

ROLE OF KATIBASTI IN GRIDHRASI (LUMBAGO SCIATICA SYNDROME)Padmakiran C.¹ Ramachandra R.² Prasad U. N.³ Rao Niranjana¹¹Dept. of Panchakarma, SDM College of Ayurveda, Udupi, Karnataka, India²Dept. of Kayachikitsa, Sri JGCHS College of Ayurveda, Ghataprabha, Karnataka, India³Principal, SDM College of Ayurveda, Udupi, Karnataka, India**ABSTRACT**

Gridhrasi is a disease with radiating pain and disability dominance and affects the walking and routine work. Low back pain is the second only to headache as a frequent source of pain in the body and most common disease affecting 60-75% of the working population. The increasing incidence of this disease alerts for the need for safe and effective treatment. *Gridhrasi* symptoms may be of *vata* or *vata kapha* dominance where *snehana* and *swedana* has a role in the treatment. So in this study, *Kati basti* – a combination of *snehana* and *swedana* is selected with *vajigandhadi taila* since it is having *kapha* and *vatahara* effect. Present study is a single blind clinical study where in *kati basti* with *Vajigandhadi taila* was advised for 6 days in 24 patients of *Gridhrasi*. The signs and symptoms were assessed before and after the treatment based on the grading. Results obtained were analyzed for the statistical significance using paired t test. The statistical analysis revealed that there is statistically significant improvement in symptoms of *vataja gridhrasi*. So *Vajigandhadi taila Katibasti* can be best advised in treating the *Gridhrasi*.

Keywords: *Gridhrasi, Kati Basti, Ayurveda***INTRODUCTION**

The most common disorder which affects the movements of the leg is low back pain, out of which 40% of persons will have radicular pain which comes under sciatic syndrome. Back symptoms are the most common cause of disability in patients under 45 years of age. 50% of the working adults admitted to having a back injury each year.¹ According to another survey, low back pain is the second only to headache as a frequent source of pain in the body and most common disease affecting 60-75% of the working population.² Depending on the underlying pathology, the symptoms of sciatica may vary from radiating pain to that

of severe motor weakness. The chronicity of the pain is a frustrating symptom. All these need an effective treatment at the earliest.

Low back pain with radiation is known as *Gridhrasi*. The line of management includes *basti chikitsa, Agnikarma and siravyadha*³. As *Vata* involvement is evident with or without *kapha* as pain and disability, *snehana* and *swedana chikitsa* is also advised as a treatment⁴.

Kati basti is a *snigdha sweda* and possesses both *snehana* and *swedana* effect. *Vajigandhadi taila* having *vata kaphahara* property is selected for the study⁵.

AIMS AND OBJECTIVES

To evaluate the therapeutic effect of *kati basti* in patients of *Gridhrasi*

MATERIALS AND METHODS

Source of the data: 24 patients of *Gridhrasi* who attended the IPD & OPD of SDM College of Ayurveda Hospital, Udupi were selected for the study.

Drug: Medicines required for the *katibasti* were prepared in SDM Ayurveda pharmacy, Udupi. This contained (For each patient) - Wheat flour-1Kg, *Vajigandhadi taila*- 1litre.

Method of collection of the data: Patients of *Gridhrasi* admitted in the IPD were screened for the inclusion criteria and randomly selected irrespective of sex and socio - economic state.

Inclusion criteria: Patients aged between 20-70years, with *pratyatma lakshanas* of *Gridhrasi*, with positive physical signs/special tests of radicular pain and with intervertebral disc prolapsed herniation, lumbar spondylosis, lumbo sacral strain.

Exclusion criteria: Traumatic conditions of the spine, Infective conditions of the spine and Neoplastic conditions of the spine.

Investigations: Routine hematological investigations like Hb%, TC, DC, ESR and RBS; radiological examination of the spine in Antero posterior and lateral view.

Study design: Single blind clinical study with Pre test and Post test design.

Duration of treatment: 6 days

Duration of follow up: 30 days

Interventions

Poorva karma: Patient is advised to take *laghu bhojana* 2 hrs before treatment. 250ml of *taila* is made lukewarm by placing it in water bath. 300g of wheat flour is mixed with required amount of water to prepare a soft dough and kept aside for 10 minutes. Then it is kneaded properly and a circular

ring is prepared and kept ready. (Same dough is reused for 2 days. Wheat flour is mixed daily to get a required consistency. On the 4th day fresh dough is used).

