy provided quick symptomatic alleviation in pain and swelling in this clinical case study, and the patient was pleased with the results. Tenderness and restricted joint movements were also eased gradually but totally with this unique Ayurvedic treatment, as were symptoms such as crepitation and stiffness in joints.

### RESULTS AND DISCUSSION

#### Mechanism of action of leech therapy

The most painful portion surrounding the knee joint is treated with Nirvish Jalauka (Nonpoisonous Leeches-Hirudo medicinalis). According to the 'gate control theory,' the overwhelming sensory stimulus supplied by the pain and burning sensation of a Leech bite can help to alleviate the patient's symptoms. Hirudin slows blood coagulation by binding to thrombin, according to the research of the components of Medicinal Leech saliva. Calin prevents platelet aggregation caused by collagen. Fibrin is dissolved by destabilase. Hirustasin inhibits kallikrein, trypsin, and neutrophilic cathepsin G, while bdelin inhibits trypsin and functions as an anti-inflammatory; Eglin has anti-inflammatory properties and inhibits the function of cathepsin G, also known as carboxypeptidase. Histamine like chemical, acetylcholine serves as a vasodilator, and anaesthetic substance induces anaesthesia at the bite site.<sup>[8]</sup>

### Reduction of weight

Obesity is known to be a contributing factor to knee Osteoarthritis. Excess weight puts a strain on the joint, which can lead to injury. In overweight people, a 5% weight loss results in an 18% improvement in total function. After determining the Dosha and Dushyas, the procedures Udwartana and Lekhana Basti should be carried out with caution.

### Rasayan therapy

Dhatushaya is one the factor of Janu sandhigata vata .frequently in Vriddhavastha. Dhatus is nourished and Dhatukshaya is conquered with the help of a Rasayana medication. As a result, it should be utilized to treat Sandhigata Vata.

### Basti

Mata basti and teekti sheera basti is useful in the treatment of Janu sandhigata vata.

**Agni karma:** Agnikarma is a nonpharmacological, parasurgical treatment for pain relief (OA of knee joint). It can be done by process direct and indirect methods.

**Upanaha sweda:** Sandhigata Vata is a kind of Vatavyadhi, and one of the best therapies is Upanaha sweda. The Vatavyadhihara Upanaha is much beneficial in the patient of Sandhigata Vata by relieving the local pain as it contains all Ushnaviryatmak, Tikshna, Vataghna, Vedanasthapana and Shothahara Dravyas.

**Pathyapathy:** Due to Vata Prakopaka Ahara Vihara, Sleshaka Kapha Kshaya and Vata Prakopa, Dhatu Kshaya, Sthoulya, and Vardhakya have a vital role to play in Janusandhigata Vata manifestation. Vagbhata calls it a Vatavyadhi, one of the Ashta Maharoga. Godhuma (Wheat), Masha (Blackgram), Raktashali (Redrice), Draksha (Grapes), Badara (Dry jujube), Madhuka (Sweet), Ushnajala (Hot water), Shritashita Jala are some of the diets that are suggested (Hot and cold water). Atapa Sevana is the Pathya Viharas (Sitting in sunlight). Yava (Barley), Chanaka, Gadarbha Dugdha, Sheetajala (Cold Water), Naveena Madya (New Fermentation), Shushka Mamsa (Dry Meat), Jambu are all recommended by Apathya for Sandhigata Vata. Chinta (Tension), Ratrijagarana (Waking late at night), Vega Sandharana (Holding natural desires), and Chankramana are some of the Apathya Vihara listed in Sandhigata Vata (Walking).

### CONCLUSION

According a principle of Utpatti-Sthiti-Laya (Generation Operation-Destruction), Rakta plays role of sthiti for human body. "Raktam Jivam ITI Sthiti". When rakta gets vitiated, sthiti also gets destructed and it is called as Vikruti. When this dushtarakta gets out from body, sthiti getting again established and Raktaplayes Prakrut Karma of itself. Therefore, Jalaukaavacharana is most effective in such Raktdushtijanyavikaras. After the overall assessment of the procedure for their efficacy on Janu

Sandhigata Vata, there has shown in edge in Jalaukavacharana method for overall other methods of management. There were no complications and adverse reactions reported in the above trial validating the safety of methods. Hence these procedures are found to be very much safe, simple, cost-effective, easily administered in the patients of Janu Sandhigata Vata. The energetic chemicals in leech saliva, as well as their close release (inside the synovial fluid), are worth investigating further. No other pharmacologic drug now has such long-term effects following a single local dosing.

#### ACKNOWLEDGEMENT

More research into the anti-inflammatory substances found in leech saliva should help to improve the effectiveness of recently developed strong materials for treating osteoarthritis. On the premise of the above pilot take a look at us will finish that leech remedy is useful in discount of pain, tenderness, stiffness, crepitus, and swelling with inside the sufferers of osteoarthritis. With the assist of leech remedy we will enhance the first-class of existence of the arthritis sufferers. We can keep away from the risks of lengthen use of analgesic, anti-inflammatory pills with the aid of using the usage of leech remedy.

#### CONFLICT OF INTEREST

The authors declare that they have no competing interests.

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