

EFFICACY OF AGNIKARMA IN THE MANAGEMENT OF GRIDHRASI W.S.R. TO SCIATICA

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ABSTRACT

Gridhrasi is one among 80 types of *Vatavyadhi*. Symptoms of *Gridhrasi* closely resembles to the clinical features of Sciatica. Sciatica is a severe painful condition where sciatic nerve of one or both the legs is involved. The study was undertaken to evaluate the clinical efficacy of *Agnikarma* (treatment done with cauterization) in the management of Sciatica. The most important symptoms are radiating leg pain and related disabilities. The management provided by modern practitioners for this condition is either conservative like rest, immobilization, analgesic and anti-inflammatory drugs, physiotherapy etc. or Surgical. If the pain and neurological findings do not disappear on prolonged conservative treatment, finally they go on surgery. Surgery is also not the ultimate solution as there is a common problem of recurrence and some patients lose their working capabilities. Hence considering above facts this study has been planned with aim and objective to evaluate the effect of *Agnikarma* in the management of *Gridhrasi* (sciatica). *Acharya Charaka* has described *Basti*, *Siravyadha* (Venepuncture) and *Agnikarma* in the management of *Gridhrasi*. In Present clinical study *Agnikarma* was advised weekly for 4 weeks in 30 patients of *Gridhrasi*. The signs and symptoms were assessed before and after the treatment based on the grading. Results obtained were analysed for the statistical significance using paired t test, which revealed that there is statistically significant improvement in symptoms of *Gridhrasi*. Ideally this technique should be evaluated scientifically using principles of biophysics and nerve conduction studies.

Keywords: *Agnikarma*, *Gridhrasi*, Sciatica, *Vatavyadhi*

INTRODUCTION:

Gridhrasi is a *Shulpradhana Nanatmaja Vatavyadhi*¹ which affects the daily routine of patients. Patient suffering from *Gridhrasi* is not capable to walk properly. According to *Acharya Charaka*, *Stambha* (stiffness), *Ruka* (pain), *Toda* (pricking sensation) and *Spandana* (twitching) are the signs and symptoms of *Vataja Gridhrasi*². *Aruchi* (anorexia),

Tandra (drowsiness) and *Gaurava* (heaviness) are the additional symptoms of *Vataphajja Gridhrasi*³. *Gridhrasi* is one of the *Vatavyadhi*. It starts from hip and gradually comes down to waist, back, thigh, knee, shank and foot and affects these parts with stiffness, distress, piercing pain and with frequent quivering.⁴ Sciatica is a major cause of illness among the working population in a developing coun-

try. This is the most common disorder which affects the movements of legs, particularly in most productive period of life, with low back pain, many of persons have radicular pain and this comes under the umbrella of Sciatica syndrome. *Ancient Acharyas given the name Gridhrasi* as a disease, it may be because of patient's gait become similar to the gait of the *Gridhra* (Eagle). This change in the gait is because of the pain in the back and the lower limbs and the patient starts limping towards the affected side. In *Ayurveda* science, various modalities of treatment are explained for the management of *Gridhrasi* ⁵. *Agnikarma Chikitsa* is said to be superior ⁶. Several researches have shown that *Agnikarma Chikitsa* is more effective compared to the other treatments such as oral drugs or even surgeries etc. The approach of *Agnikarma* has been mentioned in the context of diseases like *Arsha*, *Arbuda*, *Bhagandar*, *Sira*, *Snayu*, *Asthi*, *Sandhigata Vata Vikaras* and *Gridhrasi*. ⁷ *Gridhrasi* is seen as a panic condition in the society as it is one of the burning problems. On the basis of symptomatology, *Gridhrasi* may be simulated with the disease sciatica in modern parlance. In modern medicine, the disease sciatica is managed only with potent analgesics or some sort of surgical interventions which have their own limitations and adverse effects. Whereas in *Ayurveda*, various treatment modalities like *Siravedha*, *Agnikarma*, *Basti Chikitsa* and palliative medicines are used successfully. Among these, *Agnikarma* procedure seems to be more effective by providing timely relief. It is a classical fact that this pain is effectively relieved by the *Agnikarma* and there is no fear of putrefaction and bleeding. Ultimately it produces balancing effect on vitiated *Vata Dosha*. To perform this procedure, many *Dahana Upkaranas* (devices)

like *Pippali*, *Ajashakrit*, *Godant*, *Shara*, *Shalaka*, *Jambavoshtha*, *Madhu*, *Guda*, *Sneha* and different types of metals are used.⁸

AIMS AND OBJECTIVES: To evaluate the therapeutic efficacy of *Agnikarma* in patients of *Gridhrasi* w.s.r. to Sciatica.

