

INTERNATIONAL AYURVEDIC MEDICAL JOURNAL





Research Article ISSN: 2320 5091 Impact Factor: 5.344

A COMPARATIVE CLINICAL STUDY ON PARISHEKA SWEDA WITH VISHAGARBHA TAILA AND TILA TAILA IN KATIGRAHA

Prabin. M. M¹, Vikram Kumar²

¹PG Scholar, ²Associate Professor, Department of P.G studies in Panchakarma, Alva's Ayurveda Medical College and Hospital, Moodubidire, Dakshina Kannada, Karnataka, India

Corresponding Author: prabinmm25@gmail.com

https://doi.org/10.46607/iamj1108082020

(Published online: August 2020)

Open Access

© International Ayurvedic Medical Journal, India 2020

Article Received: 24/07/2020 - Peer Reviewed: 05/08/2020 - Accepted for Publication: 05/08/2020



ABSTRACT

Swedana Karma is one among the Shadupakrama (Six treatment modalities), indicated in the management of various diseases caused by Vata. Parisheka Sweda is a type of Drava Sweda which can be applied as Ekanga (over a body part) or Sarvanga (whole body). Katigraha (low back pain with stiffness) is a condition which is characterized by Shoola (pain) and Stabdhata (stiffness) in Kati Pradesha (lumbo - sacral region) due to vitiated Vata. Swedana helps to relieve the pain and stiffness. Parisheka Sweda acts over whole Kati Pradesha (lumbo - sacral region), hence it will be more beneficial in this condition. Vishagarbha Taila contains Tikshna and Ushna Guna drugs and is specially indicated in Katigraha (low back pain with stiffness). Tila Taila is best among Vatahara Dravyas. Hence this study was undertaken to compare the efficacy of Parisheka Sweda with Vishagarbha Taila and Tila Taila in the management of Katigraha (low back pain with stiffness) to ascertain the better modality. Total 40 patients were randomly selected and divided in two equal groups. Group VT patients were given Vishagarbha Taila Parisheka Sweda and group TT patients were given Tila Taila Parisheka Sweda for half an hour once a day for 1 week over Kati Pradesha (lumbo - sacral region). Statistical analysis showed that both groups showed good improvement in various parameters of Katigraha (low back pain with stiffness). When comparison was done between the groups, it revealed that there was no statistically significant difference between the groups except in stiffness (p<0.001) and left lateral flexion (p<0.05). Hence it can be concluded that both Vishagarbha Taila Parisheka Sweda

and *Tila Taila Parisheka Sweda* may be accepted in treating patients with *Katigraha* (low back pain with stiffness) to reduce both signs and symptoms successfully.

Keywords: Parisheka Sweda, Katigraha, Low back pain with stiffness, Vishagarbha Taila, Tila Taila

INTRODUCTION

Panchakarma is a unique approach of Ayurveda which deals with purification and detoxification of the body. In Panchakarma, Snehana and Swedana are the two treatment modalities, used as Poorva Karma (Preoperative procedure) as well as Pradhana Karma (Main procedure) for treating different diseases. There are different types of Swedana Karma explained in Ayurvedic classics; Parisheka Sweda¹ is one among them. Induction of Swedana by unique procedure of pouring warm medicated liquids on body is known as Parisheka Sweda (either Ekanga – over a body part or Sarvanga – whole body). The *Parisheka Sweda* is said beneficial in various diseases with using of different liquid medications such as Taila (oil), Kashaya (decoctions), Jala (water), Dhanyamla (liquid obtained after fermenting cereals), etc.

Katigraha (low back pain with stiffness) is the condition in which patients have complaints of Katishoola with *Katigraha*² (catching type of low back pain). It is one among the eighty *Nanatmaja Vata Vvadhi*. As per Ayurvedic classics, In Katigraha the Shoola and restricted movement are present in whole of Kati Pradesha, i.e. in between Uraha and Nitamba 4 (lumbo sacral region). As pain in *Katigraha* is referred to the low back region it can be correlated to Low back pain (Lumbago) in contemporary science. Low back pain (Lumbago) is usually defined as pain, muscle tension, or stiffness localized below the costal margin and above the inferior gluteal folds, with or without leg pain (sciatica)⁵. It is a condition with 60-80% of the world's population experiencing pain at some time in their lives. Among this, mechanical pain accounts for more than 90% of the back pain episodes⁶. Due to the critic nature of low back pain, people become disabling in the routine activities and ultimately it affects the quality of life. Hence, symptomatic relief is of prime importance so as to make the person fit for routine challenges in

