

ORIGINAL PAPER

# Role of Tila Taila as Sneha Abhyanga in Sandhigatavat in Relation to Pain to Prove the Theory “Snehat Vatam Samayati”

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## ABSTRACT

*Ayurveda, the science of life aims to preserve the positive health of a healthy person and to cure the diseases. In Ayurveda treatment is based on two siddhantas only-samanya siddhanta and vishesh siddhanta. Out of these, guna vishesh siddhanta, which is related to opposite guna, was taken to see the role of tila taila as sneha Abhyanga (external massage) in Osteo-arthritis (Sandhigatavat) in relation to pain and prove the theory “Snehat Vatam Smayati”. Total no of 30 patients of Sandhigatavata (OA), age 40-70 years were selected randomly from out patient department (OPD) and in patient department (IPD) of Govt. Ayurvedic College & Hospital (GAC&H) at a ration of 1:1 for this study. Results were observed weekly and after 21 days of the trial period and datas are statistically analysed using Student's T-test. P value  $\leq 0.05$ , considered as statistically significant. Results depicts that pain before treatment mean $\pm$ SD was 2.03 $\pm$ 0.718 and after treatment declined to 0.87 $\pm$ 0.571 P( $\leq 0.001$ ). It showed a statistically high significant result corresponding to indication of a highly effective intervention of Til Taila for decrease in the symptom of pain in Sandhigatavata (OA). This study may be used as a pedestal for further sophisticated studies.*

**Keywords :** Sandhigatavata, Abhyanga, Snehana, Tila taila, Guna, Siddhanta

## INTRODUCTION

Ayurveda, the science of life, can give adequate healthy and happiness to the human body as supports.<sup>1,2</sup> The present work has undergone a clinical and demographic study to establish the effectiveness of sneha (taila) abhyanga (external massage) in a group of 30 patients for management of sandhigatavata (Osteo-arthritis). Every system of the human malady are carefully studied by our ancient Acharyas and clearly defined the Sandhigatavata and its disorder among the eighty types of vata vyadhi.<sup>3</sup> In Ayurveda, Sandhi has been mentioned as the root of Majjabaha srota. It is composed of Prithivi, Akash and Jala mahabhuta.<sup>4</sup> In equilibrium state, the three somatic humours like vata, pitta and kapha, conduct and control all the structures and functions of the body. But only vata is capable for mobility and is the force to keep dhatu and malas in equilibrium. Among the disorders pertaining to particular age groups, sandhigatavata is a type of degenerative and articular joint disorder which affects mainly the weight bearing joints in advancing age when kupita vayu gets involved.<sup>5,6</sup> Charaka (1000 B.C.), Susruta

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(500 B.C.) and Bhagbhata 400 B.C) are the pioneer in the field of Indian medicine. Although they have not described sandhigatavata in detail, but the principles of diseases of joints have been enumerated. The clinical features of Sandhigatavata described in Ayurvedic texts are very similar to the clinical entity of Osteo-arthritis. It is also seen in the lower socio-economic group associated with cold, damp climate.<sup>7</sup> Sandhigatavata has been designated in Ayurveda as a Tridosaja vyadhi with predominance of vata. The indulging dietary habits vitiate vayu and obstruct the “sleshak kapha” within the sandhis. As a result it produces pain, swelling, stiffness, tenderness, muscular wasting of the joints leading to impaired movement of the limbs.<sup>8</sup> So Charaka has given the clinical presentation of sandhigatavata like ‘Vatapurnadritisparsha sotha sa sandhigate anila’ (if vayu gets located in joint swelling occurs like air filled bag in touch) & ‘Akunanaprasarana sabedana’ (pain during contraction and extension).

The diseases caused by vata dosha can be pacified with opposite guna of vata dosha like Snigdha, Ushna, Guru, Sthula, Sthira, Picchila and Slakshna as per gunavishesh siddhanta described in classics.<sup>9</sup>

## OBJECTIVE

To see the effect of Snehana (Til taila) as Abhyanga karma in patients of sandhigatavata in relation to pain as symptomatic relief.

