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CASE STUDY

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# Management of Ankylosing Spondylitis with *Baluka Sweda* Followed by *Basti Karma* - A Case Study

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## Abstract

Ankylosing Spondylitis is a seronegative chronic inflammatory disorder affecting primarily the spine and sacroiliac joints, secondly the other major joints in the body. It is more common in males (Male/ Female ratio 9:1) and the age of onset being 15-20 years. The incidence of HLA-B27 is less than 1 percent in general population but it is present in more than 85% of patients with ankylosing spondylitis. The aim of treatment is to control pain and maintain maximum degree of joint mobility. *Ayurveda* holistic approach may have better results. A 31 years old male patient of Ankylosing Spondylitis with HLAB27 positive since 8 years was admitted in NIA, Jaipur. The patient had pain and stiffness in back, difficulty in forward and lateral bending and lying supine. He was unable to sit in squat position for defecation. There was only 2 cm chest expansion on forced inspiration and cervical and lumbar range of movement(ROM) was decreased. The patient was treated with *Baluka Sweda* 4 days followed by *Yoga Basti (Erandamuladi Niruha* and *Dashamula Matra Basti)* along with some *Ayurveda* oral Palliative medicines *Simhanada Gugullu, Dashamula Kwatha and Nimbaamrutadi Erandam.* The mobility of joints in cervical and Lumbar ROM was increased. Patient was able to sit in squat position. Chest expansion increased by 1 cm and Significant improvement was observed in Pain and stiffness. Patient was happy and satisfied with quality of life. The *Ayurveda* intervention was found to be efficacious in the management of Ankylosing Spondylitis.

## Keywords

Ankylosing Spondylitis, *Baluka Sweda, Yoga Basti, Ayurveda*

Greentree Group

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## INTRODUCTION

Ankylosing Spondylitis is a seronegative chronic inflammatory disorder affecting primarily the spine and sacroiliac joints, secondly the other major joints in the body. It is more common in males (Male/Female ratio 9:1), the age of onset being 15-20 years[1]. The pathogenesis of Ankylosing Spondylitis is thought to be immune – mediated, but there is no direct evidence for autoimmunity[2]. The exact cause of disease is not known. A strong association has been found between a genetic marker – HLA-B27 and this disease. 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.[3] The aim of treatment are to relieve pain and stiffness, maintain maximum range of skeletal mobility and avoid deformity[4]. *Ayurveda* holistic approach may have better results.

## PATIENT INFORMATION

A male patient aged 31 years came to the OPD of Panchakarma at National Institute of Ayurveda, Jaipur with complaint of pain and stiffness in his back, difficulty in forward and side bending of the body and difficulty in sleeping supine and getting up from bed. He had difficulty in bending forward and sideways. He was unable to sit properly in Indian style latrine for defecation. He was unable to get proper sleep due to pain. As per patient, he was asymptomatic before 8 years then he gradually developed intermittent pain in back and associated stiffness. The patient had stiffness of the back in the morning initially, but now progressing the whole day. He was diagnosed HLAB27 positive 8 years back. Dietary history shows that he had irregular food habit and mixed diet (vegetarian and non-vegetarian). Patient had no history of any addiction. No personal and family history of any major systemic illness was present. Stress regarding the disease was present. He had taken allopathic treatment and managed pain but he found the stiffness of back was increasing progressively, affecting the whole of the spine. NSAIDs were given for pain management. Patient came NIA with hope of *Ayurveda* management approach that may be safe and efficacious.

## CLINICAL FINDINGS

On examination patient was *Vata Pitta Prakruti, Raja Tama Manskia Prakriti* having *Madhyam Samhanan*, 57 Kg Body weight, 171 cm height, 110/70 mm of Hg

Blood Pressure, Pulse rate 72/min regular in rhythm, Respiration Rate 22/ min. Patient had was only 2 cm Chest Expansion on forced inspiration. Cervical and lumbar range of movements (ROM) were decreased. Flexion at hip joint was also reduced. No involvement of cardiovascular and central nervous system was noted. No any ocular manifestations were seen. There was stiffness in the neck and back and that patient was walking with a straight stiff back swinging his arms. The spinal mobility was decreased considerably. The symptoms of the disease were progressive.