MATERIALS AND METHODS: The study was performed in the OPD and IPD of P.G. department of *Shalya Tantra*, National Institute of Ayurveda, Jaipur. We selected 30 patients of clinically diagnosed *Gridhrasi* on the basis of signs and symptoms given in *Ayurveda* texts.

a) INCLUSION CRITERIA:

- Patients having classical symptoms of *Gridhrasi* like pain over *Sphik*(waist), *Kati* (back), *Prishta* (thigh), *Uru* (hip), *Janu* (knee), *Jangha* (calf region), extending up to *Pada* (foot), *Stambha* (stiffness), *Toda* (pricking pain). Tingling and numbness of limbs, difficulty in walking etc.
- Patients with Straight Leg Rising test positive.
- Age group – 30 to 70 yrs.

b) EXCLUSION CRITERIA:

- Cases of spondylolisthesis, sacroiliac arthritis, Herpes simplex infection causing radiating pain.
- Known cases of tuberculoma, or cyst compressing the nerve root, diabetic neuropathies.
- Patients having multiple wounds, fracture of vertebra, destructed vertebral bodies.
- People of *Paittik* constitution, where *Agnikarma* is contraindicated.

c) STUDY DESIGN:

In this study, 30 patients who satisfied the study criteria included in the study Outcome variables were recorded before treatment, on 7th day, on 14th day, and on 21st day after treatment.

d) DURATION OF TREATMENT:

Four weeks

e) CRITERIA FOR ASSESSMENT –

The improvement in the patient was assessed mainly on the basis of relief

in the cardinal symptoms of the disease. To assess the effect of therapy objectively, following scoring pattern was used.

Symptoms	Grade				
	0	1	2	3	4
Pain	No pain	Occasionally	Mild pain	Moderate pain	Severe pain
Tod (pricking sensation)	No pricking sensation	Occasionally	Mild	Moderate	Severe
Stiffness	No stiffness	Occasionally 5-10 min.	Daily 10-20 min.	Daily 21-60 min.	>1 hours
Spandan	No stiffness	Occasionally 5-10 min.	Daily 10-20 min.	Daily 21-60 min.	>1 hours
Tingling sensation	No tingling sensation	Occasionally	Mild	Moderate	Severe
Numbness	No numbness	Mild	Moderate	Severe	
On Walking	Can walk 1 km without pain	Can walk 0.5 km without pain	Can walk 250 meter without pain	Pain on standing position	Patient can't stand
SLR test	>90 degree	>75- <90 degree	>60- <75 degree	>45- <60 degree	<45 degree

f) PROCEDURE:

The procedure of *Agnikarma* was conducted in the minor OT of P.G. Department of *Shalya Tantra*, NIA hospital. The material used for *Agnikarma* was *Panch loha Shalaka*. First of all the procedure of *Agnikarma* was explained to the patients in detail before conducting the treatment and patient was mentally prepared by giving assurance. As a preoperative measure, patient was advised to consume *Snigdha* (unctuous) and *Picchila* (slimy) food before treatment. On the day of procedure, patient was made to lie in prone position, with leg extended. Patient was instructed to relax and slowly made to change his/her leg position to the required side.

Poorva karma:

- Informed consent to undergo *Agnikarma* treatment was taken.
- Routine blood investigation's done.
- Inj. Tetanus Toxoid 0.5 ml given to patient.
- Selected site was cleaned with *Triphala Kwath*.

Pradhan Karma:

The selected site was washed with *Triphala Kwath* and it was draped with sterile towel. By using a marker pen, 15-30 points choosed and marked in linear form over lumbo-sacral region and other maximum tender points along the course of Sciatica nerve, giving space 1 cm between each point. At the same time, the *Shalaka* (metal rod with sharp point) was heated over the burning gas stove until it became red hot. *Agnikarma* was performed with the red hot *Pancha loha shalaka* (metal

rod) at the marked points in *Bindu Akroti* (in the form of dot), in such a way that the *Samyak Dagdha Lakshanas* (signs of proper burning) were looks like appearance of sound, foul smell, constriction of skin. ⁹ Immediately after *Agnikarma*, a mixture of cow's ghee and honey was applied over the site of *Agnikarma* and a sterile bandage was applied to avoid outside exposure. The patient was advised to

rest in the supine position for half an hour and was sent home in case of out-patient, to the ward in case of in-patient. The patient was advised to remove the bandage after 3 hours. He was advised to keep the area clean and free from moisture the second course of *Agnikarma* was conducted on 7th day and similarly, the procedure was repeated for the third sitting after second week that is on 14th day.

