THE EFFECT OF CHATURBHADRA KALPA BASTI IN THE MANAGEMENT OF KATIGRAHA

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ABSTRACT

Kati Graha (Low back ache) is a Vedanapradhana Vyadhi. Patient feels pain and stiffness in the lumbar region, which hampers the normal activities of the person. It is one of the Nanatmaja vatavyadhi mentioned by Acharya Sharangadhara. Nidana and samprapti of this disease is not mentioned separately but included under Vatavyadhi. Due to much prevalence in the society and lack of effective medicament, the disease is being chosen for the study. Basti Chikitsa is the best line of treatment for VataVyadhi and called as Ardhachikitsa. Kashyapa has planned a special pattern of Chaturbhadra kalpa basti administration in vatarogas by putting 4 Anuvasana at beginning, followed by 4 Niruha in middle & 4 Anuvasana at the end. 15 patients were treated in Chaturbhadra kalpa basti pattern with Prasarini taila & Rasnasaptaka kashaya as Anuvasana & Niruha respectively for 12 days. So, in this clinical study an attempt is made to find out efficacy of Chaturbhadra kalpa basti pattern in Katigraha.

Keywords: Katigraha, Chaturbhadra Kalpa Basti, Prasarinitaila, Rasna Saptaka Kashaya

INTRODUCTION

In present busy, fast and mechanical life, one can’t follow the rules of ‘Dinacharya’ and ‘Ritucharya’ described in ‘Ayurveda’. Due to heavy industrialization and development, advanced software technology the mankind running behind fast and furious life. Due to that every person indulging in improper sitting postures, Continuous long journeys, overexertion, jerky movements during traveling and sports, weight lifting, sitting for a prolonged time and other strainful activities etc., create an undue pressure to the spinal column and play an important role in producing low backache even in early decades of life. About 70%-90% of the population above 40 years of age suffers from this disease.

In Ayurvedic samhitas katigraha has been mentioned as a very common problem, characterized by pain and restricted movements of kati Pradesh (Lumbar region). The etio-pathogenesis of katigraha is suggestive of vatapradhana vyadhi. Along with vata, sometimes kapha may be involved leading to stiffness, re-
stricted movements etc. symptoms. In present study only the chronic patients of Katigraha has been selected where only vata involvement is there. Though katigraha is a commonest diagnosis given to the patients attending the clinics with back pain, the current management of disc diseases includes pain killers, lumbar corset, physiotherapy etc. In the concepts of Ayurveda, looking to the etio-pathogenesis of katigraha, sampraptivighatana demands Shodhana along with Brimhana to regulate vataprapakopa. In these conditions Basti is the choice of treatment not only in regulating & coordinating vata dosha in its site, but also controls other anubandha doshas involved in pathogenesis. Apart from the karma, kala and yoga basti pattern mentioned by other acharyas, acharya kashyapa mentioned a special pattern of basti i.e. Chaturbhadra kalpa basti\(^2\). This basti schedule works in prabhoota vata prakopa, where disease is in jeernavastha, where brimhana with shodhana is in need, because this package is a blend of Anuvasanapradhana basti i.e. containing 8 Anuvasana and 4 Niruha bastis.

**Aim and objectives**
1. To study the concept of Chaturbhadra kalpa basti in detail.
2. To assess the effect of Chaturbhadra kalpa basti in the management of Katigraha.

**Materials and methods**
This study was conducted on 15 patients with classical signs and symptoms of Katigraha to evaluate the efficacy of Prasarini taila\(^3\) & Rasnasaptaka kashaya\(^4\) as Niruha & Anuvasana respectively in Chaturbhadra kalpa basti pattern.

**Source of Data:**
Patients were selected from OPD & IPD Panchakarma department of Sri Siddharoodha Charitable Hospital, attached to N.K.J. Ayurvedic Medical College & P.G research Centre, Bidar, Karnataka and other associated hospitals of the city.

**Research design**
Total 15 patients were randomly selected for the study according to the pre-set inclusion and exclusion criteria.

**Inclusion Criteria**
1. Patients presenting with signs & symptoms of katigraha were selected.
2. Patients age between 20-70 years irrespective of sex & socio-economic status.
3. Patients fit for Basti Chikitsa.

**Exclusion Criteria:**
1. Katigraha associated with other severe systemic complications.
2. Patients with inflammatory diseases.
3. Patients with congenital spine diseases.
4. Patients not fit for Basti chikitsa.

**Investigation required**
Routine blood investigations
- CBP
- RBS
- ESR

Special Investigations
- X-ray of lumbar spine AP & Lateral view.
- MRI and CT scan if necessary.

