

A COMPARATIVE CLINICAL STUDY ON THE EFFICACY OF AGNIKARMA AND KATI BASTI IN THE MANAGEMENT OF GRIDHRASI W.S.R. TO SCIATICA

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ABSTRACT

Gridhrasi (Sciatica) is one of the *Vatavyadhi* which is caused by aggravated *Vata dosha*. This disease is characterized by *ruja* (pain) in the waist, back, thigh, knee and calf regions along the course of sciatic nerve. In spite of the different types of treatment modalities mentioned in ancient and modern medical sciences, they have some or the other shortcomings and drawbacks. Considering all these, the present study was taken up with the objective of evaluating the efficacy of *Agnikarma* in the management of *Gridhrasi*. To consider the significance of the method of *Agnikarma*, the efficacy of *Katibasti* in the management of *Gridhrasi* which has been established in the previous work was also studied. In both the groups had highly significant effect in relieving the pain and SLR test in cases of *Gridhrasi*. Patients were co-operative and had good acceptability in both the methods of management.

Keywords: *Gridhrasi* (Sciatica), *Katibasti*,

INTRODUCTION

Gridhrasi is a Rujapradhana Nanatmaja Vata Vyadhi, intervening with the functional ability of low back & lower limbs¹. It is particularly seen in most active period of life, involving working class people causing hindrance in routine life. Low back pain is the major cause of morbidity throughout the world affecting mainly the young adults. Life time incidence of low back pain is said to be 50-70% with the incidence of sciatica more than 40%^{2,3}.

The cardinal sign and symptoms of Gridhrasi vyadhi are Ruk (Pain), Toda (Pricking pain), Stambha (Stiffness) and Muhurspan-

dana in the Sphika, Kati, Uru, Janu, Jangha and Pada in order and Sakthiskhepananigraha i.e. restriction in lifting leg⁴.

The symptoms seen in Gridhrasi vyadhi can be well correlated with “Sciatica” in modern terminology. Sciatica is a very painful condition in which pain begins in lumbar region and radiates along the postero lateral aspect of thigh and leg. Hence, movement of the affected leg is restricted and patient is not able to walk properly. This problem which evidently has a favorable natural history, can be remarkably disabling, has challenged health care providers.

The term Kati Basti is evolved from Shiro-basti; a, procedures which is bahya snehana procedure. It has both Snehana and Swedana effect⁵. The taila used for these procedures does the snehana and due to the agni samyoga in this procedure it does Swedana effect. The procedure is unique; in the sense comprising both Snehana and Swedana or it may be put like Snehayukta Sweda. Agnikarma is the procedure indicated by Aacharya in Vata-vyadhi. Sushruta mentions Agnikarma as superior most than other therapeutic procedures as it gives instant relief in pain.

Keywords: Gridhrasi, Sciatica, Katibasti, Agnikarma.

Aims and Objectives

- ✚ To evaluate the efficacy of the Kati basti in the management of Gridhrasi.
- ✚ To evaluate the efficacy of Agnikarma in the management of Gridhrasi.
- ✚ To compare the effect of Agnikarma and kati basti in the management of Gridhrasi.

MATERIALS AND METHODS:

This study started after enrolment of patients attending the OPD of Dept of panchakarma at SKAMC Hospital & Research center, Bangalore by follow up the protocol, with post-acceptance of the consent form as per the protocol approved in IEC. In this study, 20 diagnosed patients of Gridhrasi were selected based on purposive sampling technique and divided into 2 groups comprising of 10 patients in each group

In this study, patients in Group A were treated with Kati Basti using Sahacharadi Taila and Group B Agnikarma were given. The above mentioned formulations are purchased from different approved pharmaceutical companies. The subjective and objective parameters were assessed before the treat-

ment and after the treatment. The data obtained were recorded, tabulated and statistically analysed by using paired 't' test.

SOURCE OF DATA

- ✚ Forty diagnosed patients of Gridhrasi following inclusion criteria approaching the OPD and IPD of SKAMCH&RC, Bangalore were selected for the study.
- ✚ Secondary data from text book, Peer reviewed Journals etc.

DIAGNOSTIC CRITERIA

- ✚ Patient presenting with lakshanas of Gridhrasi.
- ✚ Patient presenting with signs and symptoms of Sciatica.
- ✚ SLR test positive.
- ✚ Bowstring test positive.
- ✚ Lasegue's sign positive.
- ✚ Schober's test positive.

INCLUSION CRITERIA

- ✚ Patients with lakshana of Gridhrasi.
- ✚ Patients with signs and symptoms of Sciatica.
- ✚ Patients of either sex, between 16-70 years.

EXCLUSION CRITERIA

- ✚ Other systemic diseases which interfere with the course of treatment.

STUDY DESIGN

Open level randomized continuous linear study.

INTERVENTION

20 Gridhrasi patients diagnosed will be selected and assigned randomly into two groups, as Group -A and Group - B.

Group - A Kati basti with sahacharadi taila.

Group - B Agnikarma.

