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### **Research Article**

# A CLINICAL STUDY TO ASSESS THE EFFICACY OF PARISHEKA SVEDA IN THE MANAGEMENT OF

## KATIGRAHA

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| *Correspondence                       | Abstract  |  |  |  |  |
|---------------------------------------|---|--|--|--|--|
| Dilbag Jindal                         | Parisheka is the assortment of Svedana Chikitsa in Panchakarma. In Parisheka Sveda, medicated liquid is to      |  |  |  |  |
| Principal investigator and consultant | be poured over the desired part or whole body. Parisheka Svedana with Taila provides benefits of both           |  |  |  |  |
| Panchakarma, SDM College of Ayurveda  | Snehana and Svedana together. In Ayurvedic classics Katigraha is consider as Vata Vyadhi. Shoola and            |  |  |  |  |
| and Hospital, B.M Road, Hassan,       | Graha in Katipradesha are the symptoms of Katigraha. For understanding in contemporary science,                 |  |  |  |  |
| Karnataka, India                      | Katigraha can be seeing as low back pain. In the treatment of Vata Vyadhi, repeated use of Snehana and          |  |  |  |  |
|                                       | Svedana is advocated. Ksheerbala Taila contains Balamoola, Ksheer and Tila Taila, which are having Shoola       |  |  |  |  |
|                                       | Hara properties. Tila Taila said as best among Taila and also having the quality to pacify Vata. Hence          |  |  |  |  |
| DOI: 10.7897/2321-6328.01211          | Ksheerbala Taila Parisheka Sveda over Katipradesha (lumbo-sacral region), with control group of Tila Taila      |  |  |  |  |
|                                       | was taken to assess its efficacy in Katigraha. Parisheka Svedana with Ksheerbala Taila and Tila Taila was       |  |  |  |  |
|                                       | given to 30 patients of Katigraha, (divided in to two groups) for 7 days. With help of using Student paired 't' |  |  |  |  |
|                                       | test, the findings of research work were statistically analysed. Results of this study show that both the study |  |  |  |  |
|                                       | group were effective in reliving the symptoms of Katigraha, while Ksheerbala Taila Parisheka Sveda was          |  |  |  |  |
|                                       | found statistically significant in comparison of Tila Taila.Parisheka Svedana with Taila gives the dual effect  |  |  |  |  |
| Article Received on: 05/06/13         | of Snehana and Svedana thus controlled the symptoms of Katigraha efficiently. This study shows that,            |  |  |  |  |
| Accepted on: 19/08/13                 | Ksheerbala Taila providing far better result in comparison with plain Tila Taila. Hence it can be said that     |  |  |  |  |
|                                       | Ksheerbala Taila has its own effect also in relieving Katigraha which is one of the Vata Vyadhi.                |  |  |  |  |
|                                       | Keywords: Parisheka Svedana; Panchakarma; Katigraha; Low back pain  |  |  |  |  |

### INTRODUCTION

In Panchakarma, Snehana and Svedana are the two treatment modalities, used as Poorva Karma as well as Pradhana Karma for treating the different diseases. There are different types of Svedana Karma explained in Ayurvedic classics; Parisheka Svedana is one among them. In Parisheka Svedana, liquid medication is to be poured over the affected region (either Ekanga or Sarvanga).<sup>1</sup> In Ayurveda, Katigraha is the condition in which patients have complaints of Katishoola with Graha (catching type of low back pain).<sup>2,3</sup> It is one, among the eighty Nanatmaja Vata Vyadhi.<sup>4</sup> In Ayurvedic classics, Katigraha is explained as both- a separate diseases as well as symptom in other disorder. In contemporary science, broadly this condition can be compare as low back pain (lumbago). Low back pain is the common medical condition, which is felt in everyone's life at one or other time. Sometimes it really needs medical help to get rid of it. Due to fast and mechanical life style, the incidence of low back pain

is rising day by day. It may affect the different age group and disturbs the routine work of an individual. Ultimately it upsets the quality of life.<sup>5,6</sup> Now a day, in day to day clinical practice it is a burning issue. So, to find out the causative factors and to give the relief from low back pain to an individual is the need of time. As the base of Ksheerbala Taila is Tila Taila, which is also has Vata relieving effect. Therefore in this study Tila Taila was kept as a control drug to compare its effect with that of Ksheerbala Taila. One of the aims of keeping the Tila Taila control group was to ascertain that the beneficial effects are due to oil and heat used in the process or it is the specific effect of Ksheerbala Taila. So to check this hypothesis the Parisheka Svedana was done with Tila Taila in one group and with Ksheerbala Taila in other group.