**Table 1:** Showing Chaturbhadralakalpa Basti Pattern

<table>
<thead>
<tr>
<th>Number of Basti</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Basti</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

Here, A= Anuvasana Basti, N= Niruha Basti

**Table 2:** Showing Intervention chart

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Procedure</th>
<th>Drug</th>
<th>Dose</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Poorva Karma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Sarvanga Abhyanga</td>
<td>Murchita tila taila</td>
<td>Q.S</td>
<td>30-40 mins</td>
</tr>
<tr>
<td>b)</td>
<td>Bhashpa sweda</td>
<td>Dashamula Dravyas</td>
<td></td>
<td>Till samyak swinna lakshana appears.</td>
</tr>
</tbody>
</table>
2. **Pradhana Karma**

- **Anuvasana Basti**
  - *Prasarinitaila* 150 ml appr (3 pala)
  - 1st,2nd,3rd,4th & 9th,10th,11th,12th day
- **Niruha Basti**
  - *Madhu* 50 gm
  - 5th,6th,7th,8th day
  - *Saindhavalavana* 12 gm
  - *Prasarinitaila* 150 ml (1/5th of total niruha matra)
  - *Kalka of Rasna, Gokshura, Eranda, Guduchi, Aragwadha, Punarnava, Devadaru.* 50 gm
  - *Rasna saptaka kashaya* 500 ml
  - Total Appro 760 ml*

3. **Paschat Karma**

- *a) Anuvasana Basti* Lifting legs, padding to the buttocks, anticlockwise massage to abdomen etc. Lying in supine position 3-5 mins Till patient feels urge
- *b) Niruha Basti* according to Shastrangadhara Uttarakhanda 6th chapter.

**Follow up**

There will be two follow ups-
First is after completion of *basti* i.e. on 12th day.
Second is after *basti pariha kala* i.e. 24th day after *Basti chikitsa.*

**Assessment criteria:**
Subjective and objective parameters will be assessed based on before & after treatment with appropriate statistical analysis.

**Parameters for assessment**

**Subjective Parameters:**
1) *Shula* (Pain)
2) *Sthamba* (Stiffness)
3) *Graha* (Restricted movements)
4) *Suptata* (Numbness)

**Objective Parameters:**
1) *Lumbar mobility test*
2) *SLR test*
3) *Coin test*

**Table 3: Showing Gradings Chart**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>G0</th>
<th>G1</th>
<th>G</th>
<th>G3</th>
<th>G4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>No pain</td>
<td>Mild pain</td>
<td>Mod.pain</td>
<td>Severe pain</td>
<td>Most excruciating pain</td>
</tr>
<tr>
<td>Stiffness</td>
<td>No Stiffness</td>
<td>Mild Stiffness</td>
<td>Mod. Stiffness</td>
<td>Severe Stiffness</td>
<td>Most severe Stiffness</td>
</tr>
<tr>
<td>Numbness</td>
<td>No Numbness</td>
<td>Mild Numbness</td>
<td>Mod. Numbness</td>
<td>Severe Numbness s</td>
<td>Most severe Numbness</td>
</tr>
<tr>
<td>Coin test</td>
<td>Easy pick</td>
<td>Minimal difficulty</td>
<td>Mod. Difficulty</td>
<td>Severe difficulty</td>
<td>Unable to bend &amp; pick</td>
</tr>
<tr>
<td>SLR test</td>
<td>Normal (90°)</td>
<td>89º - 70º</td>
<td>69º - 50º</td>
<td>49º. 30º</td>
<td>&lt; 30º</td>
</tr>
<tr>
<td>Lumbar mobility test</td>
<td>Normal (15cm)</td>
<td>14.9 – 13.8 cm</td>
<td>13.7 – 12.6 cm</td>
<td>12.5 – 11.4 cm</td>
<td>11.3 – 10 cm</td>
</tr>
</tbody>
</table>

**Observation**

In present study maximum i.e. 33.33% patients were in the age group of 41-50 yrs. Among the registered patients 56.67% of the patients were Female & 43.33% of the patients were Male. 90% of the patients were belonging to Hindu community and Muslim were 10 %. 90% of the patients were Married. 26.67% patients were uneducated, 20% patients were primary, 36.67% patients secondary & 16.67% patients were graduate. 13.33% patients were doing ser-
vice, 20% patients were doing business, 13.33% patients were doing agriculture and remaining 53.34% patients were Housewives. 33.33% patients had mixed diet, while 66.67% patients had vegetarian diet. 36.67% Patients were having good sleep and 63.33% patients were having disturbed sleep. 36.67% patients were found vatapittaja prakruti, 10% patients having Pittakaphaja Prakruti & 53.33% were found kaphavataja prakruti. 66.67% patients had Vishama Agni, 26.67% patients had Mandya Agni, 6.67% had Teekshna Agni & no patients were of Sama Agni. 50% patients had Madhyama koshtha, 36.67% patients had Krurakostha & 13.33% patients had Mrudua koshtha. 33.33% patients were having the chronicity of 12-23 months & more than 35 months, 26.67% were of 24-35 months chronicity & 6.67% patients were of 0-11 months.