Pradhaana karma: Patient is advised to lie down in the prone posture. Low back area is exposed properly. The prepared circular ring is placed over the *kati pradesha* so that the most tender part will be the mid point of the circle. Then both the inner and outer side of the ring is fixed properly to the skin so that there should not be leakage during the procedure. After checking the temperature of the *taila*, luke warm *taila* is filled inside the ring with the help of a spoon. Frequently *taila* is rotated using finger. Once the temperature decreases, Lukewarm *taila* is replaced with the same method. The procedure was continued till *samyak swinna lakshanas* are seen which usually takes upto 40-50 minutes. Same oil was reused for another 2 days. On 4th day fresh oil is used.

Paschat karma: The oil was removed completely with the help of spoon and cotton. Dough ring was removed. Mild *abhyanga* was done in *kati pradesha*. Patient was advised bath after 15 minutes of rest.

Assessment criteria: Patients were evaluated thoroughly before and after the intervention and after 15 days of follow up on the basis of:

- Greenough and Fraser scoring method.
- Herron and Turner's rating.
- Sugarbaker and Barofsky clinical mobility scale.
- Oswestry Disability assessment Questionnaire.

Subjective parameters:

- Symptoms of *Gridhrasi*. (grading for each symptom was given)
- Symptoms of *Samyak swedana*.

Objective parameters: Was assessed by maneuvers and signs like: Straight leg raising test, Bowstrings sign (Lasegue's sign), Flip test and Schobers test.

OBSERVATION

The effect of *Vajigandhadi taila kati basti* was studied in 24 patients suffering from *Gridhrasi*, fulfilling the inclusion criteria. All the selected patients completed the study. Other observations recorded are:

Age: Maximum numbers (29%) of the patients belong to the age group of 51-60, followed by 25% each belong to the age group of 41-50 and 21-30. Occupation: Majority of the patients (33%) were manual labors, followed by 17% house wife, 13% office. Duration of illness: 50% of patients gave the history of 1-3 months, and 32% gave the history of 3-6 months, followed by the history of 8-15 days, above 6 months, 1 week and 4 weeks. Presenting complaint: Maximum patients (80%) presented with low backache as a chief complaint where as 20% presented with Radiation of the pain as a chief complaint. Limb involved: maximum number of the patients (50%) complained of radiation of the pain to the right lower limb, followed by 40% to left lower limb and 10% to both lower limbs. Associated complaint:

83% of the patients complained of *sthambha*, *Ruja* in 100% patients, *Gruhnati* in 75%, 79% patients complained of *toda*, 20% of the patients complained of *Gaurava* and *arochaka*, *Tandra* found in 3pts, 18% patients complained of Numbness. Type of *Gridhraasi*-80% of the patients presented with symptoms of *Vataja Gridhrasi* and 20% with symptoms of *Vata kaphaja Gridhrasi*. SLR: In maximum number of the Pts (42%), SLR was in the range 51-60, followed by 12% in 31-40.

RESULTS

The effect of the *Kati basti* on different parameters of *Gridhrasi* was assessed using Paired t test, based on the pre (BT), post treatment (AT) and follow up (AT-1) scorings. After a course of the *kati basti*, the analysis of the patients revealed that there is a statistically significant improvement seen in the parameters like *sthambha*, *Ruk*, *toda*, *gruhnati*, magnitude of pain, neurological deficit, functional ability, and functional disability. Symptoms *tandra*, *gaurava* and *arochaka* remained unchanged.

As the (n) value was less in these 3 parameters, statistical application was not possible. The different values are:

Table 1: Effect of *Kati basti* in various parameters

Symptom	Patients (n)	BT	AT	SD	't'	p
<i>Stambha</i>	20	1.958	0.0833	1.035	8.877	<0.001
<i>Ruk</i>	24	1.958	0.0833	0.741	12.398	<0.001
<i>Toda</i>	19	1.333	0.0417	0.806	7.847	<0.001
<i>Gruhnati</i>	18	2.292	1.042	0.794	7.713	<0.001
<i>Aruchi</i>	5	0.333	0.333	-	-	-
<i>Gaurava</i>	5	0.458	0.458	-	-	-
<i>Tandra</i>	3	0.208	0.208	-	-	-
Magnitude of pain	24	22.292	50.708	6.971	19.969	<0.001
Neurological deficit	24	21.667	4.583	12.590	6.647	<0.001
Functional ability	24	15.292	23.333	5.521	7.136	<0.001
Functional disability	24	41.417	11.042	9.986	14.901	<0.001

Table 2: Procedure of *KATI BASTI*

Temp. Tolerated	Height of the circle	Diameter of the circle	Quantity of oil	Duration of treatment
Min 41°C; Max 51°C	4 cm	12cm	250ml/sitting	Min 30min; Max 50min

DISCUSSION

Kati basti

Temperature tolerance: The patients having *Vata pradhana* and *kapha pradhana prakruti* tolerated temperature more than other *prakruti* persons (Maximum of 51⁰C as recorded using Pyrometer). Patient with *pitta pradhana prakruti* showed minimum tolerance (41⁰C).

