

**THE EFFECT OF MRITTIKA POTTALI SWEDA IN PAIN MANAGEMENT OF JANUSANDHI GATA VATA WITH SPECIAL REFERENCE TO OSTEOARTHRITIS: A CLINICAL STUDY**

<sup>1</sup>Dr Vibha Pali - <sup>2</sup>Dr Swapnil Kaithwas

<sup>1</sup>Lecturer Swasthviritta, S.N.P.A. Govt. Ayurveda Medical College, Raipur, C.G.

<sup>2</sup>Lecturer Swasthviritta, Ankerite Ayurvedic Medical College, Lucknow, U.P. India

**ABSTRACT**

Sandhigatavata is a condition, characterized by Sandhishoola, Shotha, Atopa and Sandhigata lakshana's. Keeping in view the various signs and symptoms mentioned in Ayurvedic classics, it can be correlated with Osteoarthritis. Osteoarthritis is a leading cause of chronic disability especially affecting the knee joints. Since knee is the weight bearing joint it is more susceptible to wear and tear, Heavy journey, agriculture, housework, etc are more contributing factor in causing the disease. More than 355 million people around the world today are suffering from chronic pain of arthritis. Therefore pain relief plays an important role in treatment of OA(Osteo-Arthritis).20 patients were selected with the signs and symptoms of Sandhigata Vata (OA) and were advised Mrittika Pottali Sweda for 15 days for 45 minutes daily. Mud acts as a pain management agent and may be effective for swollen joint. Thus a cost effective attempt is made in management of pain in Sandhigata Vata with special reference to Osteoarthritis.

**KEYWORDS:** Sandhigata Vata, Mrittika Pottali Sweda, Osteoarthritis

**INTRODUCTION**

Vata is the moving Dosha in the body. All other Doshas and Dhatus are dependent on Vata Dosha for their routine works. Movement of the body is also one of the Prakrit Karma of the Vata Dosha. Acharya Charaka explained – due to the intake of Vatacara Ahara Vihara Vata vitiation takes place. This vitiated Vata lodges in Rikta Srotas in where Shunyata of Snehadhi Guna is present. Vata after settling in Rikta Srotas produce disease related to that Srotas<sup>1</sup>. In the age group of 40-60 years, 30% of population is suffering from this disease. About 80% of people have radiographic evidence of OA. Though 25-30% are symptomatic.<sup>2</sup> More than 355 million people

around the world today are suffering from chronic pain of arthritis. Therefore pain relief plays an important role in treatment of OA. There are various NSAIDs available like ibuprofen, aspirin etc to manage pain, it has its own consequences like Hepatotoxicity, Nephrotoxicity etc for which people are leading towards natural remedies.

Among Non-Pharmacological treatment external application is given importance. Since man has originated from Prakruthi itself, Prakruthi has its own effect in human body system.

Naturopathy is a non-pharmacological method which deals with the different nature

cure techniques. Mud is one among it, which can be used as the best therapeutic agent in the pain management of Osteoarthritis. Mud acts as a pain management agent and may be effective for swollen joint.<sup>3</sup>

In Ayurvedic classics also mud application is indicated. Mud dissolved in water and boiled in a pan<sup>4</sup>. When it becomes thick is collected in piece of cloth and Mrittika Pottali Swedana is applied on affected part.

Thus, a cost effective attempt is made to see the analgesic activity of Mrittika Pottali Sweda in pain management of Janusandhigata Vata

### OBJECTIVES

To assess the analgesic effect of Mrittika Pottali Sweda in Janu Sandhigatavata.

### Selection Criteria

#### Inclusion Criteria:

- Patients having classical signs and symptoms of Sandhigata vata
- Age of patients between 40 to 60 years

#### Exclusion Criteria:

- Patients of systemic disorders that affects OA
- Patients with history of joint injury
- Patients on steroid therapy.
- Patients undergone surgery of knee joint.
- Patients unfit for Swedana.

#### Criteria of Diagnosis:

Diagnosis of patient was established on the basis of signs and symptoms mentioned in classics as follows.

1. Sandhi shoola
2. Sandhi shotha
3. Sandhi graha
4. Atopa

#### Assessment of Results:

Subjective and objective parameters were the base line data assessed to after treatment data for comparison

#### Subjective parameters:

- Shoola

#### Objective parameters:

- Goniometer

#### GRADINGS:

#### Sandhishoola (Pain in Joints)

No Pain	0
Pain during excessive movement	1
Pain during little movement	2
Pain during rest, but tolerable	3
Continuous pain, not tolerable	4

#### Goniometer:

130 degree (Normal)	0
Less than 130 but more than 100 degree	1
Less than 100 but more than 75 Degree	2
Less than 75 degree	3

Follow up: 15 days

#### Preparation of Medicine:

The collected mud ( Black Cotton Soil) is sieved to remove pebbles and other unwanted waste and is exposed to sunlight for a day.

Method of preparation of Mrittika Pottali:

- The mud is boiled in water in a pan.
- When it becomes thick is collected in piece of cloth.

#### Materials required-

- Cooking pan
- Cloth
- Goniometer
- Gas burner
- Khalva yantra

20 patients were applied with Mrittika Pottali Sweda over affected Janusandhi in the morning.

