



A RANDOMIZED COMPARATIVE CLINICAL STUDY TO EVALUATE THE EFFICACY OF AGNIKARMA WITH *PANCHALOKHA SHALAKA* AND *LOHA SHALAKA* IN *GRIDHRASI VIS-À-VIS SCIATICA*

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Abstract: *Gridhrasi* is one of the *vatavyadhi* according to Ayurveda. It is a *ruja pradhana vyadhi*. On the basis of the symptoms *Gridhrasi* can be correlated with Sciatica. It is a crippling disease, causing throbbing pain in hip and radiating downwards, with the sciatic nerve. Trauma, overloading, prolonged standing, sedentary lifestyle and neurological factors are said to be the causative factors. About 60-80% of people get affected by low back pain and amongst which 6 percent⁴ are reported to have radiating type of pain. It disturbs daily routine of the patients because of continuous and stretching type of pain. Despite of all advances in modern medicine, Sciatica merely managed with Analgesics, NSAIDs, Muscle relaxants which have long term severe side effects. In *Ayurveda*, various methods used in the treatment of *Gridhrasi* are *Bheshaja*, *Basti*, *Siravyadana* and *Agnikarma*. The common indications of *Agnikarma*⁶ include pain, stiffness, muscle spasm and inflammatory conditions, these symptoms are observed in the *Gridhrasi*. The disease treated with *Agnikarma* do not recur and there is no fear of putrefaction and bleeding, and ultimately it produces balancing effect on vitiated *vatadosha*. *Agni karma* done by using *Panchaloha Shalaka*, which does *vata kapha shamka*. *Agnikarma* done by using *lohashalaka* which works as a Rejuvenator, health promoter, and it balances all the tridoshas. Hence considering above facts this study has been planned as "A RANDOMIZED COMPARATIVE CLINICAL STUDY TO EVALUATE THE EFFICACY OF AGNI KARMA WITH *PANCHALOKHA SHALAKA* AND *LOHA SHALAKA* IN *GRIDHRASI VIS-À-VIS SCIATICA*".

Key words : *Agnikarma*, Sciatica, *Panchalohashalaka*, *lohashalaka*.

I. INTRODUCTION

In today's era, the lifestyle and nature of work are putting tension on the usual health, Due to this, the person is unable to carry out the daily activities. Sciatica is a crippling disease, causing throbbing pain in hip and radiating downwards, with the sciatic nerve. Trauma, overloading, prolonged standing, sedentary lifestyle and neurological factors are said to be the causative factors. About 80 - 90% of people get affected by low back pain¹ and 5% of those become victims of sciatica which disturbs daily routine and overall quality of life, compromised by continuous and stretching type of pain². There are several disharmonies in this biological system as the advancement of busy professional and social life, improper sitting postures and over exertion jerking movements during traveling etc. factors creates undue pressure to the spinal cord which leads to low backache and the progression leads to sciatica. This disease now becomes a threat to the working population. Sciatica is due to spinal disc herniation, back sprain, shingles, and degenerative lumbar spine. Spinal stenosis or the narrowing of the spinal canal due to compression of the spinal cord could be another reason for sciatica pain. Sciatica may also occur during pregnancy as a result of the weight of the fetus pressing on the sciatic nerve. It rarely arises from Piriformis syndrome in which the shortening of piriformis muscle exerts pressure on the sciatic nerve, all cause temporary forms of sciatica, lasting from days to weeks

In reference to sciatica treatment, Modern medical science has only symptomatic management with analgesics like muscle relaxants, NSAIDS, corticosteroids and condition is managed by administration of physiotherapy etc. In some cases, Epidural steroid injection and Periradicular infiltration are given and these are having their-own complications and side effects. If nerve compression is more; surgical procedures like laminectomy, discectomy are indicated but these surgical procedures are expensive with their limitations. Long term use of these medicines may cause mild to serious systemic illness.