#### SUBJECTS AND METHODS

The present clinical trial was done over the 30 patients of Katigraha, selected from the outpatient department and in patient department of S.D.M. College of Ayurveda and Hospital, Hassan, India; after ethical clearance from institutional ethics committee vide number: SDMCAH/IEC/08-09/14/09.03.09

#### **Diagnostic Criteria**

- Katigraha (Reduced movement)
- Katishoola (Low back pain)
- Reduced walking capacity due to pain
- Tenderness in lumbar region.

#### **Inclusion Criteria**

The patients, who were fit for Parisheka Svedana, in the age group of 20-50 years of either sex, were selected for clinical trial.

#### **Exclusion Criteria**

- Patients who were having low backache due to any infection, cancerous, congenital, viscerogenic, vascular causes.
- · Patient associated with any other systemic disorder.
- Patients with the history of trauma (AbhighataJanya Katigraha).
- Low backache caused by any treatment for other ailments (iatrogenic).
- Backache due to prolapse disk.
- Post-surgical backache.
- Contraindicated for Svedana.

#### **Research Design**

30 Patients of Katigraha were randomly divided in to the two groups - Ksheerbala Taila group (KBG) and Tila Taila group (TTG), each comprise of 15 patients. Each patient was subjected to Sthanika Parisheka Svedana over Kati Pradesh with Ksheerbala Taila / Tila Taila. Duration - 30 minutes, once a day, Up to 7 consecutive days; Time of Administration - Morning hours (7 am to 9 am), before food.

#### Procedure

The whole procedure of Parisheka Sveda was divided under three steps, Purva, Pradhan and Pashchat Karma. In Purva Karma, as per the inclusion criteria selected patients were educated about the whole course of the treatment. The all required materials for Parisheka Svedana were arranged. In morning time (from 7 am to 9 am) after the evacuation of natural urges, the patient were shifted for procedure and asked to comfortably lie down in prone position with well exposed Katipradesha, over Droni. The one liter Taila (as per

group) heated, by kept it in water bath. Sthanika Abhyanga with Taila (as per the clinical trial group) over Katipradesha was done for 10 minutes. Then Vastrachhana<sup>7</sup> (covered with the cotton cloth piece measuring of 18 x 18 inches) done over Katipradesha. In Pradhana Karma, the Parisheka Yantra filled with Sukhoshna (approximate temperature-  $40^{\circ}$ C to  $42^{\circ}$ C) Taila (as per group). The heated Taila was poured from the height of 13 fingers<sup>8</sup> (about 9 inches) over Kati Pradesh with the help of Parisheka Yantra for continues 30 minutes. In between the procedure the Taila was being reused by recollecting and reheating. After refilling the Parisheka Yantra with heated Taila, every time before starting the procedure temperature was being checked and confirmed with patient. In Pashchat Karma, after the completion of above said procedure, the whole Taila was wiped out from patient's body. After 5 minutes patients were asked to take bath with warm water. Patients were advised to take Laghu, Ushna and Anabhishyandi Aahar, during the course of treatment (7 days), and asked to follow the regimens which are explained in Snehana and Svedana Chikitsa<sup>9</sup>. After the course of treatment the regimens to be followed are explained to the patients and 'Patient Education Chart' was given.

#### Follow up

After the completion of treatment patient were followed up for 1 month at the intervals of 7 days. On these four follow up's, the condition of the patients was assessed under four criterion; Relief is sustained, further improvement, no changes and deteriorate.

#### **Assessment Criteria**

The objective parameters were include improvement in pain and restricted movements of spine such as flexion, extension, left lateral movement, right lateral movement, rotating movement and walking time. For assessing the above said symptoms, tools like visual analogue scale, Goniometer and measuring tape were used. The self-gradation was given to all the symptoms of Katigraha. The symptoms were noted before and after treatment and compared with each groups.

#### **Statistical Methods**

The data obtained were tabulated and statistically analysed using Student paired 't' test. The change with p < 0.05 was considered as statistically significant.

### RESULTS

#### Ksheerbala Taila Group

The effect of Parisheka Svedana done over Katipradesha with Ksheerbala Taila was noted as highly significant at the level of P < 0.001, in all the symptoms of Katigraha (Table 1).

