

**AYURVEDIC APPROACH FOR MANAGEMENT OF ANKYLOSING SPONDYLITIS: A
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ABSTRACT

Ankylosing spondylitis (AS) is a chronic inflammatory condition primarily affecting the sacroiliac joints and spine, causing musculoskeletal pain, stiffness, and immobility, particularly in young adults with a male predominance. In India, the prevalence of AS, estimated at 0.2%, poses a significant burden, as evident from community-based surveys. We present a case report of a 35-year-old married male admitted with lower back pain persisting for 10 months and stiffness in both lower limbs for 6 months. Despite prior allopathic treatment, symptoms worsened over 7 months. Clinical examination revealed pain on straight leg raising test and elevated inflammatory markers including CRP and RA. MRI showed disc degenerative changes and neural foraminal narrowing. The BASDAI scoring indicated disease activity. Abhyang and Swedana were given with the help of Kshreer Bala Taila. Kati Basti, Erandmuladi Niruha Basti and Matra basti along with Shamana Chikitsa

KEYWORDS: HLAB27, back pain, Erandmuladi niruha basti, matra basti.**1. INTRODUCTION**

Ankylosing spondylitis (AS) is a chronic inflammatory disorder that affects primarily sacroiliac joints and the spine. There is also a variable involvement of peripheral joints and articular structures. Musculoskeletal pain, stiffness, and immobility of the spine due to AS is a major burden. It typically affects young adults and the male-to-female ratio is closer to 3:1. Prevalence of spondyloarthropathy in India seen by Indian data on the epidemiology of spondyloarthropathy (SpA) is scary. Prevalence data from the first Indian community-oriented program for control of rheumatic disease (COPCORD) survey showed the rural prevalence of back pain to be 17.3%. Among of that AS is likely to be about 0.2%.^[1] AS is developed through complex interactions between genetic background and environmental factors. In some extent etiology is unknown. Non-steroidal anti-inflammatory drugs (NSAID), corticosteroids, and various disease-modifying antirheumatic drugs (DMARDs) are used to treat AS. The unavailability of satisfactory treatment in bio-medicine leads to permanent deformity in this disease. In Ayurveda, there is a description regarding the management of such disorders based on the stages of expression under the concept of Vatavyadhi.^[2] There are 80 types of independent Vatavyadhis^[3] are mentioned and Avarana of Vata with

other doshas are also mentioned. Various Panchakama procedures and internal Ayurvedic medicines have been proven beneficial in the management of AS.

2. CASE REPORT**Introductory history**

- Date of admission – 25/07/2023
- OPD/ IPD Admission no.- 1693/44056
- Age/sex- 35Y / Male
- Marital status - Married.

Chief complain

- Lower Back pain - Since 10 months.
- Pain and stiffness in both lower limbs- 6 months.

Associated complain

Headache and generalized weakness.

Past history

No history of Hypertension, Diabetes Mellitus, and Thyroid.

History of present illness

The patient was well before 1 year. He had a back injury due to which he sometimes feels pain and stiffness in his lower back and both legs. This patient had earlier taken

allopathic medicine but got no relief in symptoms which gradually aggravated over the last 7 months.

Physical examination

- Pulse –84 bpm,
- B.P. - 130/85mm of hg,
- Temp. - Afebrile
- CNS - well conscious,
- CVS - S1 S2 present,
- RR- 18/min

Local examination

SLR – Pain at 70° in the bilateral lower limb.

Investigation reports

Date - 29/11/23

- C- Reactive protein (CRP)- 10.43
- RA – 14.80 IU/ML

- HLA-B27 Positive

Date -22/4/23

- MRI (Dorsal Spine)
 - Disc degenerative changes seen in L3-L4 to L5-S1
 - Asymmetric disc bulge at L3- L4, L4-L5 causing moderate bilateral recess neural foramina narrowing
 - Mild left posterior disc bulging at L5-S1 Level causing mild lateral recess stenosis.

Assessment criteria

The scoring of 'Bath Ankylosing Spondylitis Disease Activity Index' (BASDAI) is adopted for assessment. To give equal weighting, the average of the two scores relating to morning stiffness is taken. The resulting 0 to 50 score is divided by 5 to give a final 0 to 10 BASDAI Score.

