



TO STUDY THE CLINICAL EFFICACY OF CHINCHADI TAILA IN SANDHIVATA W.S.R. TO OSTEOARTHRITIS

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ABSTRACT :

Background: The life style of man has become mechanical .The time and more desires have made the man unable to follow the *swasthya niyamas* thereby he becomes a victim of diseases and disorders like obesity, increased risk of early degenerative changes etc. Man, today, even in his young age has begun to suffer from the degenerative diseases like *Sandhivata*.

Aim & Objective: To evaluate the clinical efficacy of *Chinchadi Taila* in Specific subjects of *Sandhivata*.

Study Design: The study has been conducted on total 15 subjects of *Sandhigatavata*. The patients were selected from the OPD of Sri Danappa Gurusidappa Melmalagi Ayurveda Medical College & Hospital, Gadag, Karnataka for the respective clinical trial.

Assessment criteria: Both objective and subjective criteria of assessment are set considered on the basis of relief in the signs and symptoms of *Sandhigatavata*.

Results: Among 15 subjects in the study group, 05 responded good, 08 moderately and 02 mildly to the treatment.

Keywords : *Sandhivata, Osteoarthritis, Chinchadi Taila, swasthya niyamas*

INTRODUCTION: *Swastha Rakshana* and *vikara prashmana* are the main mottos of Ayurveda which is well achieved by the homeostasis of the *tridosha*. In Ayurveda, *vata dosha* governs the bodily movements along with the *min*. The state where *vata prakopa* occurs within *asthi* and *sandhis* is understood as *Sandhivata*. Due to the *ruksha guna pradhanyata* of *vata dosha* the fluidity from the joints, bones or any part of the body gets absorbed hence causing depletion of the synovial fluid and cartilages leading to the difficulty in the joint movements. In a healthy living being

normalcy is measured by movements and if this gets disturbed and disrupted it lead to abnormal living. As the advancement of busy professional and social life, improper sitting postures in work area, continuous and over exertion, jerking movements during traveling and sports etc all are playing their role in causing undue pressure on the body. The ability of any work of every individual is directly proportional to the ability of using his joints. *Sandhivata* is one such clinical entity among *Vatavyadhis* which affects the major joints of senior citizens in which *dhatukshaya* is prime factor which is

characterized by certain symptoms like joint pain, joint stiffness, swelling and difficulty of joint movement etc. This disease can be compared with Osteoarthritis of contemporary medical science. It is a form of arthritis that features the breakdown and eventual loss of cartilage of one or more

bones of the joints. It is chronic also due to the natural aging of the joint.

With the regressive ratio of the disease reported inclines one to study this clinically. Albeit, this trial is a sincere attempt to bring down the numbers of the patient suffering from *Sandhivata*.

***Sandhivata-The Disease. Table no.01 Showing the Nidana, Lakshana and Samprapti of Sandhivata*¹**

NIDANA	Sannikrushta Hetu:	Ativyayama, Abhighata, Marmaghata, Bharaharana, Sheeghrayana, Pradhavana, Atisankshobha.
	Viprakrushta Hetu:	Rasa —Kashaya, Katu, Tikta
		Guna —Ruksha, Sheeta, Laghu
		Dravya —Mudga, Koradusha, Shyamaka, Uddalaka, Masura, Kalaya, Adaki, Harenu, Shushkashaka, Vallura, Varaka
		Aharakrama —Alpahara, Vishamashana, Adhyashana, Pramitashana
		Viharaja —Atijagarana, Vishamopachara, Ativyavaya, Shrama, Divasvapna, Vegasandharana, Atyucchabhashana, Dhatu Kshaya.
		Manasika —Chinta, Shoka, Krodha, Bhaya
Lakshana	<i>Shula, Vata purna druti sparsha, Shopa, Prasarana Akunchanayoho, Savedana pravrutti, Hanti sandhi, Atopa.</i>	
Samprapti ghatakas	<p>Dosha—Vata—Vyana vata vridhi, and Kapha—Shleshaka kapha kshaya</p> <p>Dushya—Asthi, Majja, Snayu, Sleshmadhara kala</p> <p>Srotas—Asthivaha, Medovaha, Majjavaha, Mamsavaha</p> <p>Agni—Jatharagni, Asthidhatwagni,</p> <p>Udbhavasthana—Pakvashaya</p> <p>Rogamarga—Madhyama</p> <p>Adhisthana—Sandhi</p> <p>Vyaktasthana—Sandhi</p>	

Sthoulya is another factor catering to the *prakupitavastha* of *Vata*². The *Medavaran* of *Vata* is the mechanism causing inter-relationship between *Sthoulya* and *Vatavyadhis*. All types of *avaranas* are also important vitiating factors of *Vata*.