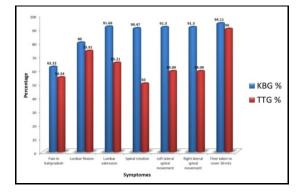
Table 1: Showing Effect of the Parisheka Svedana with Ksheerbala Taila in Katigraha

| Symptom                       | Mean BT | Mean AT | % of Relief | SD (±) | SE (±) | 't' value | Р       |
|-------------------------------|---------|---------|-------------|--------|--------|-----------|---------|
| Pain in Katipradesha          | 3.00    | 1.13    | 62.00       | 0.35   | 0.09   | 20.54     | < 0.001 |
| Lumbar flexion                | 1.66    | 0.33    | 80.12       | 0.72   | 0.18   | 7.11      | < 0.001 |
| Lumbar extension              | 1.60    | 0.13    | 91.25       | 0.40   | 0.16   | 8.83      | < 0.001 |
| Spinal rotation               | 1.40    | 0.13    | 90.00       | 0.79   | 0.20   | 6.10      | < 0.001 |
| Left lateral spinal movement  | 1.53    | 0.13    | 91.50       | 0.63   | 0.16   | 8.57      | < 0.001 |
| Right lateral spinal movement | 1.53    | 0.13    | 91.50       | 0.63   | 0.16   | 8.57      | < 0.001 |
| Time taken to cover 50 mts    | 1.13    | 0.06    | 93.80       | 0.25   | 0.06   | 15.98     | < 0.001 |

**Tila Taila Group-** The effect of Parisheka Svedana done over Katipradesha with Tila Taila was noted as highly significant at the level of P<0.001, in all the symptoms of Katigraha (Table 2).

| Symptom                       | Mean BT | Mean AT | % of Relief | SD (±) | SE (±) | 't' value | Р       |
|-------------------------------|---------|---------|-------------|--------|--------|-----------|---------|
| Pain in Katipradesh           | 2.93    | 1.33    | 54.60       | 0.50   | 0.13   | 12.22     | < 0.001 |
| Lumbar flexion                | 1.53    | 0.40    | 73.85       | 0.91   | 0.23   | 4.78      | < 0.01  |
| Lumbar extension              | 1.53    | 0.53    | 65.35       | 0.84   | 0.21   | 4.58      | < 0.01  |
| Spinal rotation               | 1.46    | 0.73    | 50.00       | 0.70   | 0.18   | 4.03      | < 0.01  |
| Left lateral spinal movement  | 1.46    | 0.60    | 58.90       | 0.99   | 0.25   | 3.38      | < 0.01  |
| Right lateral spinal movement | 1.46    | 0.60    | 58.90       | 0.99   | 0.25   | 3.38      | < 0.01  |
| Time taken to cover 50 mts    | 1.33    | 0.13    | 90.22       | 0.56   | 0.14   | 8.29      | < 0.001 |

Table 2: Showing Effect of the Parisheka Svedana with Tila Taila in Katigraha



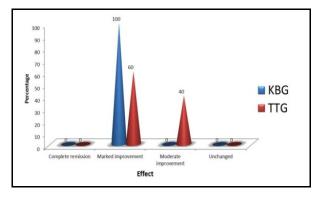
Graph 1: Analysis of Symptom-wise Result in Both Groups

#### **Overall Effect of Therapy in Both Groups**

The overall effect of Parisheka Sveda in both groups show that, in Ksheerbala Taila group all patients got marked improvement (100 %), while in control group of Tila Taila Parisheka Svedana 60 % patients got marked improvementand 40 % patients got moderate improvement. In both the groups, neither any patient got complete remission, nor did remains unchanged (Graph 2).

#### DISCUSSION

Katigraha is considering as Vata Nanatmaja Vikara, but as per the symptoms it can be grouped under Vataj and Vatakaphaja. Although Katigraha is not described elaborately in Ayurvedic texts, but in present era, due to mechanical life style the prevalence of its main symptom, low back is very high. It is very the common condition next to the cold. As classics told that it may be caused both by Sama or Nirama Vata, therefore its presentation may be changed accordingly. The associated symptoms of Katigraha may be heaviness in low back region, irregular bowel habits, anorexia, headache, difficulty in walking due to pain etc. Due to less available description, the clinical understanding of Katigraha is not so clear. Parisheka Svedana over Katipradesha (lumbo-sacral region) was selected as it covers the entire Katipradesha and thus provides significant relief in Katigraha. In classics Tila Taila is said to be the best among all Taila and having the qualities of Vatahara. Ksheerbala Taila also having the properties of Vatashamaka, Shoolahara, Balya etc. thus it was selected for the present study. During Parisheka Sveda, Vastrachhana (covering the part with thin cotton cloth) provides somewhat similar effect of Pichu and helps to maintain the temperature throughout the procedure. During the clinical trial it was observed that even though Parisheka Sveda is the type of Svedana, but it can't provide all Samyak