***On SrotoPariksha***

- *Pranavahasrotas-Atisramaswasa*
- *Rasvahasrotas- Gaorava, Angamarda.*
- *Asthivaha – Asthishoola*
- *Purishavaha – Vibandha*
- *Svedavaha- svedaalpata*
- Other *Srotas* apparently seemed unaffected.

**ASSESSMENT**

Passive as well as active ROM was measured separately for cervical and lumbar spine. For Cervical spine, Goniometry, the extent of flexion deformity was evaluated by measuring the distance from wall to tragus. For lumbar flexion, the distance between the finger tip and floor with the patient in maximum side flexion was measured.

**THERAPEUTIC INTERVENTION**

Patient was admitted on 24/5/16 having I.P.D. NO. 2287. Patient was treated with *Baluka Sweda* for 4 days followed by *Erandamuladi Niruha Basti* as *Yoga Basti*. Internal medicines were *Simhanada Gugullu*2 (500mg) three times a day, *Dashamula Kwatha* 40ml twice a day in morning and evening, *Nimbaamrutadi Erandam* 10ml at night before bed and *Pathya Aahar*(dietetic regimen).

***Yoga Basti*[5]*:*** Total 5 *Anuvasana Basti* and 3 *Niruha Basti* in a course of 8 days alternating *Anuvasana* and *Niruha.* The first and last two*Basti* being *Anuvasana.*

***Anuvasana Basti*** *– Dashamula Taila 120 ml* and *Saindhava* Salt (5 gm).

***Niruha Basti*** *–Erandamuladi Niruha Basti*[6] was prepared by classical methods. *Erandamuladi Niruha Basti* 640ml was prepared with ingredients 100 ml honey, 7 gm rock salt, 100 ml Sesame oil, 30 gm *Kalka (*paste of herbs/powder), 400ml *kwatha* (decoction) and 40 cow's urine. Decoction was prepared from *Erandamula (*roots of *Ricinus communis), Palash (Butea monosperma), Shaalparni (Desmodium gagenticum), Prishniparni (Uraria picta),*

*Brihati (Solanum indicum), Kantkarika(Solanum xanthocarpum), Gokshura (Tribulus terrestris), Rasana (Pluchea lanceolata), Ashwagandha (Withania somnifera), Atibala (Abutilon indicum), Guduchi (Tinospra cordifolia), Punarnava (Boerhavia diffusa), Aaragvadh (Cassia fistula), Devdaru (Cedrus deodara), Madanphala (Randia spinosa). Kalka Dravya* were *Satpushpa (Anethum sowa), Priyangu(Callicappa macrophylla), Madhuk (Glycyrrhyza galabra), Bala(Sida cordifolia), Vatsaka (Holorrhena antidysentrica), Musta (Cyperus rotondus), Hapusha(Juniperus communis), Rasanja (Berberis aristata), Pippali (Piper longum).*

**Administration of *Basti:*** *Basti* was administered following classical *Basti* Pattern[7]. *Niruha Basti* was administered on empty stomach at 10-11 am in the morning while *Anuvasan Basti* very soon after proper meal. *Abyanga* with *Dashamula Taila* and *Swedana* with *Dashamula* Decotion steam were done daily for 8 days. Patient was advised to strictly follow *Pariharya Vishaya* regimens advised. *Samyak Basti Pratyagaman Lakshanas* (signs of proper enema) were observed. The details of *Basti Pratyagaman Kala* is mentioned in table no. 1.

