



## A Case Study of Agnikarma Therapy in the Management of Sciatica

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### Abstract

*Sedentary lifestyle, improper sitting posture at work place, continuous and over exertion jerking movements during travelling and sports leads to undue pressure on spinal cord which results in low back ache and sciatica. The pathognomonic sign of sciatica is radiating pain from low back to planter surface of foot. It may or may not present with associated symptoms of sciatica. In present era, many medical and surgical interventions are available for the treatment of Sciatica though those are not as much successful for cure of Sciatica and also these procedures are expensive and time consuming. We have found in authentic Ayurvedic literature that Agnikarma is one of the treatments of Sciatica (Gridhrasi) from thousands of years. Purpose of the study was to evaluate the efficacy of Agnikarma therapy performed by innovated Agnikarma Probe made by Panch Dhatu (five types of metals) in case of Sciatica. After giving Agnikarma sitting, we have got marked improvement in symptoms of Sciatica within couple of hours and also found moderately improvement in various clinical examinations of Sciatica like SLR, Cross SLR, Local tenderness etc.*

**Keywords:** Sciatica, Sciatica clinical examinations, Agnikarma therapy, Agnikarma probe, Gridhrasi.

### Introduction

Changing of life style of modern human being has created several disharmonies in his biological system. As the advancement of busy, professional and social sedentary lifestyle, improper sitting posture in offices, factories, continuous and over exertion jerking movements during travelling and sports – all these factors create undue pressure to the spinal cord and play an important role in producing low back ache and Sciatica. Likewise, progressive disorders affecting the pelvis and

nearer structures are also precipitating this condition. In this way, this disease is now becoming a significant threat to the working population.

People with "sciatica" suffer from a wide range of symptoms. Often the pain will come and go. At times, it may be constant, but then it may subside for hours. Some people may feel only a dull ache or numbness, which travels down the back into leg. For others, it may be intense "shooting pains" down the leg into the foot and toes.

In reference to sciatica treatment, there is no need to state that in other medicinal sciences only the symptomatic management and also few surgical procedures with interest of adverse reaction are available for the patient.

In modern medicine for the management of sciatica various modalities are available such as -

- Conservative treatment
- Epidural steroid injection
- Peri-radicular infiltration
- Surgical treatment

All these are having their complications and side effects<sup>[1]</sup>. On the other hand, all these management tools are not affordable for the poor, particularly in developing countries like us.

With the above realities keep in mind, we were in search of cost effective, easy to perform and result oriented treatment of Sciatica and so on we had gone through various modalities running from hundreds of years all around the world. We found various methods used as a line of management in Sciatica (*Gridhrasi*) such as *Siravedh* therapy (Ayurvedic vein puncture treatment), *Agnikarma* therapy, *Panchkarma* therapy, Palliative management by various Ayurvedic herbs in *Charak Samhita* (*Ch.Chi.* Chapter 27), etc.

In Ayurvedic texts, *Gridhrasi* is *Vata* dominant or *Vata-kapha* dominant disorder. Further as in this disease the patient walks like vulture (*Gridhra*) and his legs become tense and slightly curved so due to the resemblance with the gait of a vulture, *Gridhrasi* term might have been given to this disease. On the basis of symptoms *Gridhrasi* can be equated with the disease Sciatica in modern parlance.

Stiffness is effectively relieved by the *Agnikarma*, is an established fact due to it is a higher dose of fomentation. References show that the diseases treated with *Agnikarma* are less recur<sup>[2]</sup>. By the process of *Agnikarma*, there is no fear of putrefaction and bleeding. It also yields quick relief. We have found lot of various products and metal instruments can be used for *Agnikarma* therapy in Ayurvedic literature<sup>[3]</sup> but at the end “*Samyak Dagdha Vrana*” (Therapeutic burn)

would be obtained at the site of *Agnikarma* therapy given is the heart of treatment. On this way, we have innovated an *Agnikarma* probe mixing by five different type of metals in different proportions i.e. Copper 40 %, Iron 30%, Zinc 10%, Silver 10% and Tin 10%<sup>[4]</sup>. This probe can be used for superficially skin burn as well deep for muscle burn. We have found that the innovated probe is also sustain heat for longer period, so it is easy to handle and perform the procedure with less period of time.

### Materials and Method

A female patient with average built of age 49 yrs was admitted in IPD female ward, Department of *Shalyatantra*, Government Akhandanand Ayurved college, Ahmedabad with chief complaints of pain in low back region radiating to left lower limb and stiffness in back especially during morning hours since two years. Patient also had complaints of tingling sensation and numbness in her left lower limb since 10 months. Last six months patient also suffered with poor appetite. For this she was diagnosed as Sciatica problem and took treatment from different Govt. Allopathic Hospitals, but got no relief. Then she approached Govt. Akhandanand Ayurved Hospital for better treatment.

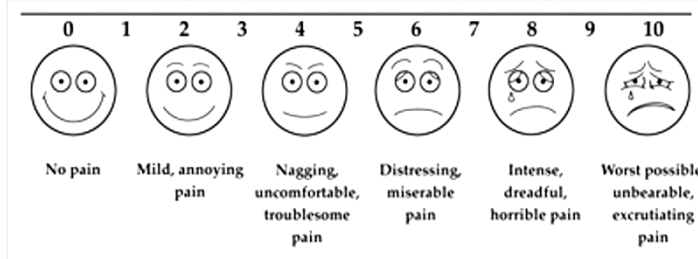
**On examination-** general condition of the patient was found antalgic gait. She was not able to stand or sit or remain in a same posture for more five minutes due to severe pain starting in her back. SLR was 40° of left side and Cross SLR test (Figure of Four test) was positive. Blood pressure was 120/70 mmHg, Pulse rate was 86/minute, Weight-70 kg and Height-5.11”.