life. In general line of treatment of *Vata Vyadhi*, *Sukhoshna Parisheka* is indicated. *Parisheka Sweda* with *Sukhoshna Taila* helps to relieve from pain and stiffness. Thus, *Parisheka Sweda* plays a vital role in managing *Katigraha*⁷. *Vishagarbha Taila* contains *Tikshna* and *Ushna Guna* drugs and is specially indicated in *Katigraha*⁸. *Tila Taila* is best among *Vatahara Dravyas*. It is having *Snighdha* and *Ushna Guna*⁹. Also, previous study shows that *Tila Taila Parisheka* is effective in reducing signs and symptoms of *Katigraha*¹⁰. Hence this study was undertaken to compare the efficacy of *Parisheka Sweda* with *Vishagarbha Taila* and *Tila Taila* in the management of *Katigraha* (low back pain with stiffness) to ascertain the better modality.

Aim and Objectives

- To evaluate the efficacy of *Parisheka Sweda* with *Vishagarbha Taila* and *Tila Taila* in *Katigraha* (low back pain with stiffness).
- 2. To compare the efficacy of *Parisheka Sweda* with *Vishagarbha Taila* and *Tila Taila* in the management of *Katigraha* (low back pain with stiffness).

Material and Methods

Source of Data: Patients suffering from *Katigraha* (low back pain with stiffness) were randomly selected from the *Panchakarma* OPD and IPD of Alva's Ayurveda Medical College and Hospital, Moodbidri.

Drug source -

- Raw drugs were properly identified and selected from the local market.
- Vishagarbhaa Taila was prepared in Alva's pharmacy, Mijar and Tila Taila was procured from the local market.

Method of Collection of Data

Study design – Randomised comparative clinical study **Sample size** – 40 patients fulfilling the diagnostic and inclusion criteria of *Katigraha* (low back pain with stiffness) of either sex were selected for the study and

4099

randomly assigned into 2 equal groups, group VT (*Vishagarbha Taila* group) & group TT (*Tila Taila* group) for the study through lottery method.

Diagnostic Criteria- *Katishoola, Katigraha*, Tenderness in Lumbar region, Restricted movements of Lumbosacral spine -Forward bending, Backward bending and Lateral flexion and Rotation

Inclusion Criteria - Patients with symptoms of *Katigraha* between age group 20-70 years of either sex.. Patients who are fit for *Swedana Karma*.

Exclusion Criteria -

- Patients who are having low backache due to any infection, congenital deformities of spine, viscerogenic.
- Patients with the history of trauma (*Abhighata Janya Katigraha*).
- Post-surgical backache.
- Sciatica.
- Contraindicated for *Swedana*.

doi: 10.46607/iamj1108082020

Procedure: The whole procedure of *Parisheka Sweda* is divided into 3 steps, Purva, Pradhana, and Paschat Karma. Patients were educated about the whole course of treatment. Patient is made to lie in prone position exposing the Kati Pradesha (lumbo – sacral region) after evacuation of natural urges. 2 liters of Taila (as per the group) was made warm by using a water bath. Local Abyanga was done on Kati Pradesha (lumbo – sacral region) with respective Taila for 5 minutes. After Abyanga, Kati Pradesha was covered with a cotton cloth piece. In Pradhana Karma the Sukhoshna Taila (temperature - 42°c to 45°c approximately) was filled in a Galanthika (pitcher). Taila was poured from a height of 12 Angula (9 inches approximately) from the body part. It should be poured in a continuous manner without interruption. Taila was reused by reheating and the procedure was carried out for 30 minutes. In Paschat Karma the covered cloth was removed, and the area was gently massaged. The area was cleaned with a piece of cotton. Patient was asked to take rest for 15 minutes and later advised for a warm water bath. Patients were advised to take Laghu (light), Ushna (hot)

and *Anabhishyandi Ahara* (food which does not causes obstruction to the channels after digestion), during the course of treatment and asked to follow the regimens (avoid speaking loudly, excessive travelling, excessive walking, excessive sitting, indigestion, consumption of food prior to digestion of previous meals, day sleep, and sexual intercourse) which are explained during *Snehana* and *Swedana* procedure¹¹.

