

An Ayurvedic Approach for Management of Ankylosing Spondylitis (Asthimajja Gata Vata): A Case Study

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ABSTRACT

Ankylosing spondylitis is a rheumatic disease with various skeletal and extra skeletal manifestations. Our immune system has a very flawless system to keep an individual disease free. In auto immune diseases there is a flawed reaction of our defence system against our own body cells resulting in a wide array of life altering diseases. One such potentially debilitating auto immune disease with insidious onset in Ankylosing Spondylitis. It is the one ailment which shows a strong association with the genetic factor HLA-B27. The disease progresses with symptoms such as loss of spinal mobility, peripheral arthritis and sacroiliitis which ultimately results in reduced quality of life of the diseased. The exact signs and symptoms of ankylosing spondylitis does not resemble with any disease mentioned in Ayurvedic texts but based on clinical presentation it can be consistent *Asthimajja gata vata*. Here, a diagnosed case of Ankylosing spondylitis having HLA-B27 positive presented with inflammatory condition having pelvic pain, stiffness, loss of mobility in spine and lower back, which was managed with Shaman drugs and Panchkarma procedures, the details of which will be mentioned in the full paper. Through this treatment promising results were found in the management of the disease without causing any adverse side effects. **Conclusion:** Ankylosing spondylitis can be effectively managed by Ayurvedic treatment modalities after proper assessment of the involved *Dosha* and *Dhatus*.

Keywords: Ankylosing Spondylitis, HLA-B27, *Asthimajja gata vata*

INTRODUCTION

Ankylosing spondylitis (AS) is a chronic inflammatory disease that primarily impacts the axial skeleton, peripheral joints, and extra-articular tissues. Its aetiology is unknown. Male-to- female frequency is between 2:1 and 3:1, and the condition typically manifests itself in the second and third decades of life¹. According to research done by Bone and Joint Decade India between 2004 and 2010, the prevalence of AS is 0.03% in India²

The predominant burden of AS is the musculoskeletal discomfort, stiffness, and rigidity of the spine. Low back discomfort that comes and goes, is dull, sneaks up on you, and is typically present in early childhood or late adolescence. The first sign of sacroiliitis may be discomfort in the buttocks that radiates down the back sides of both legs, along with morning stiffness in the lower back that gets better with activity and

returns after periods of inactivity. Pain is frequently felt at the costochondral junction, spinous process, iliac crest, greater trochanters, ischial tuberosities, tibial tubercles, and heels. Late symptoms include syndesmophytes, bamboo-like spine, and neck stiffness and pain³. In 80–90% of AS patients, HLA-B27 is present⁴. The old Ayurvedic scriptures do not refer to Ankylosing spondylitis as a distinct condition. However, taking into consideration the signs and symptoms of the disease can be done using the idea With particular reference to the Asthimajjagatavata⁵. Non-steroidal anti-inflammatory drugs (NSAID), corticosteroids, and other disease-modifying anti- rheumatic medications are used to treat AS (DMARDs). These treatments offer little advantage, though. Therefore, finding a safe and efficient treatment for ankylosing spondylitis is considered essential. For the treatment of AS, several Panchakama techniques and oral Ayurvedic medications have been effective.

CASE REPORT

Table no. 1: Demographic details

Name- X.Y.Z	Occupation	-Housewife
Age- 38 yrs	Marital Status	-Married
Sex- Female	Religion	- Hindu
Address- Jammu	Socio-Economic Status	- Middle Class
Phone no.- *****356	O.P.D. No.	-22121
Weight- 58 Kg	Height	- 158 cm

Table no. 2: Chief Complaints

Sr.no.	Chief complaints	Duration
1	Pain in the lower back and pelvic area	1 month
2	Pain in pelvic region radiating to Rt.side of leg	1 month
3	Tingling sensation after long sitting	1 month
4	Pain in the sacrum region during walking	1 month
5	Loss of mobility in spine	1 month

A 38-year-old female patient with pain in the lower back and pelvic region radiating to the left side of her leg and a tingling sensation after long sitting, Pain in the sacrum region during walking that had been bothering him for 1 month. Nobody in the family had ever experienced AS. The patient had no history of smoking or drinking. The patient had not had any symptoms in the past years. He then began to experience morning stiffness in his lower back and pain in the pelvic region. Her Pain in the pelvic region radiating to left side of her leg gradually worsened, making it more difficult for her to perform daily tasks. When she went to an allopathic hospital, she was identified as having AS and a positive HLA-B27 and a positive Schobertest. NSAIDs were suggested, and they temporarily relieved him. Later, she started to bend over and was unable to sit. she then visited Jammu Institute of Ayurveda and Research, Jammu to find a solution to her issue.