Results

Table 4: Showing Subjective Parameters

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Symptom</th>
<th>BT Mean ± SE</th>
<th>Follow up</th>
<th>AT Mean ±SE</th>
<th>df</th>
<th>t- value</th>
<th>%</th>
<th>p-value</th>
<th>Remark s</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pain</td>
<td>3.4±0.16</td>
<td>1</td>
<td>2.27±0.15</td>
<td>14</td>
<td>8.5</td>
<td>33.23</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>1.47±0.13</td>
<td>14</td>
<td>10.64</td>
<td>56.76</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td>2</td>
<td>Stiffness</td>
<td>3.27±0.18</td>
<td>1</td>
<td>2.27±0.11</td>
<td>14</td>
<td>5.92</td>
<td>30.58</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>1.33±0.15</td>
<td>14</td>
<td>10.64</td>
<td>59.33</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td>3</td>
<td>Restricted movements</td>
<td>3.0±0.13</td>
<td>1</td>
<td>1.93±0.15</td>
<td>14</td>
<td>6.96</td>
<td>35.67</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>0.93±0.15</td>
<td>14</td>
<td>13.48</td>
<td>69</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td>4</td>
<td>Numbness</td>
<td>2.53±0.26</td>
<td>1</td>
<td>1.6±0.23</td>
<td>14</td>
<td>7.9</td>
<td>36.76</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>0.67±0.18</td>
<td>14</td>
<td>7.3</td>
<td>66</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
</tbody>
</table>

Table 5: Showing Objective Parameters

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Symptom</th>
<th>BT Mean ± SE</th>
<th>Follow up</th>
<th>AT Mean ±SE</th>
<th>df</th>
<th>t- value</th>
<th>%</th>
<th>p-value</th>
<th>Remark s</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Coin test</td>
<td>2.6±0.18</td>
<td>1</td>
<td>1.73±0.15</td>
<td>14</td>
<td>6.5</td>
<td>33.46</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>0.8±0.14</td>
<td>14</td>
<td>12.44</td>
<td>69.23</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td>2</td>
<td>SLR test</td>
<td>2.66±0.15</td>
<td>1</td>
<td>1.6±0.13</td>
<td>14</td>
<td>9.02</td>
<td>39.85</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>0.67±0.15</td>
<td>14</td>
<td>11.83</td>
<td>74.81</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td>3</td>
<td>Lumbar Mobility Test</td>
<td>2.53±0.16</td>
<td>1</td>
<td>1.53±0.13</td>
<td>14</td>
<td>10.25</td>
<td>39.53</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>0.8±0.10</td>
<td>14</td>
<td>11.31</td>
<td>68.38</td>
<td>&lt;0.0001</td>
<td>HS</td>
</tr>
</tbody>
</table>

DISCUSSION

On Basti karma

In the pathogenesis of Kati Graha, Vata is invariably present particularly Vyana and Apana vayu. Kati Graha is a disease having its origin in Pakvashaya and seat in Kati that is lumbar spine. Behind the Pakwshaya, there are large numbers of nerve plexuses originating from the hypo gastric plexus and lumbo-sacral plexus etc. These plexuses will get nourishment and soothing effect from Basti karma because Basti mainly acts on the Pakwshaya, here it nourishes, purifies and expels the unwanted toxins from the body.

Pain is the cardinal symptom of Vata and Basti which is used for this study is mainly having the Vatahara property and the Basti is the main line of treatment to overcome the vitiated Vata too. The drugs of Rasnasaptaka kashaya are having Ushna virya, Sukshma, Teekshana gunas which helps to reduce the Kapha hence produced better relief in Stambha & Graha. Prasarini taila used for anuvasa basti is having brimhana, balya, vatanulomana properties which helps to relieve pressure on nerve roots, there by strengthens the nerves, hence produced better relief in Suptata.

Coming to the basti pattern, Chaturbhurada kalpa basti serves the purpose of more brimhana, balya &
vatanulomana karma along with shodhana, as it contains double the number of niruha bastis.

Discussion on results
On pain the effect of therapy was observed 56.76% improvement. On stiffness the effect of therapy was observed 59.33% improvement. On restricted movements the effect of therapy was observed 69% improvement. On numbness the effect of therapy was observed 66%. All the results were statistically highly significant (P < 0.01).

On coin test the effect of therapy was observed 69.23% improvement. SLR test the effect of therapy was observed 74.81% improvement. On Lumbar Mobility Test the effect of therapy was observed 68.38% improvement. All the results were statistically highly significant (P < 0.01).

Overall effect of therapy: The overall effect of therapy was 66.65%.

CONCLUSION
Kati Graha Low Back Ache is commonly seen in society as a prominent problem. Basti is one of the prime treatment choices in chronic Katigraha condition. Chaturbhadra kalpa basti serves the purpose of more brumhana, balya & vatanulomana karma along with shodhana, as it contains double the number of niruha bastis. Hence Chaturbhadra kalpa basti plays very important role in mitigating vata, thereby it subsides shula etc. symptoms of katigraha. Basti showed better result that is 66.65%. Prasarini taila as anuvasanabasti gives very good result in katigraha because of its balya, brumhana & vedanasthapana properties. Drugs of Rasnasaptaka kashaya like rasna, eranda, guduchi, gokshura, aragwadha, punarnava, devadar as Asthapana basti are having best vatahara properties.

REFERENCES

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