Assessment Criteria Subjective Parameters

- Pain in Kati Pradesha.
- Stiffness in Kati Pradesha.

Objective Parameters

- Tenderness
- Restricted Movement of hip Forward bending (Schober's test), Backward bending, Lateral flexion, Rotation
- Functional assessment Walking time

Assessment of the condition were done on a detailed case proforma adopting standard scoring methods of subjective and objective parameters.

Observation Period

- Initially on the first day before treatment.
- On the 7th day after treatment.

Follow up – In both groups follow up was done on 14th Day, and 28th day after completion of treatment protocol.

Statistical Method: Average was found using mean and standard deviation. Pre-test and post-test data were compared using paired 't' test. Comparison of two groups was done using unpaired 't' test.

Observations and Results: In this study maximum number of incidence (65%) was in the age group 21-40 years and in male (65%). Majority of the patients had *Vatakapha Prakruti* (47.5%) and most of the patients were from middle socio-economic status (80%). Maximum patients had *Madhyama Vyayama Shakthi* (72.5%). Majority of the patients had chronicity of 1-4 months (32.5%) followed by chronicity of 1-2 years (20%).

Results

Table 1: Statistical analysis of Pain

Group	Mean Sc	ore			%	S.D(±)	S.E(±)	t value	p value
	BT			BT – AT					
VT	1.850	AT	0.900	0.950	51.35%	0.605	0.135	7.025	p<0.001
		AF1	0.650	1.200	64.86%	0.616	0.138	8.718	p<0.001
		AF2	0.800	1.050	56.76%	0.686	0.153	6.842	P<0.001
TT	1.750	AT	0.900	0.850	48.57%	0.587	0.131	6.474	p<0.001
		AF1	0.500	1.250	71.43%	0.550	0.123	10.162	p<0.001
		AF2	0.800	0.950	54.23%	0.686	0.153	6.190	P<0.001

The above data shows that the effect of treatment on pain was statistically highly significant (p<0.001) after treatment and after two follow up in both the groups.

Table 2: Statistical analysis of Stiffness

Group	Mean Score				%	S.D(±)	S.E(±)	t value	p value
	BT			BT – AT					
VT	1.500	AT	0.350	1.150	76.67%	0.587	0.131	8.759	p<0.001
		AF1	0.200	1.300	86.67%	0.657	0.147	8.850	p<0.001
		AF2	0.300	1.200	80%	0.834	0.186	6.439	P<0.001
TT	1.350	AT	0.850	0.500	37.04%	0.513	0.115	4.359	p<0.001
		AF1	0.500	0.850	62.96%	0.366	0.0819	10.376	p<0.001
		AF2	0.550	0.800	59.26%	0.523	0.117	6.839	P<0.001

The above table denotes that the effect of treatment on stiffness were statistically highly significant (p<0.001) after treatment and after following up in both the groups.

Table 3: Statistical analysis of Tenderness

Group	Mean Sc	ore			%	S.D(±)	$S.E(\pm)$	t value	p value
	BT			BT – AT					
VT	1.050	AT	0.250	0.800	76.19%	0.523	0.117	6.839	p<0.001
		AF1	0.050	1.000	95.24%	0.649	0.145	6.892	p<0.001
		AF2	0.100	0.950	90.45%	0.686	0.153	6.190	P<0.001
TT	0.900	AT	0.250	0.650	72.22%	0.587	0.131	4.951	p<0.001
		AF1	0.500	0.850	94.44%	0.587	0.131	6.474	p<0.001
		AF2	0.100	0.800	88.89%	0.616	0.138	5.812	P<0.001

The above table denotes that the effect of treatments on tenderness were statistically highly significant (p<0.001) after treatment and after following up in both the groups

