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# CLINICAL STUDY OF SAHACHARTAILA JANUBASTI IN JANU-SANDHIGATA VATA

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## **ABSTRACT**

The botanical name of **Sahchar (Vajradanti)** is **Barleria prionitis**. It belongs to plant family **Acanthaceae**. most commonly used for dental care, acute-chronic rheumatism and inflammatory condition of joints. **"Sahacharam"** means walking along with. As Sahachartaila is having specific property like (Madhur & Tikta Rasa) Gati Visheshatvam, (helps to move) Sahachartaila is Ushana Guna in nature, hence it diminishes vitiated Vata and remove Kaphanubhandha. Janubasti is the therapy where hot medicated oil is made to retain on the surface of the knee portion of body. At present, there is no cure for OA of Knee. The management of OA of Knee is broadly divided into non-pharmacological, pharmacological, and surgical treatments, which are highly symptomatic and commonly associated with troublesome side effects. These treatments are either expensive or not available for common people in developing countries. Hence the patient should be kept under Sahachartaila Janubasti therapy. 50 pts. were selected from the Dept. of Panchakarma OPD Bharati Vidyapeeth Ayurveda Hospital Pune. Sahachartaila was Purchased from Agsati Pharmaceutical's Pune . Sahachartaila Janubasti was done daily once for 30 minutes for 7 days and f/u were taken on 15<sup>th</sup> and 30<sup>th</sup> day. Sahachartaila Janubasti reduces all signs and symptoms of Janusandhigat Vata i.e. pain, swelling, Tenderness, Pain during extension and flexion, tenderness, difficulty during walking without any treatment-emergent adverse effect. Sahachartaila Janubasti shown significant results (i.e. P value is <0.05) in cardinal signs and symptoms of Janusandhihat Vata.

KEYWORDS: Sahachartaila, Janubasti, Goniometry Scale, Janusandhigat Vata.

## INTRODUCTION AND BACKGROUND

Osteoarthritis of knee is more prevalent in Indian population. This disease simulates to SandhigataVata. It is one of the degenerative Joint Disease characterised by breakdown of joint cartilage. Osteoarthritis is the 2<sup>nd</sup> most common disease in the world population i.e. 30%. Knee joint is the most affected site. The major risk factors associated with Knee joint are old age, obesity, occupational knee bending etc. which makes it an important cause of disability. SandhigataVata to be caused by the excessive intake of Vata Vrudhikara Ahara like Katu, Tikta, Kashaya Rasa PradhanaDravya And Ativyayama (excessive strain or stress to the joints) or Abhighata (injuries) (Yadavaji Trikamaji, 2011). Osteoarthritis is a degenerative joint disease due to the degradation of the joints, the articular cartilages and subchondral bone. It is caused by the mechanical stress to the joints and produces the symptoms like joint pain, swelling, stiffness etc. Even though the disease effects any joint in the body, most commonly involved joints are major joints and weight bearing joints of the body like hip and knee joint. Due to the life style, Indians suffers from knee joint osteoarthritis whereas western country suffers from hip joint osteoarthritis commonly. The incidence of this

disease increases with the age and the prevalence is more in females (25%) when compared to the males (16%). (http://en.wikipedia.org/wiki/Osteoarthritis). Almost all persons by Age 40 have some pathologic change in weight bearing joint. The reported prevalence of Osteoarthritis from a study in rural India is 5.78%. Obesity, Occupational knee bending, Physical labor etc., are some of the predisposing factors for the disease.

# Need of the Study

No satisfactory, comprehensive & time bound treatment schedule for JanusandhigataVata is available at present. Even other treatments have their own limitations in the management of this disease. Other systems of medicine can provide either conservative or surgical treatments which are highly symptomatic and commonly associated with troublesome side effects. Whereas such type of conditions can be better treatable by the management and procedures mentioned in Ayurvedic classics (Yadavji Trikamji, 2010). Acharya Susharuta has explained Vāyu entrapped in Snāyu, Sandhi & Asthi which should be treated with Snehan, Swedan, Upanaha, Agnikarma, Bandhanand Mardana (Yadavji Trikamji, 2010). These treatments are economical and they have long lasting

effects and the chances of recurrence are less. Hence we took Janubasti with Sahachartaila for this study.

#### **Hypothesis**

Ho: There is no significant effect of Sahachar Taila Janubasti in JanusandhigataVata.

H1: There is significant effect of Sahachar Taila Janubasti in JanusandhigataVata.