Procedure - (group A)

Kati basti -

a) **Making a frame** - The dehusked black gram powder paste was rolled and mould it

into an elongated rounded mass. The free ends of the elongated mass of paste are joined to form a ring of approximately 12cm in diameter and this ring was placed on the patient's kati region. The gap between the skin and paste is sealed by pressing the black gram paste against the skin. In this way frame is prepared and its height was maintained as 2 inch approximately.

b) **Pouring oil** – Taila was indirectly heated in a bowl containing hot water up to 45⁰C. This oil was poured into the frame by using a cotton swab. The level of oil was maintained approximately 2cm above the skin.

c) **Changing the oil** – After 5 minutes, the oil was taken out from the frame with the help of a cotton swab. Fresh warm oil is then poured into the frame. The cooled oil that is taken out was kept over boiling water for heating. This was repeated for 30 minutes duration with a replacement of oil for every 5 minutes. Same set of oil was used for continuous 3 days of procedure. 7th day all (3rd day and 6th day's oil) combined and used. Everyday oil was filtered before procedure.

d) **Removing oil and frame** – After 30 minutes, complete oil is taken out from frame with a cotton swab. Then frame was removed.

Group B:

Poorva karma:

✚ Selection of patient :

All the patients were selected on their clinical findings as well as relevant investigation according to the prepared research proforma.

✚ Most tenderness point in the lumbar and lower limb is marked

Pradhana karma:

✚ Dhatura patra was made in to small pieces and fried in murchitaila taila.

✚ .This fried leaves were covered with eranda patra and a coin is placed over the marked area immediately.

Pashchat Karma:

✚ Honey is applied over the area of agnikarma.

Assessment criteria:

✚ Detailed clinical observations were noted before and after the procedure. Based on grading assessment has done for Ruk, Toda, SLR test.

Ruk(Pain)	
No pain reported	0
Occasional Pain	1
Mild pain but no difficulty in walking	2
moderate pain but slight difficulty in walking	3
Severe pain but severe difficulty in walking	4
Toda (Pricking Sensation)	
No pricking sensation	0
Occasionally pricking sensation	1
Mild pricking sensation	2
Moderate pricking sensation	3
Severe pricking sensation	4
SLR test	
Above 90 degree	0

Above 75 & Below 90	1
Above 60 & Below 75	2
Above 45 & Below 60	3
Below 45	4

Results:

Effect of treatment group A

		Mean	S.D.	S.E.	T Value	P value	Remark
RUK	BT-AT	2.3	0.80	0.18	12.83	<0.001	HS
TODA	BT-AT	2.65	0.49	0.11	24.20	<0.001	H S
SLR	BT-AT	1.65	0.49	0.11	15.07	<0.001	H S

Effect of treatment group B

		Mean	S.D.	S.E.	T Value	P value	Remark
RUK	BT-AT	1.55	0.60	0.14	11.46	<0.001	HS
TODA	BT-AT	1.15	0.59	0.13	8.76	<0.001	HS
SLR	BT-AT	1.4	0.75	0.17	8.30	<0.001	HS

Observations and Results:

In this study it can be observed that *t* values in Ruk, Toda, and SLR test was 12.83, 24.20 and 15.07 respectively. And also P value is <0.001 this shows the very high significance of Agni karma on Ruk, Toda and SLR test. The treatment Agnikarma which was under taken for present study has shown maximum improvement in the symptom of Gridhrasi vyadhi during treatment.

Improvements were observed mean of 45 min. after the procedure. This treatment is economically very low cost and can be implemented very easily.

DISCUSSION

Kati basti has effect of snehana and swedana chikitsa. Our acharya has explained qualities of snehana dravyas like drava, sookshma, sara, snigdha, picchila, guru and sheeta. For vatavyadhi, we are using specific taila, which are having ushna veerya and vata shamaka gunas. Due to sukshma property of these tailas, it easily gets absorbed through twacha. By its snigdha guna and ushna guna it reduces rooksha and sheeta guna of vata

dosha, due to its sara guna it reduces sthambha lakshana, due to its guru guna it reduces laghu guna of vata dosha. With the help of Kati basti reduces lakshnas of Gridhrasi vyadhi like ruk, toda, sthamba,SLR etc.

Ushna guna of agnikarma act as vataghna in this way it reliefs pain.Ushna guna improves dhatwagni and thus helps to remove toxins (ama pachana), this improves local nourishment of the tissue and thus reduces pain by decreasing local inflammation. Local tissue metabolism is improved at the area of agnikarma and thus it leads to increased demand of oxygen and nutrient of the tissue. This causes enhanced delivery of nutrients and more efficient removal of waste product, hence speeding up the natural process of repair. Pain receptor of skin and motor end plate stimulated at 45 pathway for pain and thermal signals run parallel and ends into same area

But only stronger one can felt. Therefore complete exclusion of pain impulse by heat occurs.

CONCLUSION

Gridhrasi vyadhi occurs due to the provoked vata and seated in the kandaras of the lower limbs.

Impairment of utkshepanadi karmas is the main feature along sthamba, ruk, toda, span-dana.

The general measures of vata pacifying therapies should be adopted in case of gridhrasi vyadhi after a thorough understanding of its site of involvement, associated Dushya, increased or decreased function of vata with its avaranas, the Prakruti, vaya, bala, satva, Satmya etc of the patients. Acharya charaka has repeatedly indicated in the context of vatavyadhi chikitsa about the necessity of assessment of these factors to implement the treatment successfully. Swedana is extensively used for the alleviation of many ailments, especially in vatavyadhis where shola is the main lakshana. The action of Kati basti depends on the temperature of oil maintained during each procedure. The effect of the treatment has shown statistically Highly Significant i.e., p value is <0.001 in subjective parameters like ruk, toda, SLR lakshanas Group B and Highly Significant i.e. p value <0.001 in subjective parameter like ruk, toda, SLR lakshanas in Group A.

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