Past History

There is no any past history of HTN, DM, TB, Peptic ulcer or any endocrine disorder.

Personal Details

Diet : vegetarian

Appetite : *Prakruta*

Micturition : regular (4-5 times / day ; night – once , No burning sensation or pain during micturition)

Defecation : regular (1 time in a day , normal consistency)

Sleep : she sleeps at 10 pm , wakes at 5 am (due to pain it takes time to fall asleep , once slept it is sound)

Table no. 3 Asthavidha Pariksha

1.	<i>Nadi</i>	<i>Vata Kapha</i>
2.	<i>Mala</i>	<i>Samyak</i>
3.	<i>Mootra</i>	<i>Samyak</i>
4.	<i>Jihwa</i>	<i>Nirama</i>
5.	<i>Shabda</i>	<i>Spashia</i>
6.	<i>Sparsha</i>	<i>Anushnasheeta</i>
7.	<i>Druk</i>	Normal
8.	<i>Akruti</i>	<i>Madhyam</i>

Table no. 4 Dashavidha Pariksha

<i>Prakriti</i>	<i>Vata Kapha</i>
<i>Vikriti</i>	<i>Vata</i>
<i>Sara</i>	<i>Madhyama</i>
<i>Samhanana</i>	<i>Madhyama</i>
<i>Pramana</i>	<i>Height : 158 Cms , Weight : 58 Kg</i>
<i>Satmya</i>	<i>Sarvarasa Satmya</i>
<i>Satva</i>	<i>Madhyama</i>
<i>Ahara Sakti</i>	<i>Madhyama</i>
<i>Vyayama Sakti</i>	<i>Pravra</i>
<i>Vaya</i>	<i>Praudha</i>

Table no. 4 Vital Examination

Sr.no.	Head	Observation
1.	HR	74/min, regular
2.	RR	20/min
3.	BP	120/82mm Hg
4.	Temperature	98° F
5.	Weight	58 kg
6.	Height	158cm
7.	BMI	20kg/m ²

Samprapti Ghatak

- Dosha- Vata Pradhana Pitta Anubandhi.

- *Dushya- Rasa, Rakta, Mamsa, Asthi, Majja.*
- *Srotas- Rasavaha, Raktavaha, Mamsavaha,*
- *Asthivaha, Majjavaha.*
- *Srotodushti- Sanga.*
- *Ama- Alpa Sama.*
- *Udbhavasthana- Amashaya.*
- *Vyaktisthana- left knee, right ankle and interphalangeal joints of hands.*

Musculoskeletal Examination

Gait –Normal legs Inspection

- No asymmetry
- No bony deformity
- Swelling not present
- Muscle wasting is not present Palpation
- Tenderness not present
- No warmth

Spine Examination

Inspection

- No, deformity present
- Swelling not present
- Scar marks are not present

Palpation

- lumbo-sacral region tenderness present Range of motion
- Lumbar spine forward flexion is uncomfortable and constrained.
- A lumbar spine cannot expand backwards without pain or restriction.
- A positive Schober Test result
- It is possible to move other joints in the upper and lower limbs pain-free.

Investigation

1. Haematological analysis revealed that HLA-B27 was positive.
2. MRI – Impression- MRI of both Hip joints no significant abnormality.