Table 4: Statistical analysis of Forward bending

Group	Mean Sc	ore			%	$S.D(\pm)$	S.E(±)	t value	p value
	BT			BT – AT					
VT 18.655	18.655	AT	19.68	1.025	5.49%	0.577	0.129	7.950	p<0.001
		AF1	20.10	1.445	7.75%	0.695	0.155	9.302	p<0.001
		AF2	19.86	1.210	6.49%	0.686	0.153	7.890	P<0.001
TT	18.595	AT	19.50	0.910	4.89%	0.839	0.188	4.850	p<0.001
		AF1	19.83	1.240	6.67%	0.826	0.185	6.712	p<0.001
		AF2	19.75	1.160	6.24%	0.865	0.193	5.999	p<0.001

The above data denotes that the effect of treatment on forward bending was statistically highly significant (P < 0.001) after treatment and after following up in both the groups

Table 5: Statistical Analysis of Backward bending

Group	Mean Sc	ore			%	S.D(±)	S.E(±)	t value	p value
	BT			BT – AT					
VT	13.32	AT	12.625	0.695	5.22%	0.439	0.0983	7.073	p<0.001
		AF1	12.550	0.770	5.78%	0.454	0.102	7.579	p<0.001
		AF2	12.625	0.695	5.22%	0.451	0.101	6.887	P<0.001
TT	13.32	AT	12.690	0.630	4.73%	0.469	0.105	6.005	p<0.001
		AF1	12.665	0.665	4.99%	0.397	0.0887	7.385	p<0.001
		AF2	12.750	0.570	4.28%	0.416	0.0929	6.133	P<0.001

The above table denotes that the effect of treatment on backward bending was highly significant (P < 0.001) after treatment and after follow up in both the groups.

Table 6: Statistical Analysis of Right Lateral Flexion

Group	Mean So	core			%	S.D(±)	S.E(±)	t value	p value
	BT			BT – AT					
VT	0.800	AT	0.150	0.650	81.25%	0.587	0.131	4.951	p<0.001
		AF1	0.050	0.750	93.75%	0.716	0.160	4.682	p<0.001
		AF2	0.100	0.700	87.50%	0.733	0.164	4.273	p<0.001
TT	0.650	AT	0.300	0.350	53.85%	0.489	0.109	3.199	p<0.05
		AF1	0.100	0.550	84.62%	0.605	0.135	4.067	p<0.001
		AF2	0.150	0.500	76.92%	0.607	0.136	3.684	p<0.05

The above table denotes that Group VT showed statistically high significance (p<0.001) after treatment and after following up in right lateral flexion. Group TT showed statistically significant effect (p<0.05) after treatment and after following up.

Table 7: Statistical Analysis of Left Lateral Flexion

	The state of the s											
Group	Mean Sc	ore			%	$S.D(\pm)$	S.E(±)	t value	p value			
	BT			BT - AT								
VT	0.800	AT	0.100	0.700	87.50%	0.571	0.128	5.480	p<0.001			
		AF1	0.050	0.750	93.75%	0.639	0.143	5.252	p<0.001			
		AF2	0.050	0.750	93.75%	0.639	0.143	5.252	P<0.001			
TT	0.600	AT	0.300	0.300	50.00%	0.470	0.105	2.854	P<0.001			
		AF1	0.050	0.550	83.33%	0.639	0.143	5.252	p<0.001			
		AF2	0.150	0.450	75.00%	0.510	0.114	3.943	P<0.001			

The above table denotes that the effect of treatment on left lateral flexion was statistically highly significant (p<0.001) after treatment and after following up in both the groups.

Table 8: Statistical Analysis of Rotation

Group	Mean Sc	ore			%	S.D(±)	S.E(±)	t value	p value
	BT			BT – AT					
VT	0.700	AT	0.150	0.550	78.57%	0.510	0.114	4.819	p<0.001
		AF1	0.000	0.700	100%	0.571	0.128	5.480	p<0.001
		AF2	0.000	0.700	100%	0.571	0.128	5.480	P<0.001
TT	0.600	AT	0.100	0.500	83.33%	0.513	0.115	4.359	p<0.001
		AF1	0.050	0.550	91.67%	0.510	0.114	4.819	p<0.001
		AF2	0.000	0.600	100%	0.598	0.134	4.485	P<0.001

The above table denotes that the effect of treatment on rotation was statistically highly significant (P < 0.001) after treatment and after following up in both the groups.