Poorva Karma: The collected Black Cotton Soil was boiled in the pan. When it became thick it was collected in the piece of cloth. Following this process two such Pottalis were prepared to apply Swedana

continuously, using simultaneous Mrityika Pottali.

**Pradhana Karma:** For this purpose the patient was asked to sit down comfortably or lie down on the table. Swedana was done with Mrityika Pottali for 45 minutes.

**Pashchata Karma:** After 45 minutes of Swedana the part was cleaned using cotton cloth soaked in warm water.

This procedure was done once daily in morning for 15 days.

**Follow up:** After 15 days.

### RESULTS

All the 20 patients were graded before and after application of Mrityika Pottali Sweda as Before Treatment(BT), After Treatment(AT) and After Follow up(AF)

SANDHISHOOLA		
BT	AT	AF
3	1	1
3	1	2
2	1	2
2	1	1
2	1	2
3	1	1
3	1	2
2	0	1
2	0	1
3	1	2
2	0	1
3	1	2
3	2	2
2	1	1
1	0	0
2	1	2
3	2	2
3	1	2
2	1	1
2	1	2

Wilcoxon signed rank test showed reduction in Sandhishool BT and AT with Mean Shoola of Knee joint (<0.001) reduced from 2.40 to 0.90 with the improvement of

63%.and Z value 4.04 which is highly significant.

The reduction showed in Sandhishool BT and AF with Mean Sandhi Shoola of Knee Joint(<0.001) was reduced from 2.40 to 1.50 with the improvement 38%. and Z value 3.82 which is highly significant.

After treatment 2 patients showed no change, 2 patients showed mild change, 10 patients showed moderate change and 6 patients showed marked changes while 7 patients showed mild changes, 8 patients showed moderate changes and 1 patient showed marked change after follow up.

GONIOMETER		
BT	AT	AF
1	0	0
1	1	1
0	0	0
0	0	0
0	0	0
1	1	1
2	1	1
1	1	1
1	0	0
2	1	1
0	0	0
1	0	0
1	1	1
0	0	0
0	0	0
1	1	1
1	1	1
1	1	1
0	0	0
1	1	1

Wilcoxon signed rank test showed response in Goniometer BT and AT with Mean flexion of Knee Joint (Goniometer) (<0.001) reduced from 2.00 to 0.50 with the improvement of 75% and Z value 2.24 which is moderately significant. The response showed in Goniometer BT and AF

with Mean Goniometer of Knee Joint (<0.001) was reduced from 2.00 to 0.50 with the improvement of 75% and Z value 2.24 which is moderately significant.

After treatment 2 patients showed no change, 16 patients showed mild change and 2 patients showed marked changes. After follow up 1 patient showed no change, 13 patients showed mild changes, 3 patients showed moderate changes and 3 patients showed marked changes.

### DISCUSSION

The present clinical study has been conducted to evaluate the effect of Mrityika Pottali Sweda in management of pain. The results observed showed that the pain reduction was highly significant with the improvement 63%. Goniometer reading for flexion angle of Knee joint also showed improvement as highly significant with the improvement 75 %.

Though there are significant reductions in the parameter taken in the study after treatment but there is some increase in the symptoms noted after follow up. The sedative effect produced relieves the pain in the area. This may be because of the increased blood supply which produces removal of waste products hence getting good nourishment. Heat is also a counter irritant i.e. the thermal stimulus may affect the pain stimulus. This explains the effect of heat applied on the nerves.

Vata is the responsible factor for inducing pain in the body and the properties of Vata and Swedana are exactly opposite. Hence, the heat can cause reduction in pain by reducing the swelling, removing the coldness at the site and causing perspiration. Ushna Guna of Sweda dilates the capillaries thus it increases circulation and enhances the

elimination of waste product. It also stimulate muscles and nerves which promotes its renovation.

### CONCLUSION

The signs and symptoms of Sandhigatavata can be co- related to Osteoarthritis. Mrityika Pottali Sweda acts on Sandhigatavata by its Ushna and Tikshna Guna. The application of mud as Pottali Sweda is beneficial as analgesic but only till it is applied.

### REFERENCES

1. Charaka samhita chikitsa stahna 28<sup>th</sup> chapter sloka no 18. Vaidya jadvaji Trikamji Acharya edited, Charaka Samhita, Chikitsa sthana, chapter 28<sup>th</sup> sloka 37, edition and reprint 2004, Pub; Choukambha Sanskrit Sansthana, Varanasi, page no. 618.
2. www.icmr.nic.in (Nov.15 2019)
3. Secrets of Naturopathy and Yoga by Dr. Brij bhushan Goel, sixth edition 2013 pg-6.
4. Pt.B.S.misra Bhavprakash, madhyama khanda 3<sup>rd</sup> part, Shloka no-37, edition 2013, Chaukambha Sanskrit bhawan, Varanasi. pg-327

### CORRESPONDING AUTHOR

Dr Vibha Pali

Lecturer Swasthvritta, S.N.P.A. Govt. Ayurveda Medical College, Raipur, C.G.

Email: vibhapali@gmail.com

Source of support: Nil

Conflict of interest: None Declared

### Cite this article as

Dr Vibha Pali: The Effect of Mrityika Pottali Sweda in Pain Management of Janusandhi Gatavata With Special Reference to Osteoarthritis: A Clinical Study ; V(1): 1678-1681