## Lacuna

Previously works had been done on the effect of Janubasti and other procedures in the management of Janusandhgata Vata (Srikantha and Murthy, 2000), (Ali Guermazi et al., 2012). But there is no work done on Sahachartaila Janubasti in Janusandhgata Vata. Thus, by considering all these factors, this study was undertaken with following Aim and Objectives.

#### Aim

To study the efficacy of Sahachartaila Janubasti in Janusandhigata Vata (OA of Knee).

#### **Objectives**

- To determine the effect of Sahachartaila Janubasti in JanusandhigataVata.
- To evaluate the effect of Sahachartaila Janubasti on symptoms of Janusandhigata Vata viz-. Shula (pain) Shotha (Swelling), Sparshasahatva (Tenderness), Akuncanjnya-Prasaranjnya Vedana(Pain during extension and flexion), Sandhisputan (Creptus). And Sakasthatachalan (difficulty during walking).

## **Drug Review**

# Sahacar Tail

Sahacar Tail dominantly Tikta – Madhura in Rasa ,and Uśṇa Viryātamak in quality hence its Vāta Kaphagna properties

Botanical Name – Barleria Prionitis

Natural order – Acantheaceae

Classical Names : Sahacara ,Saireyka , Kurantaka .Jihinti, Katasarika ,Bhindi

Ayurvedic Properties:

Rasa-Tikta ,Madhura

Guna- Snigdha ,Laghu

Virya- Uşņa

Vipāka- Katu

Doşaghanatā- Kaphavātaśāmaka

## Rogaghanatā

Raktavikara, Upadanśa,Saravānga Sotha, Pratiśāya,Dantaśūla, Kāsa, Palitya,Vrana, Kuṣtha, Kandu,Vidhradhi, Gandamāla.

Karma-Kaphavātaśāmaka, Varnapācana-

Sodhan, Sothahara, Swedajanan , Raktasodhak, Vişaghna, Vedanā Prasamana.

Dose- Leaf Juice-10-20ml, Decoction-50-100ml

#### **Botanical Description**

Prickly under shrub, 60cm to 1.5 m high. Leaves elliptic, acuminate at both ends, entire ,spine tipped. Flowers axillary, yellow ,bracts fallacious. Capsules ovoid, 25mm long with a tapering beak, 2-seede.Seeds compressed ,ovate, clothed with silky pressed hairs.

# **Pharmacological Aactivities**

Hypogglycaemaic, diuretic, Analgesic, Anti Inflammatory, Spasm genic, hypotensive, hypothermic and CNS depressant.

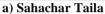
#### MATERIALS AND METHODS

- 50 patients of Janusandhigata Vata were randomly selected on the basis of clinical examination selected from OPD of Panchakarma Dept. Bharati Vidyapeeth (DU) Ayurveda collge and Hospital, Pune- 43.
- A Special case Performa containing details necessary for study was prepared.
- Sahachartaila was purchased from Pune market (Agasti Pharmacy-Batch No.13068) and Standardization was done in Late Principal Bhide Lab. Pune.

#### **Treatment Scheduled**

- Janubasti 50 pts.
- Purvakarma :- Cleaning of Janusandhi ( knee joint) with lukewarm water and prepare Mashpishti (Blackgarm powder ), steel rim.
- Pradhana Karma:- Janubasti with Sahachartaila 120 ml for each Janusandhi up to level of 2 Angula.
- Time :- After Breakfast
- Duration:- 30 minutes
- Pashyata Karma :-Remove the steel rim/ Mashapishti and clean area with lukewarm water .
- Assessment Day-0 day & 7<sup>th</sup> day
- Follow Up: 15<sup>th</sup> & 30<sup>th</sup> Day from the 1<sup>st</sup> day of Janubasti.
- Pathya-Apathya -Was advised to avoid exposure air







b)Goniometer



c) Procedure of Janubasti

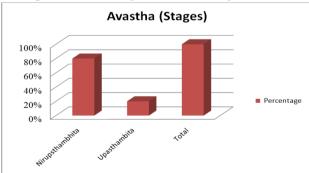


d) Goniometer Assessment of Knee

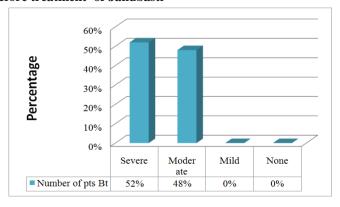
# **OBSERVATIONS AND RESULTS**

It includes Observations on demographic data's with their graphical representation and results of individual symptoms followed overall response of the treatment.