So, it is the need of time to seek other treatment option mentioned in *Ayurveda* classics. In *Ayurveda*, Pain is cardinal symptom in most of the *Vatavyadhis* the term '*Gridhrasi*' itself suggests the gait of the person which is similar to *Ghriddha* (vulture) due to pain. This disease is listed under vitiation of *Vata* Only, i.e. *Nanatmaja Vatavyadhi*³ having *lakshana* of *Sakti Kshepanigraha* (i.e. restricted lifting of the legs) symptoms of *Gridhrasi* are pain starts from *Sphik* and then radiates to, *Uru, Janu, Jangakati, Prushtagha* and *Pada* along with *Stambha, Toda, Spandana*⁴. It disturbs the physical and mental status of a patient. *Vata* Invading the *kandaras* of the *Parsha, Pratyanguli* and *gulpha* produces *kshepanin* the thighs causing *Gridhrasi*. On the basis of the symptoms, *Gridhrasi* can be correlated with Sciatica. In *Ayurveda*, various methods used in the treatment of *Gridhrasi* are *Bheshaja, Basti, Siravyadana* and *Agnikarma*⁵. In classics *Agnikarmain Padakanistika* region mentioned for *Gridhrasi*⁶, it includes relief from pain and stiffness, reduces muscle spasm and inflammatory conditions, which are the symptoms observed in the *Gridhrasi*. Therefore this study has been conducted to rule out the comparative efficacy of *Agnikarma* using "*PANCHALOHA SHALAKA*" for group A and *Agnikarma* using "*LOHA SHALAKA*" for Group B in *GRIDHRASI VIS-À-VIS SCIATICA*".

II. A CLINICAL STUDY REPORT

1.1 Selection of the patient :

Patient attending OPD and IPD of Department of *ShalyaTantra*, Ayurveda Mahavidyalaya, Hospital, Hubballi, 20 patients were randomly selected who were fit for the study as per the inclusion criteria.

1.2 Selection of drugs

SahacharadiTaila for *sthanika abhyanga* and *LakshadiGuggulu* as internal medicine was prepared in the department of *RasaShastra* and *BhaishajyaKalpana*, Ayurveda Mahavidyalaya, Hubli.

1.3 Sample size

Minimum of 20 patients diagnosed as *Gridhrasi* will be Selected and randomly categorized into two groups as Group A & Group B each consisting of 10 patients

Sample size	-	20 patients
Procedure	-	<i>Group A : Agnikarma with panchaloha shalaka</i> <i>Group B : Agnikarma with lohashalaka</i>
No. of sittings	-	Two sitting
Locally	-	<i>Sahacharadi Tailam for sthanika abhyanga (for both group)</i>
Internally	-	<i>Lakshadi Guggulu(for both group)</i>
Dose	-	<i>Lakshadi Guggulu - One tablet of 500mg twice a day after food with ushnodaka(for both group)</i>
Duration	-	Every week assessment for one month
Follow up	-	Follow up after 14 days

1.4 Inclusion Criteria:

1. Patients with sign and symptoms of *Gridhrasi*(sciatica)
2. Patients of either sex between the age group of 20 to 60 years.
3. Patients fit for *Agnikarma*.

1.5 Exclusion Criteria:

1. Patients with Hypertension, Uncontrolled Diabetes Mellitus, Cardiac disorders, Malignancy and Systemic disorders Patients with Hepatitis B, Tuberculosis, HIV.
2. Patient who are unfit or contra-indicated for *Agnikarma*
3. Pregnant women

1.6 Assessment Criteria

- Subjective parameters - table 1
- Objective parameters - table 2
- Investigations - table 3

III. OBSERVATIONS

1. Patient were with age group of 41-50 years , Female sex ; married ; non-vegetarian dietary habit;
2. Majority of the patients i.e 60% patients were having *Madhyama kosta*, and 30% patients were having *vishama agni*.
3. Maximum number of patients i.e 0-1 year's chronicity, and are Having gradual onset .

