EFFICACY OF AYURVEDIC TREATMENT PROCEDURE ON GRIDHASI (LUMBO SCIATICA SYNDROME) IN AN AYURVEDIC HOSPITAL - A RETROSPECTIVE STUDY

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ABSTRACT

Gridhasi is one of the most important of vata vyadhi characterised by ruka (pain), stambha (stiffness), toda (piercing pain) and gourava (heaviness) which starts from sphik pradesh (hip) and radiates downwards through pristhabhaga of kati (waist), pristha (back), uru (thigh), janu (knee), jangha (shank) and pada (foot). In modern sciences, it is correlated with sciatica syndrome. Sciatica is pain radiating through sciatic nerve trunk. It is mainly caused by compression of nerve root resulting from IVDP, osteophytes and canal stenosis. Chief symptom of sciatica is pain radiating from buttocks down to the leg. The present study compromised of 22 patients of Gridhasi selected from indoor patient department of National Research Institute of Ayurvedic Drug Development, Kolkata. Treatment included simhanad gugulu, ajmodadi churna and haritaki churna, kativasti with mahanarayan taila. Results were accessed based on improvement of symptom by ‘t’ test which was p < .001 in this case suggesting significant results.

KEYWORDS: Gridhasi, Sciatica Syndrome, Ayurveda.
INTRODUCTION
Gridhasi is one of most important types of vata vyadhi. As the gait of gridhasi patient resembles with that of vulture it is termed as gridhasi. In Ayurvedic text, gridhasi is described as a type of vata vyadhi which starts from hip and gradually comes down to waist, back, thigh, knee, shank and foot and stiffness, distress and piercing pain along with frequent quivering is found in these parts. According to another opinion in Ayurvedic classics, when the ligaments of heel and toes are afflicted with vata, by producing obstruction of movement of leg produces gridhasi. The two ligaments mentioned here are ligament of heel which goes upwards and the ligament of toes which goes downwards. [3]

In modern science gradhasi can be correlated to sciatica. Sciatica syndrome mainly occurs due to pressure put on sciatic nerve root by a herniated disc and role of chemical factors acting in addition to this pressure is also important as disc surgery does not always relieves the pain and large disc herniation does not always produces the symptom of sciatica. There is no exact data available on incidence and prevalence of sciatica. Roughly 5-10% patients of low back pain have sciatica whereas reported lifetime prevalence of low back pain is 49-70%. Annual prevalence of sciatica in general population is 2.2%. Disc related sciatica (DRS) is most common and due to its high incidence it causes considerable socioeconomic cost.

In treatment of sciatica in modern medicine include conservative treatment like rest, immobilisation, analgesic and anti-inflammatory drugs, physiotherapy, manipulation etc which again do not provide confirmative relief. That’s why the authors tried to find out a useful modality from Ayurvedic resources for treatment of gridhasi. The study material comprised of 22 patients of gridhasi selected from in-patients department of National Research Institute of Ayurvedic Drug Development, Kolkata and were treated by simhanad gugulu, ajmodadi churna and haritaki churna and kati vasti with mahanarayan taila for one month. Simhanad gugulu is an Ayurvedic herbo mineral formulation acting excellently on vata vyadhi. Kativasti is a type of panchakarma therapy not mentioned in classical Ayurvedic texts but having good effect on kativata and gridhasi. Mahanarayan taila is an oil preparation mentioned in Ayurvedic classics having rasna, aswagandha, kustha etc as main ingredient and having good action on vata vyadhi. Ajmodadi churna is an excellent drug having good action on vata vyadhi along with gridhasi. Haritaki Churna is an herbal formulation having vatanuloman activity.
MATERIAL AND METHOD
The retrospective study was carried out in 22 patients of In Door Patients Department of National Research Institute of Ayurvedic Drug Development, Kolkata between 2014 to 2016. The popular treatment protocol was selected consisting of simhanad gugulu, ajmodadi churna and harataki churna, kati vasti with mahanarayan taila.

Criteria of selection of Patients
The patients who have sign symptom of gridhasi were selected for the study. The sign symptom are Low Back Pain (Ruka) radiating to sphik, kati, pristha, uru, janu and jangha, stambha, toda and gourava (as mentioned in Ayurvedic classics).

