A CASE STUDY TO EVALUATE THE EFFICACY OF KAL BASTI FOLLOWED BY PANCHATIKTA KSHEER SARPI BASTI IN THE MANAGEMENT OF ASTHIMA JAGAT VATA WITH SPECIAL REFERENCE TO HLA-B27 (ANKYLOSING SPONDYLITIS)

Seema Bahatkar¹, Anita A. Patil², Kesar N. Kshirsagar³

¹HOD, Panchakarma Department, R. A. Podar Medical (Ayu) College, Worli, Mumbai-18, Maharashtra, India
²Associate Professor, Panchakarma Department, R. A. Podar Medical (Ayu) College, Worli, Mumbai-18, Maharashtra, India
³MD-Scholar, 3rd yr, Panchakarma Department, R. A. Podar Medical (Ayu) College, Worli, Mumbai-18, Maharashtra, India

Corresponding Author: kesarkshirsagar@gmail.com

https://doi.org/10.46607/iamj4308082020

(Published online: August 2020)

Open Access

© International Ayurvedic Medical Journal, India 2020

Article Received: 17/07/2020 - Peer Reviewed: 14/08/2020 - Accepted for Publication: 14/08/2020

ABSTRACT

Ankylosing spondylitis belongs to group of Rheumatic disease known as spondyloarthropathies which show a strong association with genetic marker HLA-B27. Whereas the incidence of HLA-B27 is less than 1 percent in general population, it is present in more than 85% of patients with ankylosing spondylitis. Inflammatory back pain and stiffness are prominent early in the disease whereas chronic aggressive disease may produce pain and marked axial immobility and deformity. HLA-B27 is the most common findings in Ankylosing Spondylitis. In Ayurveda, no typical nomenclature has been found for the said disease but considering all sing and symptom of the patients, it can be treated as Asthimajjagata vata. No satisfactory treatment is available in modern medicine for this disorder. Various Panchakarma procedures and Ayurvedic drugs have been proved useful for these manifestations. The patient was considered suffering from Asthimajjagat Vata (HLA-B27) and was treated with Guduchi, Dashamool and Erandmool as Niruha and Bala-guduchyadi Tail as Anuvasana for 16 days as Kal basti followed by Panchatikta
ksheera sarpi Basti for 14 days (1 month) was given. Patients condition was assessed for symptoms of Asthimajjagat Vata (HLA-B27 positive). This study shows successfully managed with Ayurvedic treatment.

**Keywords:** Asthimajjagat Vata, Kal Basti, Panchatikta ksheer Sarpi Basti, HLA-B27 (Ankylosing spondylitis).

### INTRODUCTION

Ankylosing spondilitis is a chronic inflammatory disorder that primarily involves the sacroiliac joints and the axial skeleton. There is also a variable involvement of peripheral joints and articular structures. Musculoskeletal pain, stiffness, and immobility of spine due to AS is a major burden. Prevalence of AS in India is 0.03% as per surveys conducted by Bone and Joint Decade India from 2004 to 2010.\(^{(1)}\) Late adolescence or early adulthood, before the age group of 40 years, and the male patients are mostly affected than female in the ratio of 3:1.\(^{(2)}\) Symptoms include initially dull pain deep in the lower back i.e. in lumbar or gluteal region accompanied with morning stiffness improving with activities are found commonly in cost sternal junctions, spinous process, iliac crest, great trochanters, ischial tuberosities, tibial tubercles, and heel. Though the exact nomenclature of the disease is not available in Ayurvedic text, considering Chakraman kastata (pain during walking), Kati shool & stambha (back pain and stiffness), Ubhay pad shool (pain in both legs), Bala kshaya (decrease vitality and strength) etc, it can be considered as Asthimajjagata vata.\(^{(3)}\)

The manifestation of Vata Vyadhi (different disease due to Vata dosha) is prominent in fully established AS. In AS, the ethereal fibrocartilage is the major target of the immune system, and there may be destructive synovitis. The myxoid subchondral bone marrow is mainly affected. There is the destruction of nearby articular tissues or joint tissues as disease progresses. The new original cartilages are replaced by bone through fusion. This causes fusion of the joint bones that causes stiffness and immobility. In Ankylosing spondylitis, the spine becomes progressively ankylosed, Spinal rigidity and secondary Osteoporosis Predispose to spinal fracture, presenting as acute, severe, well, localised pain (Boon Nicholas et al., 2006). Ayurveda interprets these changes as vitiated Vata dosha that affect Asthi dhatu (bones). We present a case that was successfully treated on the line of Ayurvedic management of Asthimajjagata vata (vata disorder involving bone and bone marrow). Basti karma is one among the best treatment for Vata disorders. Chakrapani on commenting explains that when we nourish the root whole plant will be nourished. In this regard the process of stiffness and degeneration can be successfully treated by Basti. The aim of treatment is to relieve pain and stiffness, maintain maximum range of skeletal mobility and avoid deformity.\(^{(4)}\) Therefore, it was selected for the present case. So, this case report is planned to evaluate the effect of Kal Basti followed by Panchatikta Ksheer Sarpi Basti in the management of Asthimajjagata vata w.s.r. to HLA-B27 (Ankylosing spondylitis). Here Basti therapy can be highly beneficial and it can prevent further progressive of illness.