# 1) Percentagewise distribution of patient according to Avastha (Stages)



# 2) Assessment criteria before treatment of Janubasti



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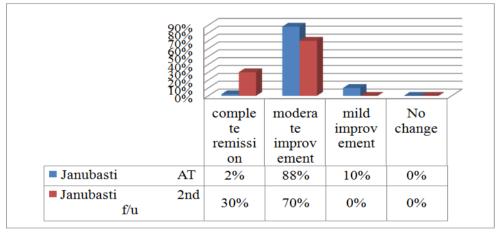
1) For qualitative data: (Shula, Shotha, Sparshasahatva) the obtained information was analyzed statistically by using Friedman test

Symptoms	ВТ	AT	AT 2 F/u	Chi Sq	P Value	Result
Shula (Pain)	3	1.5	1.5	92.16	< 0.0003	Significant
Shotha(Swelling)	3	1.79	1.21	93.19	< 0.0001	Significant
Sparshasahatva (Tendreness)	3	1.5	1.5	100	< 0.0003	Significant

2) For quantitative data: (Akunchan- Prasaranjanya Vedna, Sandhisputhan and Skashta Chalana) were statistically analyzed and Mean, S.D., S.E., z value and P value were calculated and t test was carried:

Symptoms	BT F	AT F	BT P	AT P Value	Result
AkunchnyjanyaVedana (pain during flexion)	0.94	19.4	0.6	0.0000	Significant
Parasaranajanya Vedana (pain during extension)	1.21	0.94	0.6	0.0000	Significant
Sandhisputhan (Crepitus)	1.62	19.4	0.6	0.0000	Significant
Sakashtachalana	1.24	37	00.6	0.0000	Significant

# 3) Overall effect of Janubasti (external oleation through retention of Barleria Prionitis oil)on Janusandhigata Vata (osteoarthritis of Knee)

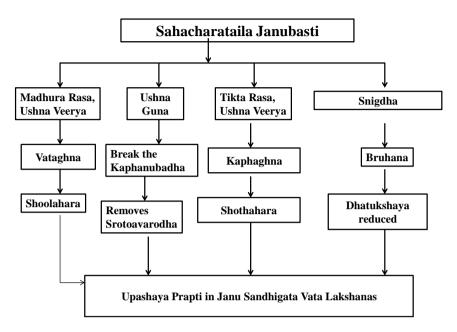


Samprapti Ghatak

VataprakopakNidan Ch. Chi. 28/15-18			
Vata and Kapha particularly VyanVāyu & ShleshakKapha			
Asthi, Majjya & Meda			
Asthivaha, Majjyavaha & Medavaha			
Sanga, Atipravruti			
Manda			
Manda			
MarmasthiSandhi Ch.Su.17/112-113			
Madhyama (Ch.Su. 11/48-49)			
JanuSandhi			
nana Ankucanprasaranajanya Vedana, Vatapurna diritisparsha			

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## Probable Smprapti Bhang by Sahachartaila Janubasti.



### DISCUSSION

- Discussion on overall Results of the treatment and Probable mode of action of Sahachartaila Janubasti.
- "Sahacaram" means walking along with. As sahacar Tail (Ali Guermazi *et al.*, 2012) is having specific property like (Madhur & Tikta Rasa & Ushana Viryatamak) Gati Visheshatvam (helps to move) it can be given in condition like the disease having difficulty in walking, pain, swelling ,Tendertness and stifness.
- Bahyasnehan (external application of oil) is mentioned as one of the therapeutic measures in curing various types of Vata disordes. External application of
- Sahachartaila Janubasti helps curing Vata disorders quickly and effectively due to its Vatahara as well as Brihmhana (nourishing) and Pachan properties.
- Both Snehan and Swedan can be done by Janubasti.
- Sahachar Taila is UshanaVirya in nature, with the help of Bhrajaka Pitta it diminishes vitiated Vata and resolves the symptoms of Janusandhigata Vata.
- All these properties of Sahachartaila help in Samprapti Vighatana and prevent Kha Vaigunya which is the main factor for Janusandhigata Vata

## CONCLUSION

- Sahachartaila Janubasti can be used effectively in Janusandhigata Vata.
- Efficacy of Janubasti with Sacharataila in Janusandhigata Vata is Satastically significant as P<0.0001 in the symptoms viz-. Shula, Shotha, Sparshasahatva, Akunchan Prasaranjanya Vedana, Sandhisputan and Skashtacalan.
- Janubasti with Sahachartaila relieving the signs and symptoms of Janusandhigata Vata.

### ACKNOWLEDGEMENT

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