4. Maximum number of patient's i.e. 78.33% having *Vata* predominant

Prakurti, 70% patients had *MadhyamaSaara*, 58.33% patients had

MadhyamaSamhanana, 53.33% patients had *MadhyamaSatva*,

48.33% patients had *MadhyamaSatmya*, 55.00% patients had

MadhyamVyayama Shakti, 92.5% of the patients had *Madhyam*

5. Out of 60 patients maximum i. e. 60 patients (100%) presented with

the symptom of *Ruka* (Pain). 37 patients (61.66%)

were presented with the symptom of *Stambha* (Stiffness) and 31

patients (51.67%) were presented with the symptom of Tingling &

numbness, and 51 Patients (85%) were Presented with the

Symptom of Painful movement, followed by 29 patients (48.33%)

Presented with *Toda* (Pricking sensation).described as main

symptoms of sciatica were observed in all patients

of this series

6. No side-effects were found in any patients during the course of

Procedure.

IV RESULTS :

- Effect of therapy in inter group:-
 - i. Subjective parameters (wilcoxon matched pairs signed ranks test)
 - ii. Objective parameters (paired 't' test)
- Effects of therapy in inter group:-
 - i. Subjective parameters (mann-whitney test)
 - ii. Objective parameters (unpaired t test)
- Comparison of overall effect in both groups:-
 - i. Percentage relief in two groups in subjective
 - ii. Percentage reliefs in two groups in objectives parameter

- Total effect of therapy in the patients of *Gridhrasi* :-

V. DISCUSSION

Highest incidence of disease was reported in the age group of 35-60 years, which is the kala of *vata prakopa*. In the present study, the therapy provides 82.64% relief in group A and 87.09% relief in group B.

Mode of action of Agnikarma :

After Agnikarma the Ushna (hot) Guna of Agni pacifies the Shita (cold) Guna of Vayu and reduces the joint pain in the case of Sandhi. Acharya Charaka described that Agni is the best treatment for Shoola (pain). Ushna Guna of Agni helps to removes the Avarana effectively and stabilizes the movement of Vata, which provide relief from Shoola. As per the modern medicine, therapeutic heat increases blood circulation at knee joint leads to the proper nutrition of the tissue. This induced circulation help to flush away pain producing substances from affected site and ultimately reduces the local inflammation. The heat application is indicated in cases of chronic inflammation. Heat leads to vasodilatation, exudation of fluid, increase in white blood cells and antibodies. This response obtained on heating the tissues is augmentation of these changes for certain period and reduce the chronic inflammation.

VI. CONCLUSION :

From the present study, it can be concluded that-Although *Agnikarma* using *PanchalohaShalaka* and *Agnikarma* using *LohaShalaka* gave good result, but comparison in both therapies, *Agnikarma* using *LohaShalaka* provided much better relief in the symptoms of *Sciatica*.