**Aim:** To evaluate the effect of Kal Basti Followed by Panchatikta ksheer Sarpi Basti in Asthimajjagata vata w.s.r. to HLA-B27 (Ankylosing Spondylitis).

### Methodology

**Case Report**

Name of Patient- XYZ, Age- 19 yr./Male, Occupation- Student., Reg. OPD No. – 54270, Reg. IPD No. – 3257, DOA – 23/10/2019 DOD - 25/11/2019

**Brief History of Case**

A 19-year-old male patient complaining of Kati shool & stambha (back pain and stiffness), Ubhay pad shool (pain in both legs), Chakraman kastata (pain during walking), Bala kshaya (decrease vitality and strength) for 2 months. He took allopathic treatment like steroids, painkiller, calcium supplements for past 2 months but didn’t get any relief. When he was taking medicine that time, he felt relief but after stopped medicine his pain again increased more than before. So, for further management he came to Panchakarma OPD No. 15 of R. A. Podar Hospital Worli, Mumbai.
Diagnosis and Assessment.
HLA-B27 (Ankylosing spondylitis) was diagnosed and assessed as follows. Low back pain and stiffness (Katiskhool & graha) - VAS method was used to assess the pain., Pain in both legs (Udbhay Pad Shool) - Assessed by asking present or absent., Difficulty in Straight Leg Rising (Sakshatra Padobhanakiya) – has been assessed by SLR test., Decreased vitality and strength (Bal kshaya)- has been assessed by weight and asking present or absent.

Observation
Gait- slow and patient has pain after walking., Prakriti - Vatakaphaj., Vaya – Tarun, Balu – Alpa, Agni - Vishamagni, Koshta - Madhym koshtha
The Causative factors are Aahar - Akalaj bhojan, Kwachit paruyseet annasevan, Mansahar, Pav-Butter, Chaha-Bread, Ati katu rasatmak aahar sevan., Vihar - Long-time sitting work (for study), AC work, Driving, Dosha – Vatakaphaj, Dushya - Ashti,Majja,Mansa., Strotodushti - Asthivaha, Majjavaha Adhisthan - Katitrik Sandhi, Udhhavasthan - Pakvashaya.

Table 1: Basti Schedule, one course of Kala Basti Administrated as per the schedule that is

<table>
<thead>
<tr>
<th>Day</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>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basti</td>
<td>A</td>
<td>N</td>
<td>A</td>
<td>N</td>
<td>A</td>
<td>N</td>
<td>A</td>
<td>N</td>
<td>A</td>
<td>N</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>

A – Anuvasan* N – Niruha*

Table 2: Basti Schedule, Panchatikta Ksheera Sarpi Basti Administrated as per the schedule that is

<table>
<thead>
<tr>
<th>Day</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>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basti</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
</tbody>
</table>

P - Panchatikta Ksheera Sarpi Basti*

Result
The results observed after the treatment were. Improvement was seen in sign and symptoms of the patient. Relief was (near about 80%) found in Low back pain & stiffness, Udbhay pad shool, Chakrman kashtata, Bala kshaya. Stiffness of lumbosacral joint (Katitrik sandhigraha) has gone. Gait has improved.

Treatment Given
Kal Basti Krama for 16 days
Ingredients of the Kal Basti as Niruha are Guduchi, Erand mool, Dashmool. The preparation of Niruha Basti was done in the usual manner of Niruha Basti. Til tailed 80 ml and Madhu 30 ml add together and mixed well then add Saindhava 5 gm to it and mixed well. Lastly decoction 550 ml was added to it. The mixture is then filtered through sieve. Total quantity will be – 650 ml should be taken, and the Basti was given at 7.30 am in empty stomach. For Anuvasana Basti Balagudwichyaadi Taila 100 ml has been used, and the total quantity were taken is 100 ml, and the time of administration was 12.30 Pm, and this procedure were performed after food.
Panchatikta ksheera sarpi Basti given for 14 days. (after Kal basti)
Panchatikta Ksheer Sarpi Basti(7) 100 ml Decoction of Panchatikta Dravyas was made., 100 ml of Godugdha was added and the siddha Ksheer was prepared., Preparation of basti: Siddhaksheer 100 ml + Panchatikta ghrita 20 ml., Total 120 ml of Panchatikta Ksheer Sarpi Basti was given for 7 days., Basti was administered & Basti Pratyahara Kala was noted.
Table 3: Observation