X - RAY

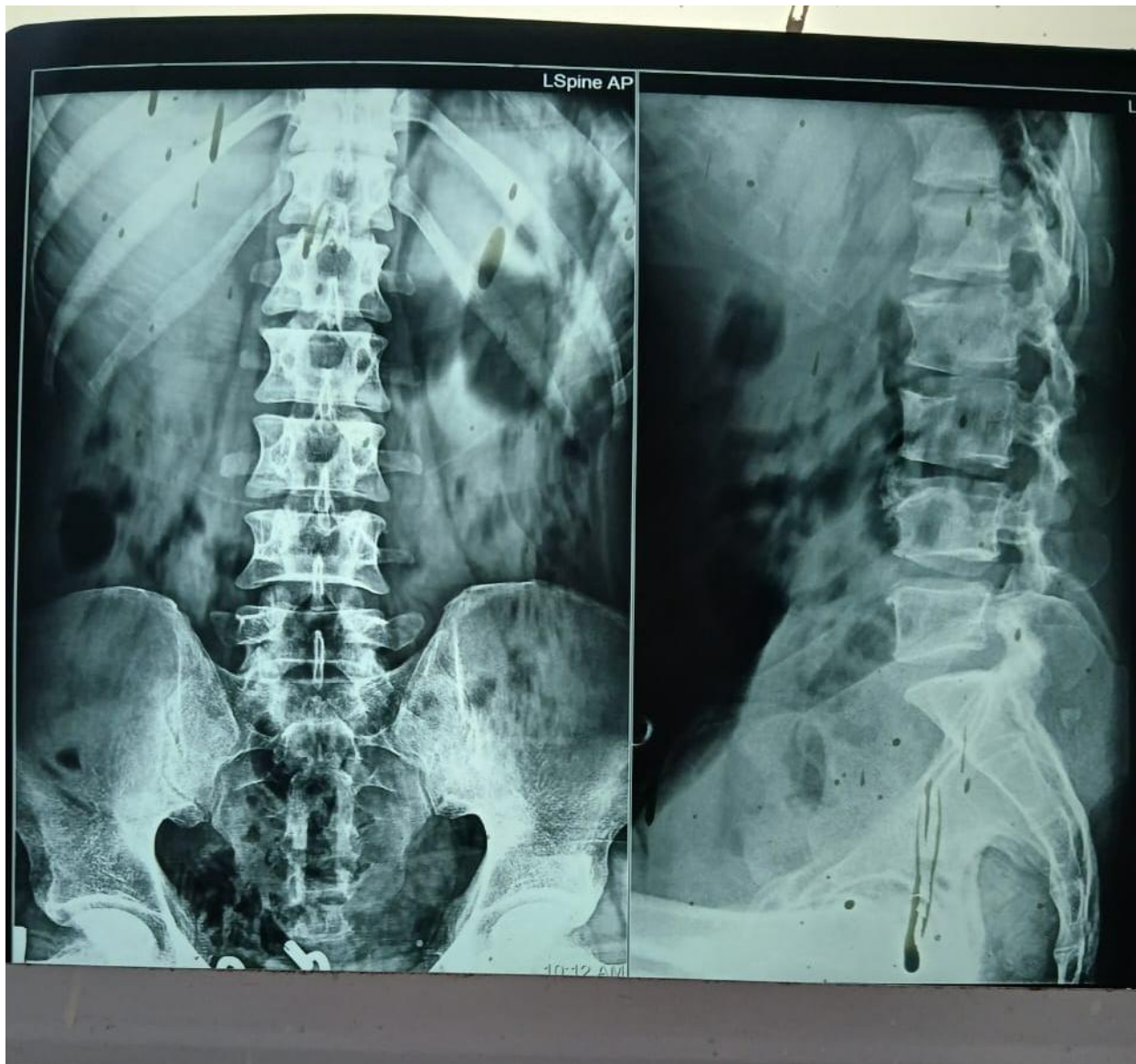


Diagram no.1 : BEFORE TREATMENT



Diagram no.2 ; AFTER TREATMENT

Diagnostic Focus and assessment

According to an *Ayurvedic* perspective, the patient's complaints of persistent low back pain with restricted movement and stiffness can be likened to the signs of *Amavata*, and *Asthi- majjagata Vata*⁶. As a result, the patient was hospitalised for treatment using Classical *Panchakarma* techniques after the case was diagnosed as *Asthi-majjagata Vata*. Changes seen throughout treatment were assessed and compared

using standard parameter scales BASDAI, BASFI, BASMI, and NRS with numerical scale values of 0-10 on two intervals, before and after the treatment.

Therapeutical Intervention

The patient was hospitalised In-Patient Department for Classical *Panchakarma* procedures, including *Abhyanga*, *Vaitarana basti*, *Anuvasana Basti*, and *Panchatikta kshira basti*, as well as particular oral drugs for *deepan pachan*.