Quantity of Oil: During this study, it has been observed and standardized that minimum of 250ml of oil is required per procedure. Less than 250ml showed minimum improvement in the pain and more than 250ml of oil shows the clinical improvement similar to that of 250ml.

Height of dough: After repeated experiments, it is concluded that the height of the dough must be 4cm. if it is less than 4cm, 250ml of oil cannot be retained properly. If the height is more than 4cm it is also of no use.

Diameter: Different diameters ranging from 6cm to 15cm were tried in this study. Ultimately 12cm of diameter was considered as the ideal diameter. 12cm diameter with 4cm height circular ring is able to retain 250ml of oil and spillage was not observed. Less than this could not able to retain 250ml of oil. Hence spillage was observed during the procedure.

Duration: During this series, minimum of 30 minutes, maximum of 50 minutes time was observed. Minimum duration observed in *Pitta* predominant *prakruti* whereas maximum duration seen in *Vata Kapha* predominance. But *Samyak Swinna Lakshanas* are the end points. Hence it is not possible to put a maximum or minimum time barrier for all the patients. A range of minimum of 30 minutes and maximum of 50

minutes may be considered as standard as by this time some of the *samyak swinna lakshanas* can be noted.

Samyak swinna lakshana: As *kati basti* is *ekanga, snigdha, mrudu, shaman swedana* procedure, it is difficult to identify all the *samyak swinna lakshanas* in the patient. However, *Sheeta vyuparama*, and *shoola vyuparama* (to some extent) can be identified. After removing the oil and dough, we can see *sweda pradurbhava* and redness in the skin. If the procedure is continued beyond this, then *daha* (burning sensation) at the site may be identified which is one of the *atiswinna lakshana*. So after noting the time, we can identify the proper duration in which *samyak lakshanas* can be seen. So in this study, it was between 30 min to 50 min.

Clinical study

Gridhrasi, a pain and disability dominant disease needs an energetic treatment. The line of management depends on *dosha* and *dhatu* involved in the pathogenesis which in turn depends on the *nidana*. *Dhatu kshaya, vata prakopa* are the inevitable conditions and involvement of *asti, sandhi, upadhatus* are evident in any pathogenesis of *Gridhrasi*. In *Abhighata*, this effect is acute where as in *aharaja nidana*, this may be a slower process. However in all these situations, *snehana* and *swedana chikitsa* has got an important role in *vata shaman*. So the selection of *katibasti* is justified here. The drugs in *Vajigandhadi taila* are *vata kaphahara, Shotahara, vedanasthapaka, balya, brumhana. Eranda taila* is specifically *vata kapha shamaka* and *kati shoolahara*. The drug *Eranda* contains an alkaloid Ricinine in the seed coat. Observational studies indicate that topical

application of Ricinoleic acid, the main component of castor oil, exerts remarkable anti-inflammatory effects. It has potential interaction on sensory neuropeptide-mediated neurogenic inflammation.⁶

The combination of the procedure and *taila* are helpful in controlling *vata* and thus the symptoms are reduced in the patient. As noted in the incidence, maximum patients were in the age group of 51-60, with strenuous work, wherein *vata prakopa* and *dhatukshaya* are common. *Dashamoola*, *Eranda* reduces *shoola* and *stambha*, *Ashwagandha* also has a significant anti-inflammatory property both in acute and chronic inflammations. These drugs are *balya* and *brumhana* too which is more required in the degenerated state.

The symptoms like *tandra*, and *arochaka* showed no improvement the reason may be, *kati basti* is a *bahi parimarjana chikitsa*. It is also an *ekanga*, *snigdha* and *mrudu sweda*. So action at this *agni* level is very minimum. The symptom *gaurava* did not show any improvement may be because, the treatment required may be a prolonged and repeated course of *katibasti* with oral *Shamana chikitsa* may also be required.

In the overall effect of the treatment none of the patients showed complete cure of the illness. The reason would be the short duration of the treatment than the required one. Other contributing factors like occupation, posture, travel may slower the improvement during follow up period. When the disease is chronic, with *Dhatu kshaya* and *gambheera dhatugata avasta*, *bahya snehana swedana* alone is not sufficient to treat the disease and repeated course of *kati basti* may yield better.

CONCLUSION

The present study revealed that *katibasti* with *vajigandhadi taila* is effective in treating *Gridhrasi*. As *kati basti* is *ekanga*, *mrudu*, *snigdha sweda*, the improvement in *tandra gaurava* and *arochaka* are not so marked one.

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