Specific Investigation
2. FBS, PPBS.
3. Serology.
4. X-Ray Lumbo sacral spine AP and Lateral view.

Drugs Intervention
The treatment regimen was as followed
1. Tab Simhanad Gugulu - 2 tabs (500 mgs) twice daily for 4 weeks.
2. Ajmodadi Churna - 3 gms twice daily for 4 weeks.
3. Harataki Churna - 4 gms twice daily for 4 weeks.
4. Kati vasti by Mahanarayan taila - once daily for 2 weeks.

The treatment was carried out for 4 weeks and kati vasti was given only for 2 weeks.

Tab simhanad guggulu and mahanarayana taila purchased from IMPCL, Mohan, Uttranchal, ajmodadi churna and Haritaki churna prepared in pharmacy of NRIADD, Kolkata.

Subjective Criteria
1. Ruka (Pain) – Grade 0 - No pain.
   Grade I - Mild annoying pain.
   Grade II - Mild uncomfortable.
   Grade III - Moderate distressing pain.
   Grade IV - Severe intense pain.
2. Stambha (Stiffness) – Grade 0 - No Stiffness.
   Grade I - 25% Restriction of movement.
   Grade II - 26-50% Restriction of movement.
   Grade III - 51-75% Restriction of movement.
   Grade IV - > 76% Restriction of movement.

3. Toda (Piercing pain) – Grade 0 - Absent.
   Grade I - Mild, Occasional.
   Grade II - Mild, Regular.
   Grade III – Moderate.
   Grade IV – Severe.

4. Gourava (Heaviness) – Grade 0 - Absent.
   Grade I - Mild, Occasional.
   Grade II - Mild, Continuous.
   Grade III – Moderate.
   Grade IV – Severe.

RESULT AND DISCUSSION
All the 22 patients of gridhasi were observed through following means
1. Demographic profile.
2. Clinical profile.
3. Laboratory profile.
4. Therapeutic profile.

Demographic Profile
Age
Patients were taken randomly from different age group. They were divided in four age group as shown in table no. 1.

Table. No. 01: Age wise Distribution.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Age</th>
<th>No. of patient</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>30-40 years</td>
<td>8</td>
<td>36.36%</td>
</tr>
<tr>
<td>2.</td>
<td>41-50 years</td>
<td>6</td>
<td>27.27%</td>
</tr>
<tr>
<td>3.</td>
<td>51-60 years</td>
<td>6</td>
<td>27.27%</td>
</tr>
<tr>
<td>4.</td>
<td>&gt;60 years</td>
<td>2</td>
<td>9%</td>
</tr>
</tbody>
</table>
Sex
Study was carried out irrespective of sex as demonstrated in table no. 2.

Table No. 02: Sex wise Distribution.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Sex</th>
<th>No. Of Patient</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Male</td>
<td>08</td>
<td>36.4%</td>
</tr>
<tr>
<td>2.</td>
<td>Female</td>
<td>14</td>
<td>63.6%</td>
</tr>
</tbody>
</table>

Occupation

Patient of different occupation were included in this work which is shown in table no. 03.

Table No. 03: Incidence of Occupation.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Occupation</th>
<th>No. of Patient</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Professional</td>
<td>5</td>
<td>22.73%</td>
</tr>
<tr>
<td>2.</td>
<td>Serviceman</td>
<td>3</td>
<td>13.63%</td>
</tr>
<tr>
<td>3.</td>
<td>Farmer</td>
<td>4</td>
<td>18.18%</td>
</tr>
<tr>
<td>4.</td>
<td>Businessman</td>
<td>2</td>
<td>9.1%</td>
</tr>
<tr>
<td>5.</td>
<td>Housewife</td>
<td>8</td>
<td>36.36%</td>
</tr>
</tbody>
</table>

Clinical Profile

Symptoms of all the patients were noted before treatment and after treatment and are shown in table no. 04 along with % age of relief.