<table>
<thead>
<tr>
<th>Observation</th>
<th>Before Treatment</th>
<th>After Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking distance</td>
<td>Patient had severe pain after walking 100 mts.</td>
<td>Patient could easily walk without pain about 400 mts.</td>
</tr>
<tr>
<td>Walking time</td>
<td>Patient took around 10 minutes to walk 100 steps.</td>
<td>Patient took around 3 minutes to walk 100 steps.</td>
</tr>
<tr>
<td>SLRT</td>
<td>Rt – 30°, Lt – 30° B/L – 0°</td>
<td>Rt – 90°, Lt – 90° B/L – 90°</td>
</tr>
<tr>
<td>Weight</td>
<td>46/kg</td>
<td>48/kg</td>
</tr>
</tbody>
</table>

DISCUSSION

The case was treated on the line of management of Asthimajjagata Vata. The established treatment included steroids & analgesics along with physiotherapy having limited prognosis. Basti being the most widely used and highly effective treatment modality in Panchakarma. Though basti is mentioned in vitiation of all the Vata, Pitta, Kapha, and Rakta Doshas. (20) In this study, Kal basti was given for 16 days, as Niruha which contain Guduchi, erandamool, dashamool. Guduchi has property of dipana, pachana, vedanasthapana (pain relieving action), tridoshahar (to pacify all three doshas) and rasayana (rejuvenate). Dashmool acts as shothahara (anti-inflammatory), Tridoshahara (to pacify all three doshas) and Vedanasthapana. Erandamool possesses Ushna, guru, Sara, Teekshna, sukshma, picchila and visra guna. It is having Katu, Kashaya, Madhura and Tikta rasa and Madhura vipaka. The action of Erandmoola is Strotovishodhana (clearing all channels), Lekhana, Deepana, balya and Rasayana. It has Vatashleshmahara effect and effective in condition like Jangha, Kati, Anaha and Vibandha. Thus, it is effective in the management of Kati shool and stambha, ubhay pad shool, chakraman kastata. Mode of action of Balaguduchyadi taila, it is indicated in all types of Vatakapha Pradhan vyadhi. It is highly efficient to reduce Vata and increase vitality and strength. Aacharya Charak states Basti 1° act on Pakavashaya and keep the Vata in Samavastha. It produces Chedana of Vata. So all the Vata Vikaras will be diminished just like the tree which is cut by its root loses the extremities, stem, Shaka, Kanda, Pushpa etc. (21) Aacharya Charaka has said that in the diseases related to Asthi and Majja we should give Basti using Tikta Rasatmaka Aushadhi Dravya along with Ghrut and Ksheer. (22) As the Aacharya Dalhana has said Asthidhara Kala is Purashadhara kala. (23) Purishadhara kala is nothing but Pakvashaya (large intestine). “Pakvashaya” is very important Shhan (Site) of Vata Dosha. (24) Here there is Nirmiti (origin) of Vata Dosha and Asthi dhatu. (25) Tikta Rasa has Shrothagna (anti-oedematous and anti-inflammatory) and Pittahara properties (suppression and elimination of vitiated Pitta dosha). (26) The substance having Snigdha and Shoshana (drying) properties and produces Kharatwa (roughness) increases Asthi, as Asthi is also Khaera by nature. But no substance is available that has both Snigdha and Shoshana properties. So Ksheer and Ghrut which are Snigdha in nature are advice to be used together in the form of Ksheera Basti. This combination has ability to reduce Kharatwa. Hence it can be said that Tikta Ksheer Sarpi Basti has ability to repair degeneration of bones and cartilage. (27) This treatment proved significant in relieving symptoms such as pain with walking, restricted movement of joints and increase vitality and strength.

Drug delivered at the upper part of the rectum is absorbed from the upper rectal mucosa and is carried by the Superior mesenteric vein into the portal circulation, and the drug absorbed from the lower part of the rectum enters directly into systemic circulation via middle and inferior haemorrhoid veins and hence the drug is available in the circulation for immediate action.

CONCLUSION

In the case study we got good results of Basti karma. The treatment given for Asthimajjagata vata was Kal Basti (Niruha- guduchi, dashamool, erandmool Basti & Anivasana- Bala-guduchyadi taila) followed by
Panchatikta Ksheer Sarpi Basti. Which helped in Vatadosa shaman, relief in symptoms of disease and also an attempt to provide safe and effective treatment to the patient. Kal Basti & Panchatikta ksheera sarpi Basti schedule result in complete relief and provide excellent improvement in clinical sign and symptoms of Asthimajagata vata. It also provided comparatively better relief in SLR test, walking distance and walking time, weight. But this study needs further evaluation on large number of patients to conclude this treatment.

acknowledgements
I would like to acknowledge M. A. Podar Hospital Worli, Mumbai for encouragement and providing all necessary facilities to conduct this study.

References

5. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 761-763.
6. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 58-62.
7. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 445-458.
8. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 225-228.
9. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 221-223.
10. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 223-225.
11. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 469-471.
12. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 820-821.
13. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 822-823.
14. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 632-634.
15. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 282-284.
16. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 280-282.
17. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 241-244.
18. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 149-152.
19. Prof. P. V. Sharma; Dravyaguna Vidyana Volume – II; Chaukhambha Bharati Academy Varanasi; Reprint 2015; pg.no. 697-699.


Source of Support: Nil
Conflict of Interest: None Declared