Vardhakya avastha is dominated by *Vata*, during this period, *Dhatukshaya* occurs which causes *Vata prakopa*. Living in *Jangaladesha* is another cause of *Vata prakopa*. *Vata* gets vitiated in the end of day and night³. *Vata prakriti* persons are more

susceptible to *Vata vikaras*. Persons who are *Ruksha-kashaya-katu-tikta Rasa satmya* are also more susceptible to *Vata vikara s*⁴. Contemporary science has failed to find a solution for this disease. It is said that current treatment for Osteoarthritis is purely control of symptoms because there is no disease modifying Osteoarthritis drug yet⁵. Ayurveda is an established medical system, which has been developed by various ancient *Acharyas* after experiments and examinations. But in the present day it is compulsory to prove the *Ayurvedic* truths on the modern parameters, without modifying its basic structure as methodical approach is the backbone of research. Research is a scientific study through which one can establish new facts, discarding the old facts or modifying the present facts. Utmost care

is taken in designing the methodology for conducting this study and establishing the objectivity of the trial to clinically evaluate the efficacy of *Chinchadi Taila*⁶ in specific subjects of *Sandhivata*.

Material and Methodology:

Study design: The study is a simple randomized comparative clinical prospective trial.

Sample size and grouping: A minimum of 15 patients suffering from *Sandhigatavata* were randomly selected and administered with *Chinchadi Taila*.

Preparation of the trial drug: The trial drug *Chinchadi taila* is a classically mentioned formulation in *Sandhivata*. The collection of raw materials and preparation of the formulated drug was carried in the institutional premises.

Table no.02 Showing the constituents of Chinchadi Taila^{7,8}

Sl.No.	Drug Name	Latin Name	Proportion
1.	<i>Chincha patra</i>	Tamarindus indica	16 part
2.	<i>Eranda patra</i>	Ricinus communis	16 part
3.	<i>Prasarni</i>	Merremia tridentate	16 part
4.	<i>Varuni</i>	Crataeva nurvala	16 part
5.	<i>Snuhi patra evam danda bhaga</i>	Euphorbia nerifolia	16 part Each
6.	<i>Arka</i>	Calotropis procera	16 part
7.	<i>Jambiri</i>	Citrus limon	16 part
8.	<i>Shigru</i>	Moringa oleifera	16 part
9.	<i>Grinjan rasa</i>	Allium sativum	16 part
10.	<i>Sarshapa</i>	Brassica jucea	1 part
11.	<i>Devdaro</i>	Cedrus deodara	1 part
12.	<i>Shunthi</i>	Zinziber officinalis	1 part
13.	<i>Dadhi</i>	16 part	
14.	<i>Shukta</i>	1 part	
15.	<i>Taila</i>	4 part	
16.	<i>Lavana</i>	1 part	

All drugs are taken and *taila* is prepared by classical method of *taila paka vidhi*. i.e. medicated *taila* is prepared by mixing 1 part

of the *kalka dravyas*, 4 parts of *taila* and 16 parts of *drava-dravya*.

Taila Murchana⁹ : Heat the plain *Tila taila* and make it free from froath. Add 4 parts of water along with coarse powder of *triphalas*, *musta*, *rajani*, *hrivera*, *lodhra*, *ketaki*, *vatankura*, *nalika*. Boil it on moderate heat, till only the oil portion remains. Filter and use it for the preparation of *Chinchadi Taila*. By this process unpleasant odour of the oil is removed and it obtains good colour and fragrance.

Table no.03 Showing the material and methodology for the clinical trial.

Selection criteria, subjective and objective parameters of the study	
Inclusion criteria: 1. Patients suffering from classical sign and symptoms of <i>Sandhivata</i> . <i>Shula, Shotha, Sthambha, Sparshasayyata Sphutana, Aakunchan Prasaran vedna</i> etc at the joint, patients between the age group of 40-75 years, no discrimination of sex, patient without any anatomical deformity (genu valgum / genu varum)	Exclusion criteria: Patient below 40 and above 75 years of age, pregnant woman, acute joint trauma, rheumatoid arthritis, diabetes mellitus, gouty arthritis (<i>vata rakta</i>), complete loss of articular cartilage, polymyalgia Rheumatica, phiranga Roga (Syphilis), psoriatic arthritis, S.L.E
Posology: <i>Chinchadi Taila</i> :- To be applied externally (local application).	
Study duration: Total study duration- 60 days Treatment duration: - 30 days Follow up: - after 30 days	
Subjective Parameters: <i>Sandhi vedna</i> (Pain) Grade 0 — No Complaints Grade 1 — Tells on Enquiry Grade 2 — Complaints Frequently Grade 3 — Excruciating condition	Objective parameters: <i>Sparshasayyata</i> (Tenderness) Grade 0 — No Complaints Grade 1 — Says the joint is tender Grade 2 — Winces the affected joint Grade 3 — Winces and withdraws the affected joint.
<i>Sthambha</i> (Stiffness) Grade 0 — Absent Grade 1 — Present	<i>Sandhi Atopa</i> (Crepitations) Grade 0 — None Grade 1 — Felt Grade 2 — Heard
<i>Sandi Shotha</i> (Swelling) Grade 0 — No Complaints Grade 1 - Slightly obvious Grade 2-covers well over the bony prominence Grade 3-Much elevated	Range of motion Grade 0-Full movement 120° - 140° Grade 1-Limited 70° — 90° Grade 2-Nill

	Walking time: Grade 0 - up to 20 seconds. Grade 1- 21-30 seconds. Grade 2- 31-40 seconds. Grade 3 - 41-50 seconds. Grade 4 — 51-60 second
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Overall Assessment of Clinical Response:	
Good Response	70 % and more improvement in overall clinical parameters.
Moderate Response	Moderate Response:
Moderate Response	Mild Response: 30% - 50% improvement in overall clinical parameters.
No Response	Nothing has been changed.