Table No. 04: Effect of Treatment on different symptoms of Gridhasi.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Symptoms</th>
<th>BT</th>
<th>AT</th>
<th>% of Relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ruka</td>
<td>80%</td>
<td>34%</td>
<td>57.5%</td>
</tr>
<tr>
<td>2.</td>
<td>Toda</td>
<td>62%</td>
<td>18%</td>
<td>70.96%</td>
</tr>
<tr>
<td>3.</td>
<td>Stambha</td>
<td>74%</td>
<td>20%</td>
<td>72.98%</td>
</tr>
<tr>
<td>4.</td>
<td>Gourava</td>
<td>62%</td>
<td>40%</td>
<td>35.49%</td>
</tr>
</tbody>
</table>

Statistical Analysis

Results were assessed on basis of different parameters before and after treatment.

Table No. 05: Effect of treatment on 22 Patients of Gridhashi.

<table>
<thead>
<tr>
<th>Chief Symptom</th>
<th>Mean Score</th>
<th>% of Relief</th>
<th>SD(±)</th>
<th>SE(±)</th>
<th>‘t’</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BT</td>
<td>AT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LBP (Ruka radiating to sphik, kati, pristha, uru, jangha)</td>
<td>66%</td>
<td>35.45%</td>
<td>46.28%</td>
<td>1.07</td>
<td>.22</td>
<td>15.27</td>
</tr>
</tbody>
</table>

In the present study we found out that the maximum patients were from 30-40 years age group as mentioned in table no. 01. It was also found out that maximum patients were female
as mentioned in table no. 02. As far as occupation is concerned, maximum patients were from housewife group followed by professional group as mentioned in table no. 03.

Clinically 80% patients were having ruka followed by stambha 74% patients, and their after treatment value along with % of relief is mentioned in table no 04. 57.5% relief was observed in ruka, 70.96% relief in toda, 72.98% relief in stambha and 35.49% relief was observed in gourava.

The result of study was highly significant with SD(±) 1.07, SE(±) 0.22, and ‘t’=15.27. At 21 degree of freedom, 5% significance limit of ‘t’ is 2.08. The observed t value is 15.27 times standard error, hence this therapeutic procedure is undoubtedly producing significant improvement clinically. (‘t’=15.27, p<0.001 i.e. highly significant).

As described above treatment plan included use of simhanad gugulu, ajmodadi churna and haritaki churna and kativasti by mahanarayan taila. Simhanad gugulu is a Ayurvedic formulation containing amalaki, haritaki, vibhiti, sodhita gandhaka, sodhita guggulu and erenda taila which act excellently on vata kaphaja vikara, vata rakta, khanja and severe pain of amavata. Ajmodadi Churna is a Ayurvedic medicine consisting of ajmoda, vidanga, saindhava lavana, devadaru, chitraka, pippalamila, shatapuspa, pippali, maricha, pathya, vridhadaru and nagar. It has got wonderful action on gridhasi, amavata, sandhivata, pristharuja, viswachi and other vataj vikara. The powder of fruit of haritaki has got wonderful action acting as vatanulomak. Kati vasti is a procedure in which medicated oil is poured over kati Pradesh i.e. lumbosacral region and kept in a particular temperature in a circular shape of instrument prepared out of black gram paste. The process was done for 1 hour daily for 2 weeks. Mahanarayan Taila is a oil preparation containing rasana, aswagandha, kustha, devadaru, chatusparni, vacha, astavarga dravya etc made in tila taila. It has balavarna vridhikaran action and has excellent action on ekangavata, arditavata, kampavata, pangu and other types of vataj vyadhi.

CONCLUSION
Ayurveda is playing an important role towards the betterment of human health. Till now Ayurveda is the only answer for many incurable, chronic and degenerative diseases. Holistic approach of Ayurveda helps a disease free healthy environment of our society. Gridhasi is such a disease which has got no confirmative treatment in modern sciences but Ayurveda has certainly got a lot of potential in treatment of gridhasi.
Based on above retrospective study it can be safely concluded that Gridhasi is a chronic disorder which affects both the sex. Maximum symptoms of Gridhasi are similar to sciatica. The present treatment protocol consisting of simhanad guggulu, ajmodadi churna and haritaki churna and kati vasti by mahanarayan taila has got excellent action on treating symptoms of gridhasi without any noticeable adverse effect during or after treatment. Further large scale studies are suggested.

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REFERENCE