Graph 2: Analysis of Overall Effect of Therapy in Both Groups

Lakshana of Svedana instantly. Moreover it gives the combined effect of Snehana and Svedana. During the study, it was noted that Lakshana like Sheetoparam, Mardavata and Svedapradurbhava were seen generally after administration of Parisheka Svedana, but Shooloparama, Stambhanigraha, Gauravnigraha and Rogopshaman like symptoms were observed in few days only, during the 7 days course of Parisheka Sveda. The blood pressure, pulse rate and respiratory rate of all patients were recorded before and after administration of Parisheka Sveda, throughout the course. But the changes in vitals were various patient to patient and cogitate as negligible. During study it was observed that most of the patients (53.3 %) of Katigraha comes under the age group of 41-50 years, 66.7 % patients were male, 70 % patients were from middle socio economic class, 83.3 % patients were taking mixed diet, 96.7 % patients reported were married, majority of patients were having Vata-Kaphaja Prakriti (60 %), majority of the patients were having the BMI from 23 to 27 (56.7 %), 66.7 % patients were having irregular bowel habits, 80 % were having Madhyama Koshtha, 73.33 % were having Madhyama Satva, all patients were having the symptom of restricted lumbar flexion (100 %). Out of the remaining symptoms, majority of the patients were having restricted lumbo sacral spine extension (80 %), followed by restricted spinal rotation (70 %), restricted left lateral bending (76.6 %), and restricted right lateral bending of lumbo sacral spine (73.3 %).

## Probable mode of action of Parisheka Svedana in Katigraha

In Parisheka Sveda with Taila, Sneha Dravya is used as media. Its dual action of Snehana-Svedana assists in alleviating Vata effectively. The Vata Dosha which is the key factor of causation of Katigraha has almost opposite qualities to Sneha. Thus Taila Parisheka Sveda normalizes the vitiated Vata Dosha and helps in Samprapti Vighatana of Katigraha. Katigraha is characterised by pain and stiffness in lumbosacral region. The heat applied through Parisheka Sveda over the effected region helps in contesting these symptoms. Degeneration is also one among the causes for Katigraha, where Vata present in Prakupita Avastha and there is Kshaya of Snehabhava. With this consideration Snigdha Sveda would be an ideal line of management, which Parisheka Sveda delivers effectively. As Parisheka avails the effect of both Snehana and Svedana, Snehana corrects the Dhatu Shoshana (which is the root cause for Vata vitiation), and imparts strength. Svedana relieves Toda, Ruk, Shotha, Stambha etc. symptoms of Vata and soften the body parts. Repeated uses of Parisheka Svedana are essential for controlling the Vata and to restore in its normal functions. Stambha or stiffness is the resultant of excess of Sheeta Guna of Vata, and also influences of factors such as Samanavata, Shleshaka Kapha, Ama, Mamsa and Meda, which are contributory to occurrence of Stambha. Samanavata is Ruksha Guna Pradhana and in its Parakupit avastha it dose excessive Shoshana, thereby resulting in contracture and stiffness. Shleshaka Kapha is Snigdha and Pichhila and in its decreased states it resulting in less lubrication of joints, causing stiffness. Being as Snigdha Sveda, Parisheka Svedana relieves the Stambha and Gourava of the Katipradesha, thus helps to treat the condition like Katigraha. Thermal therapy acts as increasing the circulation and local metabolic process with the relaxation of the musculature. Application of heat causes relaxation of muscles and tendons of the low back improves the blood supply, venous drainage, lymph supply and activates the local metabolic processes which are responsible for the relief of pain, tenderness, swelling and stiffness. Trans-dermal absorption depends upon lipid solubility of the drug. Drugs in oils and other lipid soluble carriers can penetrate the epidermis as it is a lipid barrier. Through the layers of cell membrane in the stratum corneum, the movement is slow. But once drug reaches the underlying tissue, it will be absorbed in to the circulation. Administering the drug in an oily media can enhance absorption through the skin. Because hydrated skin is more permeable than dry skin. By this mechanism Parisheka Sveda fulfils the expected changes in Katigraha. Katigraha is a Krichha Sadhya Vyadhi. In practice also it was observed that only one course of (7 days) Parisheka Sveda can't cure the condition completely, so

it supports the classical reference of using Snehana Svedana again and again while treating Vata Vyadhi.

#### CONCLUSION

Deliberation of overall effect of therapy showed that the effect of Parisheka Sveda done with Ksheerbala Taila was far better in comparison to the Parisheka Sveda done with Tila Taila. On the basis of statistical analysis it can be concluded that both the therapies selected for this study provided significant relief in the signs and symptoms of the patients of Katigraha. The results of this study clearly showed that Parisheka Sveda with Ksheerbala Taila provided far better relief to the patients of Katigraha in comparison to Tila Taila. Hence it can be said that Parisheka Sveda with Ksheerbala Taila has its own effect in relieving Katigraha which is one of the Vata Vyadhi.

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