Observations & Results: In the trial, 15 patients received *Chinchadi Taila*, the result shows highly significant in all parameters. Patients got better result in *Sandhi Vedna* and Walking time. By comparing the t-values, the study shows significant result.

SIGN & SYMPTOM S	MEAN			% RELIEF	S.D	S.E	T-VALUE	P VALUE	REMARKS
	BT	AT	AF						
<i>Sandhi Vedana</i>	2.60 0	1.46 7	1.13 3	43.57%	0.35 2	0.09 0	12.475	<0.001	H.S
<i>Sthambha</i>	0.46 7	0.06 6	0.40 0	85.86%	0.50 7	0.13 1	3.055	0.008	S
<i>Sparshasayyata</i>	0.86 7	0.46 7	0.40 0	46.13%	0.50 7	0.13 1	3.055	0.009	S
<i>Sandhi Shotha</i>	1.66 7	0.40 0	0.36 7	76%	0.70 4	0.18 2	6.971	<0.001	H.S
<i>Sandi Atopa</i>	1.13 3	1.13 3	000	000	0.00 0	000 0	0.000	1.00	N.S
Range Of Movement	3.00 0	1.46 7	1.20 0	51.1%	0.51 6	0.13 3	11.500	<0.001	H.S
Walking Time	6.8	5.6	5.6	20.23%	4.08	1.31	5.17	<0.001	H.S

*BT-Before Treatment., *AT-After

Treatment., *AF-After Follow-up, *S.D.-

Standard Deviation., *S.E- Standard Error,*S- Significant,*H.S-Highly Significant *N.S-Not Significant

- After observing the clinical parameters, the effect of the therapy has been graded into four, they are, Good response, Moderate response, Mild response, No response.
- Out of fifteen patients, 05(33.33%) show Good response to the treatment. 08 (53.33%) were shown Moderate response and 02 (13.33%) patients shown Mild response.

DISCUSSION:

Probable mode of action and metabolism of Chinchadi Taila:^{10,11,12}

- The *madhura rasa* of *chincha, eranda and grinjana* does the *vata shamana* along with the *amla rasa* of *jambiri*.
- Drugs like *shunthi, devadaroo, arka, chincha, and shigroo* possessing *Ruksha guna* are useful in *shotha*, drugs like *snuhi, sarshapa, lahsuna and eranda* possessing *snigdha guna* subsides *vata* along with providing tonicity to the tissues and pharmacologically acting as *balya*.
- In combination with these drugs like *jambhiri, arka, eranda, shunthi and snuhi* act as *kapha vatahara and laghu guna* of *sarshapa, shigru and varuni* does the *sroto shodhana*.
- All the drugs present in *chinchadi taila* are *ushna virya* which directly subsides the aggravated *vata* and the *ruksha guna* of *katu vipaka* of drugs like *snuhi, lahsuna, arka, parasrni, devadaroo, varuni and shigru* act as *shothahara*
- *Amla vipaka* of *chincha* and *jambiri* along with *madhura vipaka* of *eranda* and

shunthi possessing *snigdha guna* will result in *dhatu poshana* and subsides *vata*.

- There is an understanding of the specific anti-inflammatory, anti-oxidant and analgesic action of the drugs like *Arka, chincha and snuhi*. Also the drugs like *Eranda, Jambeera, Prasarini and Varuni* exhibit anti-inflammatory and antioxidant activity. *Lasuna* acting as an analgesic and Anti-inflammatory drug. *Sarshapa* acts as an anti-oxidant. *Shigru* acts as an analgesic.

CONCLUSION:

- *Sandhi* is not a single structure rather it is considered as an organ. There are different structures, which helps in maintaining the stability of the joint. *Snayu* or ligament helps in proper binding of the joint. They unite the bones and help to direct the bone movement and prevent the excessive and undesirable motion. Muscle tone helps to maintain the alignment of the joint.
- *Shleshmaka Kapha* or Synovial fluid, which fills up the cavities, occupies the Synovial joint, bursae and tendon sheaths. It provides the lubricant factors, nutrient to the cartilage, disc and helps in keeping the joint firmly united. *Shleshmadharakala* situated in the joints supported by *Shleshamka Kapha* helps in lubrication. Conclusively, all the drugs present in *Chinchadi taila* are *vata shamaka*. The property of drugs directly act on *Sandhivata* and reduces his symptoms. The patients used *Chinchadi taila* for *Abhyanga* and here in all parameters like *Sandhi shotha, Sandhi Graha, Sandhi Atopa, Range of movements, Sparshaasayata* etc. patients got good relief.

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