## MATERIAL AND METHOD

It was a hospital based observational study in the period from 2012- 2013. A total number of 30 Clinically and radiologically diagnosed patients of sandhigatavata (OA) were selected in the age group of 40-70 years in a ratio of 1:1 from O.P.D. and I.P.D. of GAC & H, Jalukbari, Guwhati-14, Assam. Random sample technique was used. Informed consent was taken from patients. Patients who were unwilling to participate in the study and seriously ill patients were excluded from the study. Outcome were evaluated after application of trial drug weekly for 3 weeks. Data analysis were done and graphically represented using bar diagram and pareto plot.<sup>10, 11</sup>

**Assessment of severity of the disease (Pain) was done by following:**

**Table 1** Grading of severity

Sign and Symptoms (Severity)	Grade (gr)
Absent	0
Mild	1
Moderate	2
Severe	3

**Table 2** Gunas of provoked vata dosha in terms of clinical features

Guna of vata	Symptoms	Before Treatment Severity Grades	After Treatment Severity Grades		
			FU-1	FU-2	FU-3
Ruksha	Atopa (Cracking Sound)				
Khara	Sula (Pain)				
Sheeta					
	Stambha (Stiffness)				
	Sotha (Swelling)				
Laghu	Laghuta (Wasting)				
Chala	Prasaranakun- chanasa vedana (Restricted Movement)				

During examination the classical description found in Brihatrayee and Madhav Nidan is applied. The signs and symptoms described in samhitas which get provoked by the respective gunas of kupita vata in sandhi according to Ayurvedic literary concept were used.

## Preparation and selection of the trial drug:

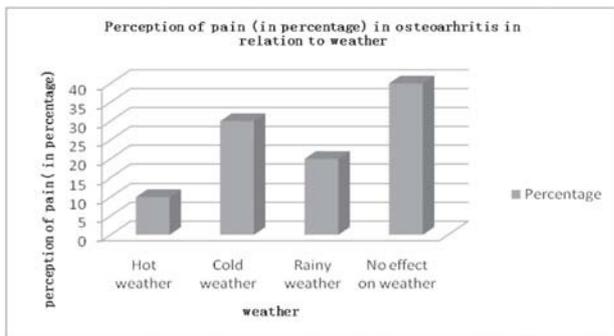
Preparation of trial drug from crude drugs was done using standard protocols<sup>12</sup> in the State Ayurvedic Pharmacy (Rasasala dept.), Govt. Ayurvedic College.

## Time of Abhyanga:

- Morning after sunrise, in a circular motion on the affected joint for 15 minutes (with his/her right hand).
- At night before bed, in a circular motion on the affected joint for 15 minutes (with his/her right hand).

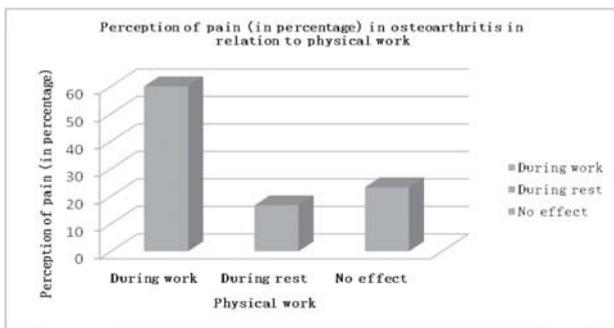
## RESULTS AND OBSERVATIONS

The results and observations of the present study are presented as follows:



**Figure 1** Perception of pain (in percentage) in relation to weather

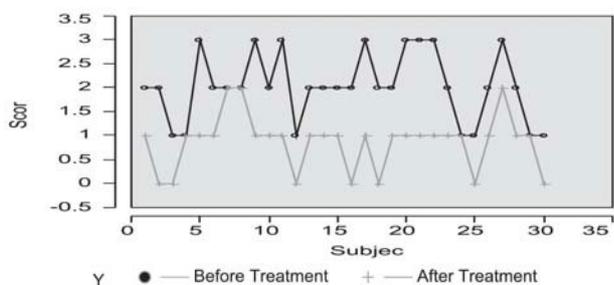
Aggravation of pain maximum number of patients have no effect on weather which is 12(40%) followed by effect of cold weather 9(30%), rainy weather 6(20%) and a minimum number of patients 3(10%) feel more pain in hot weather which is evident in **Figure 1**.