**Table 1**details of *BastiPratyagaman Kala*

| Date/ Day | 31/5 or Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Day 8 |
|---|---|---|---|---|---|---|---|---|
| Type of Basti | *Anuvasana* | *Niruha* | *Anuvasana* | *Niruha* | *Anuvasana* | *Niruha* | *Anuvasana* | *Anuvasana* |
| Duration of BastiPratyagama | 4 hour | 20 minutes | 4 hour | 15 minutes | 5 hour | 25 minutes | 6 hour | 4 hour 30 min |

## FOLLOW UP & OUTCOMES

Till time of discharge on 08/06 patient had significant relief in complaint of pain and stiffness in his back, difficulty in forward and side bending of the body. He was able to sit squat in Indian style latrine for defecation. There was no difficulty in getting up from bed. Patient got relief from *Vibandha, Gaorava* and *Angamarda.* Same improved status sustained and no symptoms aggravated even after 60 days follow up. Patient was very happy and satisfied with the management. Distance from wall to the tragus 16cm was reduced by 2 cm and was maintained till follow up.

**Table 2** Observations before and after treatment in Cervical Range of Movement

| Measurements | Before Treatment | After Treatment | Last Follow Up |
|---|---|---|---|
| **Flexion** | 40° | 45° | 45° |
| **Extension** | 40° | 50° | 45° |
| **Lateral flexion to right.** | 25° | 35° | 40° |
| **Lateral flexion to left.** | 25° | 35° | 35° |
| **Rotation to right.** | 65° | 75° | 75° |
| **Rotation to left** | 60° | 65° | 70° |

**Table 3** Observations before and after treatment for lumbar flexion

| Measurements | Before Treatment | After Treatment | Last Follow Up |
|---|---|---|---|
| **Distance from ground to the middle finger tip on forward bending** | 48cm | 39cm | 40cm |
| **Distance from ground to the middle finger tip on lateral bending to left** | *58cm* | *53cm* | *55cm* |
| **Distance from ground to the middle finger tip on lateral bending to right** | *60cm* | *55cm* | *55cm* |

## DISCUSSION

Ankylosing spondylitis is a type of arthritis that affects the spine. The spine's bones (vertebrae) may grow or fuse together, resulting in a rigid spine. In Ankylosing spondylitis there is similarity like *Asthimajjagata Condition. Vata Kapha* dominance was evident from signs & symptoms in this patient hence the above treatment modality was adopted. *Baluka Sweda* is *Vata Kaphahara, Sothahara* and *Shulahara. Basti* is mentioned in vitiation of all the *Vata, Pitta, Kapha, Rakta Doshika*[8] disorder but it is specially indicated for *Vata* diseases. *Acharya charak* states *Basti* 1st act on *Pakawashaya*, 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, *Shakha, Kanda, Pushpa* etc.[9] The main seat of *Vata* i.e. *Pakvashaya* (colon) is also cleansed thereby alleviation & normalisation of *Vata* occurs which proves that *Basti(* medicated enema) being beneficial for *Ankylosing spondylosis. Erandamuladi Basti* is a combination of drugs, which are mainly having *Kapha Vatahara properties. Erandamoola* is a potent analgesic with positive action for various rheumatic conditions. Honey, rock salt, *Murchita Tila* oil, *cows urine* are other components. *Dashamula Taila* has *Shothaghna* (anti-edematous and anti-inflammatory) and *Sulaghna* properties. Internal Medication *Dashamoola* decoction has *Vata Kapha Shamak* property. *Dashamula* poses anti-inflammatory and analgesic action. The action of the constituents of *Dashamula* decoction[10] break the basic pathology of Ankylosing

spondylitis consequently helps in relieving its clinical features. *Simhanada Gugullu*, acts as analgesic and anti-inflammatory. Being a good *Sothhara and Sulahara Simhanada Gugullu*[11] was preferred. *Nimbaamrutadi Erandam*[12] was advised as *Anulomana*. The quality of life of the patient has improved. There was no worsening of any symptoms and sign until last follow up 60 days after treatment.

## CONCLUSION

There was significant improvement in the case of Ankylosing Spondylitis. Patient was happy and satisfied with quality of life. The *Ayurveda* intervention was found to be efficacious in the management of Ankylosing Spondylitis. *Ayurveda* treatment controls pain and stiffness and may reduce or prevent significant deformity.

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