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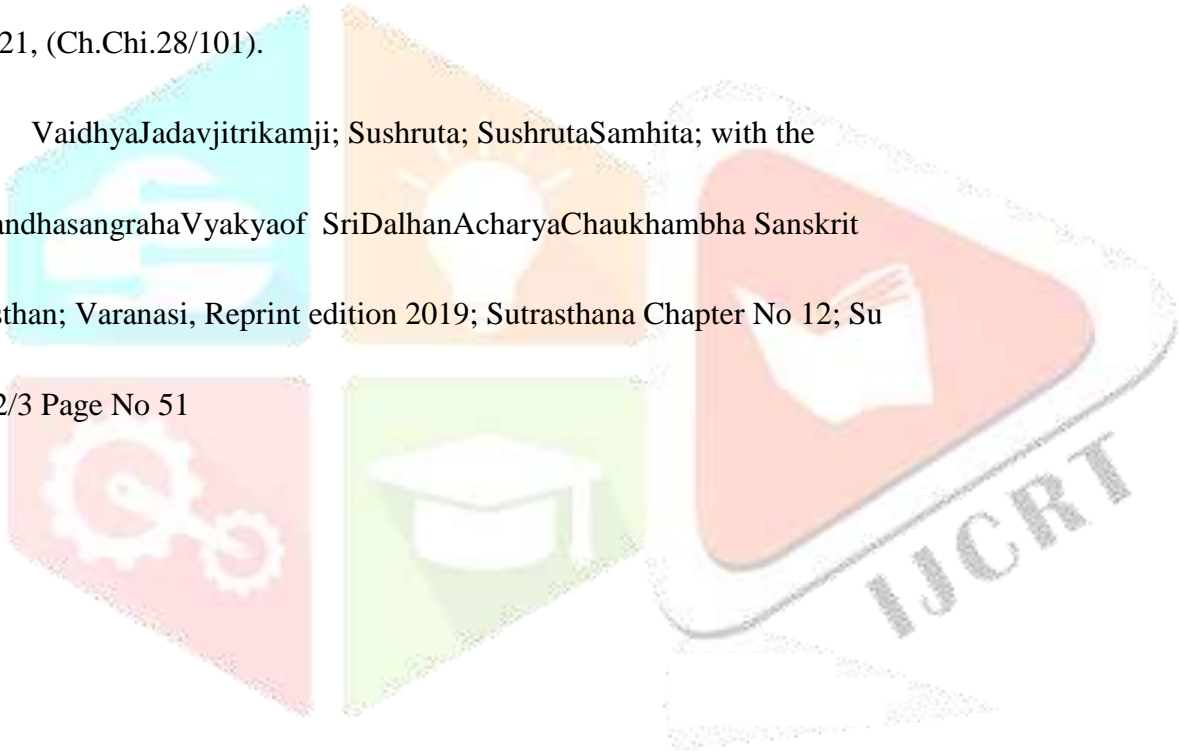


Table 1: Subjective parameters

Symptoms	0	1	2	3
<i>Stambha</i> (Stiffness)	No stiffness	Mild (for 10 – 30 min)	Moderate (for 31 – 60 min)	Severe (for more than 1 hour)
<i>Ruk</i> (Pain)	No pain	Mild pain but no difficulty in walking (1-3)	Moderate & slight difficulty in walking (4-6)	Severe pain with extreme difficulty in walking (7-10)
<i>Spandana</i> (Twitching)	No Twitching sensation	Mild (for 10 – 30 min)	Moderate (for 31 – 60 min)	Severe (for more than 1 hour)
<i>Gourava</i> (Heaviness)	No Heaviness	Mild (not affecting the normal movements)	Moderate (affecting the normal movements)	Severe (severely affecting the normal movements)

Table 2: Objective parameters

Symptoms	0	1	2	3
Tenderness	No tenderness	Mild (Pain on deep Palpation)	Moderate (Pain on superficial Palpation)	Severe (Doesn't allow)
Straight leg raise test (SLR TEST)	More than 90 ⁰	Between 60 ⁰ - 90 ⁰	Between 30 ⁰ - 60 ⁰	Less than 30 ⁰

Table 3 : Investigations

Blood
1. CBC
2. RBS
3. RA- FACTOR
☐ OTHER
X-RAYS (If necessary)

Table 11 : Showing the Overall assessment of therapy in both Group A and Group B (In percentage)

Remarks	Group A	%	Group B	%	Total	%
Complete relief (100%)	3	30%	4	40%	7	35%
Marked relief (75% - 99%)	3	30%	6	60%	9	45%
Moderate relief (50% - 74%)	4	40%	0	0%	4	20%
Mild relief (25% - 49%)	0	0%	0	0%	0	0%
No relief (Below 25%)	0	0%	0	0%	0	0%

Table 12 : Total effect of therapy in both the Groups**Showing the Total effect of therapy in both the Groups**

Group A			Group B		
BT	AT	PERCENTAGE	BT	AT	PERCENTAGE
121	21	82.64%	124	16	87.09%