**Figure 2** Perception of pain (in percentage) in relation to physical work

Maximum number of patients feel more pain during work 18(60%) followed by no effect 7(23.3) and during rest 5 (16.7) which is evident in **Figure 2**.

**Figure 3** depicts that before treatment, 7 patients were in grade 1, 15 were in grade 2 and 8 were in grade 3. Whereas after treatment the number of patients were found to be 7 in grade 0, 20 in grade 1 and 3 in grade 2.



**Figure 3** Effect of Til Taila on diagnosed patients of sandhigatavata (OA) before and after treatment representing In a Pareto Plot

**Table 3** Effect of Trial Drug on pain

	Before Treatment	After Treatment	Correlation	P Value	Paired Differences		t	P Value
					Mean	SD		
Mean	2.03	0.87	0.43*	0.017	1.17	0.70	9.14**	<0.001
±S.D.	0.718	0.571						

Significant at P(<0.05) \*\*Significant at P(<0.01)

**Table 3** depicts that pain before treatment mean±SD was 2.03±0.718 which after 21 days of treatment declined to 0.87±0.571 P(<0.001). It showed a statistically high significant result corresponding to indication of a highly effective intervention for decrease in the symptom pain.

**DISCUSSION**

Studies on the treatment of Sandhigatavata (Osteoarthritis) with til oil abhyanga on the basis of guna vishesh siddhanta have been forwarded by many research workers. Observations suggests that, as a sneha dravya, Til taila (sneha) have a significant effect in pacification of vitiated vata related to pain due to having opposite qualities of vata like Drava, Suksma, Sara, Snigdha, Picchil, Guru, Sitala, Manda, and Mridu, as Charaka mentioned in classics. In pain before treatment the mean was 2.03 and SD was 0.718 which is declined to mean 0.87 and SD 0.571 and the p value is <0.001 which shows a highly statistically significant result. So the intervention is highly effective for decrease the pain symptom. Renter E stated, significant difference in pain intensity between the two groups (P = 0.004) after treatment. The study showed a positive effect of sesame oil in improving clinical signs and symptoms in patients with knee OA and indicated the fact that sesame oil might be a viable adjunctive therapy in treating OA.<sup>13</sup> Colleen M. A. Stated the sesame group experienced the largest drop in pain intensity from 9.5 before treatment to 3.5 after treatment. The control group experienced a drop from 9 before treatment to 7 after.<sup>14</sup> Hsu D Z., Chu P. Y. and Jou I .M. Daily sesame oil treatment for 7 days significantly decreased OA-associated joint pain.<sup>15</sup> The trial drug Tila taila is clinically and statistically established as effective for the treatment of Sandhigatavata without having any side effect and toxicity.<sup>12,16,17</sup> Correlation between the before treatment and after treatment of pain shows the significance value of 0.017 which also shows the significant value. So it suggests that there is a relationship between pre and post test which reject H0: Reject H<sub>0</sub> if P<t<sub>a</sub> when t<sub>a</sub>=t<sub>0.05</sub>

setting the level of confidence at 95% probability signifying that if the differences is significant at the level of  $P < 0.05$ , the hypothesis will be rejected establishing the term “snehat vatam samayati.” The present study is in continuity with other studies done across the countries.

## CONCLUSION

Ayurveda has its own philosophy with unique approach. The present study revealed that the clinical improvement of pain of sandhigatavata (OA) with the application of a vata samka aushadhi, i.e. Tila taila as taila abhyanga. Further studies are required with bigger sample size to substantiate the evidence. Here the guna of vata that affect on the body tissue was converted to the clinical features. In future if any device is discovered to measure the effect of guna in the body then it will help more to the further researchers to be a pioneer study.

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**Contribution of Authors:** We declare that this work was done by authors named in this article and all liabilities pertaining to claims relating to the content of this article will be done by the authors.

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