RESULTS:

Signs and symptoms	Mean score		X	% of relief	SD	SE	t	p
	B.T.	A.T.						
<i>Ruka</i>	3.4	0.4	3.0	88.23	0.9428	0.2981	10.06	<0.001
<i>Toda</i>	3.8	0.4	3.4	89.47	0.8944	0.4	8.5	<0.01
<i>Stambha</i>	2.71	0	2.71	100.0	0.488	0.1844	14.71	<0.001
<i>Spandana</i>	2	0.666	1.333	66.66	0.5164	0.2108	6.324	<0.01
Tingling sensation	3.75	0.625	3.125	83.33	0.991	0.3504	8.9188	<0.001
Numbness	1.875	0.5	1.375	73.33	0.5175	0.183	7.5144	<0.001
Walking distance	1.7	0.6	1.1	64.706	0.3162	0.1	11	<0.001
SLR test	3.1	0.4	2.7	87.097	0.9487	0.3	9	<0.001

In this study effect of therapy shows highly significant with p value <0.001 results in *Ruka*, *Stambha*, Tingling sensation of lower limb, numbness. There was improvement in SLR test which also gives highly significant with p value < 0.001. Moderately significant results with p value <0.01 seen in case of *Toda* and *Spandan*. It is found that patients were clinically improved with the treatment of *Agnikarma* with no side effect of the therapy. About 88.23% relief found in case of pain immediately after the treatment which is one of cardinal symptom due to which patient became very comfortable and mentally satisfied by the treatment. 89.47% relief in *Toda*, About 100% relief was seen in case of stiffness after the therapy.

Gridhrasi is one of painful condition which hampers the daily routine of the patient. This disease having predominance of *Vata Doshas* as it comes under eighty *Vataj Nanatmaj Vyadhi* and may have *Kapha Anubandh* with it. Thus radiating pain from lumber region to the lower extremities may show stiffness in the lower limb and patient got difficulty in walking or continuous standing even for short period. Ayurveda believes that being *Ushna* treatment *Agni karma* acts against the properties of *Vata* and *Kapha Doshas* and hence *Agni karma* cures all the *Vataja* and *Kaphaj* disorders. Pain occurring anywhere in the body is due to *Vata*, *Agni karma* being *Ushna* Chikitsa pacifies *Vata* and thus the pain is relieved immediately after *Agnikarma*. Similarly *Kaphaj* disorders also get cured by the *Ushna* i.e hot qualities of *Agnikarma*.

DISCUSSION:

According to *Ayurveda*, every *Dhatu* has its own *Dhatvagni* which is responsible for the nourishment, Increase and decrease of *Dhatu*. When this *Dhatvagni* becomes *Manda* diseases begin to manifest. Thus in this condition *Agnikarma* works by giving external heat there by increasing the *Dhatvagni* which helps to digest the aggravated *Doshas* and hence cures the disease. *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*.

Total relief from Pain and negative SLR test with treatment were observed in many cases (as mentioned above) before the fixed duration of treatment. *Ayurveda* principles states that being *Ushna* treatment acts against the qualities of *Vata* and *Kapha Doshas* and hence cures all the *Vataja* and *Kaphaj* disorders.

According to scientist Dr Ven Hanff, the place where heat burns the local tissue metabolism is improved, thus various metabolic and rejuvenating changes takes places at the site of heat burns, thus it leads to increase demand of oxygen and nutrients of the tissues at the site of heat burns. It also excretes the unwanted metabolites and toxins.¹⁰

Due to increased local metabolism, the waste products (metabolites) which are produced gets excreted, which normalize the blood circulation thus resulting in reduction in intensity of pain. There may be generalize dilatation of the heated blood vessels on the centers concerned with regeneration of the body temperature. Heating affect the vasomotor centers causing general rise in temperature. Due to increased local metabolism, the waste products (metabolites) which are produced gets

excreted, which normalize the blood circulation thus resulting in reduction in intensity of pain

CONCLUSION:

Agnikarma therapy shows highly significant results in all signs and symptoms, especially in case of pain as it is one of the most uncomfortable factor for patient. The entire treatment was tolerated comfortably by the patients. There were no side effects noticed in any of the patients. The procedure was simple economical and can be done in OPD level gives instant relief to most of the patients, but still to avoid the reoccurrence of the disease and to break the *Samprapti* the patient may need to continue on oral shaman medication. The Pain relief provided by *Agnikarma* presents a window of opportunity in the clinical management of Sciatica.

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