Table 9: Statistical Analysis of Walking Time

Group	Mean So	core			%	S.D(±)	S.E(±)	t value	p value
	BT			BT – AT					
VT	0.450	AT	0.100	0.350	77.78%	0.489	0.109	3.199	P<0.05
		AF1	0.100	0.350	77.78%	0.489	0.109	3.199	P<0.05
		AF2	0.100	0.350	77.78%	0.489	0.109	3.199	P<0.05
TT	0.550	AT	0.100	0.450	81.82%	0.510	0.114	3.943	P<0.001
		AF1	0.500	0.500	90.91%	0.513	0.115	4.359	P<0.001
		AF2	0.500	0.500	90.91%	0.513	0.115	4.359	P<0.001

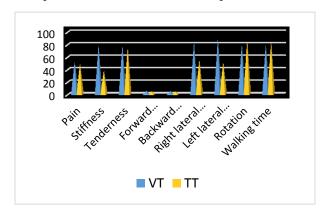
The above table denotes that Group VT showed statistically significance (p<0.05) after treatment and after following up in Walking Time. Group TT showed statistically highly significant effect (p<0.001) after treatment and after following up in Walking Time.

Table 10: Comparative Effect of Group VT And Group TT

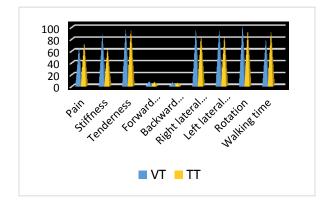
Feature	MEAN		MD	t value	p value
	GROUP VT	GROUP TT			
Pain	0.950	0.850	0.100	0.531	p>0.05
Stiffness	1.150	0.500	0.650	3.728	P<0.001
Tenderness	0.800	0.650	0.150	0.853	p>0.05
Forward Bending	1.025	0.910	0.115	0.505	p>0.05
Backward Bending	0.695	0.630	0.115	0.452	p>0.05
Right Flexion	0.650	0.350	0.300	1.755	p>0.05
Left Flexion	0.700	0.300	0.400	2.418	P<0.05
Rotation	0.550	0.500	0.050	0.309	p>0.05
Walking Time	0.350	0.450	0.100	0.632	p>0.05

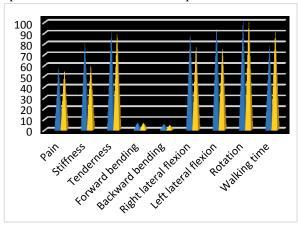
The above table shows that the comparative difference in effect of treatment is statistically insignificant (p>0.05) between Group VT and Group TT in all the parameters except for stiffness (p<0.001) and left lateral flexion (p<0.05).

Comparative Results of Both Groups After Treatment Comparative Results of Both Groups After 1st Follow Up



doi: 10.46607/iamj1108082020





Comparative Results of Both Groups After 2nd Follow Up

DISCUSSION

Katigraha is a condition which is characterized by pain and stiffness in the Kati Pradesha (lumbo - sacral region) due to vitiated Vata. It is not explained as a separate disease entity in Brihatrayi but in Gadanigraha it is mentioned as a separate disease while explaining the Vata Vyadhis¹². Patients of Katigraha may complain of radiating, catching or squeezing type of pain. The proper history taking is very important for the diagnosis of Katigraha. From simple improper daily activities to malignancy, there may be many causative factors for the manifestation of Katigraha. The symptoms of Katigraha can't be correlated exactly with any disease of modern medicine, but for understanding in contemporary science it may be considered as low back pain. In Parisheka Sweda with Taila, Sneha Dravya is used as media. Its dual action of Snehana-Swedana helps in alleviating Vata Dosha effectively. The Vata Dosha which is the key factor of causation of *Katigraha* has almost opposite qualities to Sneha. Thus, Parisheka Sweda normalizes the vitiated Vata and helps in Samprapti Vighatana of Katigraha. In this study maximum number of incidence (65%) was in the age group 21-40 years. This may be due to the reason that most of the patients were youngsters and middle-aged belonging to the working class. Male patients were more (65%). May be due to demographic facts. As male are doing hard and stressful jobs comparatively to female. Majority of the patients had Vatakapha Prakruti (47.5%), which shows that *Vata Kapha Prakruti* people are more

