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, Siravyadh (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 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 Spandan (twitching) are the signs and symptoms of Vataja Gridhrasi. Aruchi (anorexia), Tanda (drowsiness) and Gaurava (heaviness) are the additional symptoms of Vatakaphaja Gridhrasi. 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. 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 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. Agnikarma Chikitsa is said to be superior. 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.

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, Agni karma, Basti Chikitsa and palliative medicines are used successfully. Among these, Agni karma procedure seems to be more effective by providing timely relief. It is a classical fact that this pain is effectively relieved by the Agni karma and there is no fear of putrification 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.

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.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Pain</td>
<td>No pain</td>
</tr>
<tr>
<td>Tod (pricking sensation)</td>
<td>No pricking sensation</td>
</tr>
<tr>
<td>Stiffness</td>
<td>No stiffness</td>
</tr>
<tr>
<td>Spandan</td>
<td>No stiffness</td>
</tr>
<tr>
<td>Tingling sensation</td>
<td>No tingling sensation</td>
</tr>
<tr>
<td>Numbness</td>
<td>No numbness</td>
</tr>
<tr>
<td>On Walking</td>
<td>Can walk 1 km without pain</td>
</tr>
<tr>
<td>SLR test</td>
<td>&gt;90 degree</td>
</tr>
</tbody>
</table>

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 chose 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 Akruti (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. 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 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:

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

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.

DISCUSSION:

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.

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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

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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