Clinical Evaluation of Agnitundi Vati in the management of Gridhrasi With special reference to Sciatica

Research Article

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Abstract

In the present era, Gridhrasi is the commonly occurring disease in both geriatric and middle age. It causes due to irritation of sciatic nerve. According to Ayurveda, Vata plays a major role in pathogenesis of the disease but sometimes associated with kapha. Agnitundi Vati described in Sharangadarsamhita has the properties acting on both vata and kapha. To assess the efficacy of Agnitundi vati in the management of Gridhrasi, present study was undertaken in 30 patients of both types of Gridhrasi. 125-250 mg of Agnitundi Vati was given orally, two times daily after meal with lukewarm water for total 21 days. It showed hopeful results in subjective and objective parameters of Gridhrasi. The study shows that Agnitundi vati is effective in management of both types of Gridhrasi, but more effective in vata-kaphaj Gridhrasi.

Key Words: Gridhrasi, Vataparakopak nidanas, Vata, Kapha, Agnitundi vati.

Introduction

Sciatica is characterised by constant aching pain in the lumbar region radiating to the buttock, calf and foot caused by irritation of the sciatic nerve. (1) It is quite a common condition with a lifetime incidence varying from 13% to 40%. The consequent annual incidence of an episode of sciatica ranges from 1% to 5%.

It can be compared to Gridhrasi described in Ayurvedic text having pricking pain, twitching along the route of sciatic nerve. It occurs both in old and middle age. It is one of the 80 types of Nanatmaja vyadhi of vata. (3) The general vata prakopa nidanas are nidanas of Gridhrasisuch as improper sitting posture, over exertion, over loading, trauma to lumbosacral spine, production of ama, jerky movements during travelling etc. (4) The samprapti of Gridhrasi is a complex mechanism. The vata provoked by the above-mentioned factors, either by depletion of dhatu or by the occlusion of channels, enters the empty majjavaha srotas and leads to Gridhrasi. (5)

The cardinal features of Gridhrasi are ruk(pain), toda(pricking sensation), stabhata(stiffness), spandanata(twitching) in the buttocks, low back region radiating to thigh, knee, calf region and foot, whereas arochak (aversion to food), tandra(drowsiness), and gaurava (feeling of heaviness) come across additionally when kapha is associated with vata. (6) Due to severe pain, it creates little threat to life. Treatment of the disease includes analgesics, traction therapy and physical therapy. Surgery i.e. removal of disc herniation also recommends according to stage. This treatment reduces only leg pain and corresponding symptoms, not the back pain and the chances of recurrence are more.

Vata plays major role in the pathogenesis of the disease but most of the times associated with kapha. Also being a nerveine disorder, can be treated by a drug having deepana, pachana, vatashamakaand shoolaghna properties along with having action on nerves. Agnitundi vati mentioned in Sharangadharasamhita is having all the properties. (7) This drug is using being successfully to cure vataraogas. But it is need to study on scientific measures to make more use of it.

Materials & Methods

Objective of the study
To evaluate the efficacy of Agnitundi Vati in the management of Gridhrasi.

Source of Data
Patients attending the OPD and IPD of the Department of Rognidan- Vikiritivigyan and Dept of Kayachikitsa, Pakwasa Samanvay Rugnalaya and Dept of Rognidan- Vikiritivigyan of Akhil Bhartiya Ayurved Anusandhan, Nagpur.

Method of Collection
30 participants fulfilling the diagnostic and inclusion criteria, belonging to either sex irrespective of socio-economic status and caste were selected and registered for the clinical study. Prakriti, addiction, gender, occupation of the patients was also studied.

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Diagnostic criteria
Patients were diagnosed on the basis of following clinical features
1. Patients having cardinal symptoms of Gridhrasi like Ruk, Toda, Stambha and Spandana in Sphik, Kati radiating to Prishtabhaga of Uru, Janu, Jangha and Pada.
2. Positive straight leg raises (SLR) test in affected leg.

Inclusion Criteria
1. Patients fulfilling the diagnostic criteria.
2. Patients of both sex between age group 20-65 years.

Exclusion Criteria
1. Benign or Malignant tumour of spine, traumatic injury, Tuberculosis of vertebral column.
2. Developmental anomalies.
4. Pregnant and Lactating women.

Laboratory Investigation (Objective Parameter)
• Routine haematological investigation- Hb%, TLC, DLC, ESR
• Urine for routine and microscopic examination
• X-ray of Lumbosacral spine – AP and Lateral view.

Plan of Treatment
125-250 mg of Agnitundi Vati was given orally, two times daily after meal with lukewarm water for total 21 days. A gap of 1 day was given in between two weeks.

Weekly follow up was taken.
Agnitundi Vati was prepared in Universal Pharmacy, Nagpur.