prone to Vata dominant diseases. Most of the patients were from middle socio-economic status (80%). This may be due to strenuous and long working hours of middle-class people. Maximum patients had Madhyama Vyayama Shakthi (72.5%). Majority of the patients had chronicity of 1-4 months (32.5%) followed by chronicity of 1-2 years (20%). May be due to subject's exertion, sometimes stretching or tearing of the muscle or tendon can lead to backache. Statistically significant difference was found in pain and tenderness in both the groups. However, on comparison the difference between the groups was statistically insignificant (p > 0.05) Pain, and tenderness are the cardinal symptoms of Vata dosha involvement. Swedana is the ultimate choice as it holds good for Vata Vyadhi treatment. Most of the ingredients of Vishagarbha Taila due to Teekshna Guna, Ushna Virya and Katu Vipaka shows action of Vedanasthapaka and Swedajanana. Tila Taila is having Snigda, Ushna Guna and Ushna Veerya and is best Vatahara. This proves that Parisheka Sweda with either Vishagarbha Taila or Tila Taila has equal effect in reducing the pain, and tenderness observed in Katigraha. Statistically significant difference was found in stiffness in both the groups. On comparison the difference between the groups was statistically significant (p<0.001). Increased blood supply due to the rise in temperature induces muscle relaxation and increases efficiency of muscle, thereby ensuring the optimum conditions for muscle contraction. Antispasmodic activity – The chemical constituent in *Dhathura* leaf

extract, Scopalamine has antispasmodic effect¹³. May be this help to reduce the muscular stiffness. There was statistically significant improvement in lumbar movements. However, on comparison difference between the groups was statistically insignificant (p>0.05) except in left lateral flexion (p<0.05). Swedana leads to increased blood supply due to the rise in temperature, which in turn induces muscle relaxation and increases efficiency of muscle. This ensures the optimum conditions for muscle contraction and relieves muscle spasms, thereby contributing to easing the lumbar movements. Heat during Swedana therapy increases extensibility of collagen fibers - collagen fibers becomes soft by the application of heat which is followed by a passive and active stretching which helps in increase in range of movement of low back. Chala Guna is the natural quality of *Vata*. In cases of *Katigraha*, it presents in Ksheena Avastha, due to which patients feels difficulty in walking. This study shows that Parisheka Sweda helps to improve the walking capacity of patients in Katigraha. When it comes to the mode of action, Snigdha and Ushna property of Swedakarma tackles the Rooksha and Sheetha Guna of Vata, which helps in relieving stiffness. Swedana Dravyas having Laghu Guna acts against Guru Guna and causes the expulsion of Apya Tatwa from the body that is Guru in nature. Swedana Dravyas by Ushna and Tikshna Gunas are capable of penetrating the Srotas where they activate the sweat glands to produce more sweat. Moreover, Laghu and Sara Guna of these drugs enable them to act on the Dosha in the channels and excrete them through micropores of the skin in the form of sweat, hence resulting in Srotoshodhana. Drugs in Vishagarbha Taila is having dominance of Katu and Tiktha Rasa, Ushna Veerya and Katu Vipaka. Tila Taila is having Guru, Ushna, Tikshna, Vyavayi Guna, Madura Rasa and Ushna Veerya. All these properties of two Tailas helps in controlling the Vata Dosha involved thereby reducing the signs and symptoms of Katigraha. During the study, it was noted that Lakshana like Sheetoparama, Mardavata and Swedapradurbhava were seen generally after administration of Parisheka Swedana, but Shooloparama, Stambhanigraha, Gauravnigraha and Rogopshamana

doi: 10.46607/iamj1108082020

like symptoms were observed in few days only in the course of Parisheka Sweda.