Sr. no.	Treatment given	Drug used	Dose	Duration
1.	Deepana - Pachana	<i>Aampachaka vati</i> , <i>Arogyavardhini vati</i> , <i>Hinguwashtak churna</i>	500 mg before meals 250 mg BD after meal 5 gm BD Before food	5 days
2.	<i>Vaitarana basti</i>	<i>Amlika kalka</i> - 40 gm <i>Guda</i> - 40 gm <i>Saindhava</i> - 10 gm <i>Tila taila</i> - 60 ml <i>Gomutra</i> - 160 ml	Total- 310 ml	30 days In the morning on an empty stomach
3.	<i>Anuvasana basti</i>	<i>Tila taila</i> + <i>Erand taila</i>	30 ml + 30 ml	After meal along with <i>vaitarana basti</i> for 30 days
4.	<i>Panchatikta kshira basti</i>	Decoction of <i>Guduchi</i> + <i>Nimba</i> + <i>Patola</i> + <i>Kantakari</i> + <i>Vasa</i> (100 ml) + Milk 100ml reduced to 100 ml by <i>Kshirapaka</i> method + <i>Panchatikta ghrita</i> 50 ml	150 ml	14 days
5.	<i>Shamana Chikitsa</i>	<i>Simhanada guggul</i> <i>Amavatari Kashaya</i> <i>Panchatika ghrita guggul</i> <i>Shunthi siddha eranda kashay</i>	500 mg after a meal 20 ml after meal 500 mg after a meal 20 ml HS	15 days
6.	<i>Sarvanga Abhyangam</i>	<i>Kottamchukadi Oil</i> (75 ml) and <i>Karpasthiyadi Oil</i> (75 ml)	75 ml each	14 Days

7. Kati Basti	• Muivenna Oil (100 ml), Mahanarayana Oil (100 ml), and Karpooradi Oil (100 ml)	30 mins. Daily	7 Days
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TABLE No. 5 : TREATMENT GIVEN

Table no.6 Assessment Parameters

Domain	Instrument	BT	AT
Function	BASFI	6.1	3.9
Pain	NRS	10	3
Spinal Mobility	BASMI	6.1	3.6
Stiffness	NRS	10	4
Fatigue	BASDAI	6.3	2.5

(NRS = Numerical rating scale; BT = Before therapy; AT = after treatment; BASDAI = Bath Ankylosing Spondylitis Disease Activity Index; BASFI = Bath Ankylosing Spondylitis Function Index; BASMI = Bath Ankylosing Spondylitis Disease Metrology Index.)

DISCUSSION

The patient was treated as per line of treatment of asthimajjagata vata. Before Basti karma, Shunthi siddha erand kashay taila (Castor oil) 10 ml was given for 5 days for proper evacuation of bowel. Snehana, svedana, panchakarma, basti with dugdha, ghrita having predominantly tikta rasa are mentioned in asthipradoshaja vikara. Madhura and tikta drugs are mentioned in majjapradoshaja (vitiated bone marrow) diseases. As in the initial stage, there was an amavastha, vaitarana basti was given along with anuvasana of tila taila and eranda taila. Vaitarana basti is a type of mridu kshara basti. Vaitarana basti possesses properties like laghu, ruksha, ushna, tikshna guna which are opposite to gurusnigdha guna of kapha. Most of the drugs of vaitarana basti possess vata-kapha shamak action. These properties of vaitarana basti are antagonists to kapha and ama, hence it provides significant improvement in the sign and symptoms of the disease. Saindhava lavana owing to sukshma and tikshna guna causes srotoshodhana. It helps the drug to reach the microchannels. Similarly, it may liquify the morbid dosha sanghata and break into smaller particles by its ushna and tikshna property respectively and thus helps elimination. Acharya Charaka has said that in the diseases related to asthi, one should give basti using tikta rasatmaka aushadhi dravya along with ghrut (ghee) and ksheer (milk). According to commentator Arundatta, the substance having snigdha (unctuous) and shoshana (drying) properties and produces kharatwa (roughness) increases asthi (asthivardhan), as asthi is also khara by nature. But no substance is available that has both snigdha and shoshana properties. So ksheer (milk) and ghrut (ghee) which are snigdha in nature are advised to be used with the substances which are tikta (bitter) and possess shoshana (drying) property. Ksheera basti containing ghrita, kshira, and tikta dravya is advised in asthigata disease. Tiktakshira basti has the potential to repair bones and degenerated cartilage and break down the pathogenesis of the disease. Ashtang Hruday samhitar has mentioned that excess use of tikta ras causes dhatukshay and vatavyadhi. Ghruta and Kshira in PKB possess vatashamana and asthiposhana property. This rectifies degeneration (dhatukshay) of asthi. Tikta ksheera basti has action as follows

1. Arresting progress of the disease; delaying the degenerative changes in asthi.
2. Repairing the degenerative changes in asthi. It is very effective in fractures, contusive wounds, dislocation of joints, and pain and stiffness of the limbs.

CONCLUSION:

Ayurvedic management of AS i.e Panchakarma procedures like vaitarana basti, panchatikta ksheera basti as well as shamanchikista helped to treat the patient of AS

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