Contents of Agnitundi vati:
Bhavana Dravya- Jambeera (Citrus Limon)

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parad (Mercury)</td>
<td>1 part</td>
</tr>
<tr>
<td>Gadhak (Sulphur)</td>
<td>1 part</td>
</tr>
<tr>
<td>Vatsanabh (Aconitum ferox)</td>
<td>1 part</td>
</tr>
<tr>
<td>Haritaki (Terminalia chebula)</td>
<td>1 part</td>
</tr>
<tr>
<td>Bibhitak (Terminalia belerica)</td>
<td>1 part</td>
</tr>
<tr>
<td>Amalaki (Phyllanthus emblica)</td>
<td>1 part</td>
</tr>
<tr>
<td>Chitrak (Plumbago zeylanica)</td>
<td>1 part</td>
</tr>
<tr>
<td>Jeerak (Cuminum cyminum)</td>
<td>1 part</td>
</tr>
<tr>
<td>Ajamoda (Carum Roxburghianum DC)</td>
<td>1 part</td>
</tr>
<tr>
<td>Vidanga (Emblica ribes)</td>
<td>1 part</td>
</tr>
<tr>
<td>Shunthi (Zingiber officinale Roscae)</td>
<td>1 part</td>
</tr>
<tr>
<td>Marich (Piper nigrum)</td>
<td>1 part</td>
</tr>
<tr>
<td>Pippali (Piper longum)</td>
<td>1 part</td>
</tr>
<tr>
<td>Sarj kshara</td>
<td>1 part</td>
</tr>
<tr>
<td>Yava kshara (Potasii carbons)</td>
<td>1 part</td>
</tr>
<tr>
<td>Saindhava (Sodii chloridum)</td>
<td>1 part</td>
</tr>
<tr>
<td>Sauvarchala (Unaqna sodium chloride)</td>
<td>1 part</td>
</tr>
<tr>
<td>Samudra (Sodii muras)</td>
<td>1 part</td>
</tr>
<tr>
<td>Kupeelu (Strychnos nux-vomica Linn)</td>
<td>18 parts</td>
</tr>
</tbody>
</table>

Assessment Criteria
Subjective and objective parameters presented by the patients were given score and were assessed before and after every week for 3 weeks.

Gradation for Subjective parameter
Ruk (Pain)
0: No pain
+: Painful but walks without limping
++: Painful, walks with limping but without support
++++: Severe pain, unable to walk
Stambha (Stiffness)
0: No stiffness
+: Mild Stiffness
++: Moderate stiffness
++++: Severe stiffness
+++++: Very severe stiffness
Spandana (Twitching)
0: No twitching
+: For few minutes occasionally
++: Daily once in a day for few minutes
++++: Many times, in a day affecting daily routine
+++++: Daily for many times severely hampering daily routine
Arochak
0: Absent Arochak
+: Mild Arochak
++: Moderate Arochak
++++: Severe Arochak
Gaurava
0: Absent Gaurava
+: Mild Gaurava
++: Moderate Gaurava
++++: Severe Gaurava
Tanda
0: Absent Tanda
+: Mild Tanda
++: Moderate Tanda
++++: Severe Tanda

Gradation for SLR
0: Equal to or greater than 900
+: 710 to < 900
++: 510 - 700
+++: 310 - 500
++++: <300

Observations and Result
Total 30 patients of Gridhrasi were registered. Important features were as follows:

Graph 1. Showing the distribution of gender in 30 patients of Gridhrasi

- Maximum, 63.3% were females.
Maximum, 36.66% were in age group 31-40 and 86.65% were in the age group of 31 – 60 years.

Maximum, 36.66% were homemakers.

Maximum, 46.67% were having addiction of tobacco chewing and gutkha and 33.33% having addiction of beetle nut.

According to prakriti, 36.67% patients were of vata-kaphaj and 36.67% were of vata-pittaj prakriti.

According to agni, majority of patients i.e. 60% were having mandagni.

53.33% patients were diagnosed as vataj Gridhrasi and 46.67% patients as vata-kaphaj Gridhrasi.
of inter vertebral disc. (8) This decrease in hydration may be due to rukshata which increases as a result of vatavriddi. Prevalence commonly found in this age group.

Sex- the higher incidence of disease occurred in females. (9)

There was higher incidence of sciatica in homemakers. Working constantly with improper posture for long duration during household work, lack of exercise; irregular food habits and cold exposure are the contributing factors. Labourer also show comparatively high incidence because of heavy work they do. (10)

A high proportion of patients were having vatapittaj and vatakaphaj prakriti suggesting that vata has major role in the manifestation of sciatica

Maximum patients were having addiction of beetle nut, tobacco chewing and gutkha. These factors lower the bone mineral density causing osteoporosis. It causes osteoporotic vertebral fractures compressing the sciatica nerve thereby responsible for nerve damage. (11) As beetle nut is kashaya in rasa, it vitiates vata.(12)

**Effect of therapy**

*Kupeelu* (Strychnos nux-vomica Linn.) is the major content of drug which is more effective in nerve disorders. It improves stimulatory function of *vata*, when function of *vata* decreases due to association with *kapha*.

All contents of *Agnitundi vati* are deepana, pachana, vatashamaka and shoolaghn in properties. Due to its ushna virya it normalises the function of *apana* and *vyanavayu*. (13)

**Conclusion**

The drug *Agnitundi vati* showed good results in both types of Gridhrasi, but better relief seen in *vatakaphaj Gridhrasi*. Ingredients of this vati having deepana, Amapachana, vatashamaka and shoolaghn properties, it improves agni by digesting *ama* which is the main factor in *vatakaphaj Gridhrasi*. In this way relieves generalised symptoms such as aruchi, gaurava and tandra. This drug works at the root level of *samprapti* and minimizes chances of recurrence.

**References**


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