Mode of action of Parisheka Sweda

Katigraha is characterised by pain and stiffness in lumbo-sacral region. The heat applied through Parisheka Sweda helps in contesting these symptoms. Degeneration is also one among the causes for *Katigraha*, where Vata Dosha present in Prakupita Avastha and there is Kshaya of Snehabhaya in that area. With this consideration Snigdha Sweda would be an ideal line of management, which Parisheka Sweda delivers effectively. As Parisheka Sweda with Taila avails the effect of both Snehana and Swedana, Snehana corrects the Shushkata of the Dhatu (which is the root cause for Vata vitiation), imparts strength and provides platform for performing Swedana. Swedana relieves Ruk, Stambha Shotha, Toda, etc. symptoms of Vata and soften the body parts. Stambha or stiffness is the resultant of excess of Sheeta Guna of Vata. Being a Snigdha Sweda, Parisheka Sweda relieves the Stambha and Ruk of the *Katipradesha*, thus helps to treat the condition like Katigraha.

CONCLUSION

From the above study it can be concluded that there is significant effect of both Vishagarbha Taila Parisheka Sweda and Tila Taila Parisheka Sweda in Katigraha. That is to say both the treatments may be accepted in treating patients with Katigraha to reduce both signs and symptoms successfully.

REFERENCES

- Agnivesha, Charaka Samhita; Edited by, Vaidya Yadavji Trikamji Acharya; Published by Chaukhambha Krishnadas Academy, Varanasi; Sutra Sthana; 14:44; pp.90.
- 2. Sri. Ganga Sahaya Pandeya edited Gadanigraha, Published by Chaukamba Sanskrit Series office, Varanasi, 1st edition 1969, Part 2; 19:160; pp.508
- 3. Sharangdharacharya; Sharangdhara Samhita; Translated in English by, Prof. K.R.Srikantha Murthy; Published by, Chaukambha Orientalia, Varanasi; Seventh edition: 2007; 7:106; pp.40
- 4. Aacharya Ragubeer Prasad Trivedi; Parishadhyam Shabdarth Shareeram; Published by, Shri Baidhyanath

- Ayurveda Bahavan limited, Nagpur; IInd edition-1979; pp.181
- 5. British Medical Journal; Clinical review- Diagnosis and treatment of low back pain; Year; 2006
- 6. Davidson's principles and practice of medicine; edited by Nicholas A. Boon, John A.A Hunter. 20th edition 2010, pp: 1240.
- Agnivesha; Charaka Samhita; Edited by, Vaidya Yadavji Trikamji Acharya; Published by, Chaukhambha Krishnadas Academy, Varanasi; Chikitsa Sthana; 28:81-82; pp.620
- Kaviraj Govind Das Sen, Bhaishajya Ratnavali, Edited with Siddhiprada Hindi Commentary by Proff.Siddhi Nandan Mishra, Pradhama Bhaga, chapter 26, Chaukamba Surabharati Prakashan, Total Page 1196, pp: 569.
- Bhava Mishra, Bhavaprakasha, Edited with Vidyotini Hindi Commentary by Sri Brahma Sankara Misra, Choukhamba Sanskrit Bhawan, Varanasi. UP. Edition: 2010, volume 1, pp: 779
- Dr Dilbag singh Jindal, Role of Parisheka Svedana in the Management of Kati Graha; Dissertation work; Department of Panchakarma, SDMCA Hassan, (2009).
- Agnivesha, Charaka Samhita; Translated in English by, Dr. Ram Karan Sharma and Vaidya Bhagwan Dash; Published by Chaukhambha Sanskrit Series Office, Varanasi; Sidhi Sthana; 12:11; pp.399.
- 12. Sri. Ganga Sahaya Pandeya edited Gadanigraha, Published by Chaukamba Sanskrit Series office, Varanasi, 1st edition 1969, Part 2; 19:160; pp.50.
- Becker BA, McCarthy LE. A, Comparison of the Antispasmodic activities of Atropine and Scopolamine and their N-methyl derivatives in mice by an in-vivo technique. Arch Int Pharmacodyn Ther. 1960; 126:307-314.

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Prabin. M. M & VikramKumar: A Comparative Clinical Study On Parisheka Sweda With Vishagarbha Taila And Tila Taila In Katigraha. International Ayurvedic Medical Journal {online} 2020 {cited August, 2020} Available from: http://www.iamj.in/posts/images/upload/4098 4106.pdf

doi: 10.46607/iamj1108082020 | IAMJ August 2020 | www.iamj.in