All routine blood and urine investigations were carried out which seems to be normal. HIV, HBsAg, VDRL were negative. In Plain X-ray of LS Spine saw mild space diminished between L4 and L5 vertebral bodies. MRI findings confirmed the presence of severe thecal sac compression at L4-L5 body.

**Clinical Examinations of Sciatica**

Test	Right leg	Left leg
SLR	+ve (80°)	+ve (40°)
Reverse SLR	-ve	+ve
Crossed leg raising Test (Figure of 4)	-ve	+ve
Tenderness of sciatic nerve root test	+ve	+ve
Sitting Test	-ve	+ve
Popliteal Compression Test	-ve	+ve

VAS score<sup>[5]</sup> :



VAS score: 6 (before treatment).

**Method of Agnikarma:-**

**Pre requisites (Purvakarma):**

The *Agnikarma* therapy room should well prepared with all materials and instruments required for the therapy and care of patient in aseptic condition i.e. Betadin liquid, Freshly prepared *Triphala Kwath* or *Panchvalkal Kwath* (Decoction made by *Triphala* or *Panchvalkal*), Aloe vera leaf, innovated *Agnikarma* probe, Probe stand, High pressure burner for making the probe red hot, LPG Cylinder, SS tray, SS bowl, Sponge holding forceps, Gloves, Sterilised plain and hole towel, Cotton, A knife, Lighter etc. Take written inform consent of the patient.



Keep the probe on burner until it become red hot. It is hardly take two minutes to make the probe red hot. Ask the patient to lie down on examination table in prone position and make him relax. Ask the patient when therapeutic burn is

made, you just feel like an ant bite for a friction of second and do not move your limbs until the procedure will finish.



**During Main Procedure (Pradhana Karma):**

Examine the patient carefully and mark the maximum tender points on and around L4 –L5 vertebral bodies and Sciatic notch. Paint the portion by Aseptic solutions like *Triphala Kwath*, *Panchvalkal Kwath* or Betadin liquid and drap. With the use of Red hot *Agnikarma* probe and skilled hands, give 4-6 therapeutic burn marks with a distance of an inch up to skin level on spinous process and transverse process of L4 and L5 body. Also give 2-3 therapeutic burn marks at the level of sciatic notch when Cross SLR test become positive. Give 2-3 therapeutic burn marks longitudinally on tendo Achilles ligament (*Antra kandara gulf Madhya* as per Ayurved<sup>[6]</sup>) on affected limb when popliteal compression test get positive. Instantly apply the pulp of *Kumari* (Aloe vera) leaf hold with swab holding forceps in small piece on the burn marks, as *Kumari* (Aloe vera) is working as instant cooling agent





**Pashchat Karma:**

After a minute, clean the part by cotton and apply “Shat dhaut ghritam” (An Ayurvedic herbal ointment used for burns treatment) advice to the patient twice a day continuous for a week and do not apply water on the *agnikarma* site (burn marks) for next 24 hours.



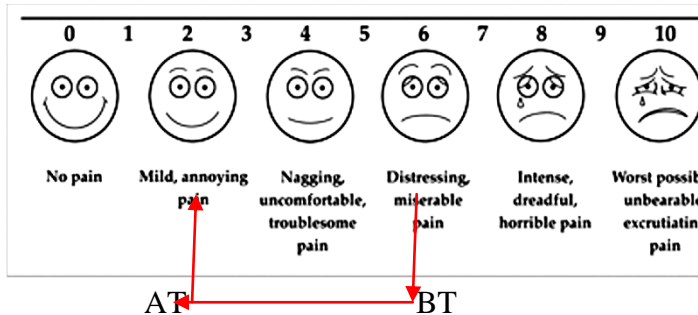
**Result**

Careful examination after a week, patient have got marked improvement in symptoms like stiffness and shooting pain. Her stiffness is almost gone. She also got relief in numbness and tingling sensation. We observed that she got moderately improvement in various clinical examinations of Sciatica.

VAS score:

Examination of left leg	Before treatment	After treatment
SLR	+ve (40°)	+ve (60°)
Reverse SLR	+ve	-ve
Crossed leg raising Test	+ve	-ve
Tenderness of sciatic nerve root test	+ve	-ve
Sitting Test	+ve	-ve
Popliteal Compression Test	+ve	-ve

VAS score reduced to 2.



**Discussion**

**Probable mode of action of Agnikarma:**

According to Gate Control Theory, Gate control system is located at the junction of first and second neuron. Large diameter fibre ‘A’ is stimulated by touch and temperature. Fine ‘C’ fibre is stimulated by pain. If ‘A’ fibre once gets stimulated, blocks the Gate mechanism, then pain from ‘C’ fibre does not pass through the Gate to reach to the brain for perception. Thus, by *agnikarma* pain perception is not feel to the patient<sup>[7]</sup>.

Moreover, Heat Induces metabolism at muscle fibre cells and removes waste products and release the stiffness of the muscles.

**Conclusion**

This case report showed that *Agnikarma* therapy is potent, safe and effective in the treatment of Sciatica (*Gridhrasi*).

There was no any adverse effect found during and after the whole procedure in this case.

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