Table 1: Gradations of Symptoms For Assessment.

Fatigue/ tiredness	0 (none) to 10 (Very severe)
Neck , back or hip pain	0 (none) to 10 (Very severe)
Pain / swelling in joints	0 (none) to 10 (Very severe)
Discomfort from any areas tender to touch or pressure	0 (none) to 10 (Very severe)
Morning stiffness severity	0 (none) to 10 (Very severe)
Morning Stiffness Duration	0 (none) to 10 (Very severe)

The BASDAI or Bath Ankylosing Spondylitis Disease Activity Index is ≥ 4 suggest high disease activity.^[4]

Basti and Matra basti prepared with Dravya (~ingredients) (Table2) along with Shamana Chikitsa (Table1) were given for the duration of 30 days.

3. MANAGEMENT

Abhayang and Swedana were given with the help of Kshreer Bala Taila. Kati Basti, Erandmuladi Niruha

Table 2: Shamana Chikitsa.

Medicine	Dose	Frequency	Anupana
Panchamirat Louha Gugglu	250 mg	BD	Lukewarm water
Maharasnadi Kwath	30 ml	BD	Lukewarm water
Ajmodadi Churan	250 mg	BD	Lukewarm water
Chandraprabha Vati	250 mg	BD	Lukewarm water

Table 3: (Shodhan) Panchkarma Chikitsa.

PANCHKARMA PROCEDURES	1. Abhayanga Swedan with Kshreerbala Taila
	2. Katibasti with Kshreerbala Taila and Dashmool Taila
	3. Kala Basti
	4. Matra Basti with Narayan Taila (60 ml)

4. RESULT

Before starting Ayurveda treatment BASDAI baseline score was 6.4 and after completion of treatment, the score was reduced to 2.0.

Table 4: Assessment of Before and After Treatment.

Symptoms	Before Treatment	After Treatment
Fatigue/ tiredness	6	2
Neck, back, or hip pain	7	3
Pain/swelling in joints	8	1
Discomfort from any areas tender to touch or pressure	6	2
Morning stiffness severity	5	3
Morning Stiffness Duration	1 hour & 15 Minutes	Up to 15 Minutes
BASDAI Score^[5]	6.4	2.0

5. DISCUSSION

Ankylosing spondylitis is a long-term inflammatory condition that causes severe pain and joint stiffness. In the early stages of AS, there is chronic dull pain in the lower back or gluteal region combined with stiffness of the lower back.^[5] This condition can be treated with Katishoola or Katigrham with special Vata alleviating medication.^[6] In the later stage, loss of spinal mobility and chest expansion with reduced lumbar movement are seen. Compared to this condition management to Katiprishtagraha^[7] by giving local Basti to reduce pain and stiffness along with the Erandamooladi Niruha Basti can be applied.

Panchamirat Louha Gugglu - Guggulu has been indicated in the management of Vata Vyadhi in classical Ayurveda texts.^[8] This acts as an antiseptic, antibacterial, astringent, anti-spasmodic, and anti-inflammatory acting on kidneys, brain, and nerves. It has analgesic activity and is useful in many conditions like pain, neuralgia, inflammation, anxiety, and convulsion. Memory loss etc. It improves blood circulation to the brain and acts on the brain, nerves, blood vessels, heart muscles, bones, and joints. It is commonly used in the treatment of symptoms associated with nerve weakness, neuralgia, neuritis, etc.^[9]

Maha Rasnadi Kwath- Maha Rasnadi Kwath helps to pacify Vata Dosha and has anti-inflammatory and analgesic properties.^[10]

Ajmodadi churna- Ajmodadi churna is a promising, plant-based, anti-inflammatory agent, for the treatment of inflammatory disorders and conditions.^[11] It is a polyherbal Ayurvedic medicine that acts as a carminative, antispasmodic, and wormifuge.^[12]

Chandraprabha Vati- Multiple mechanisms of action provide evidence for the antioxidant activity, diuretic, and anti-inflammatory activity of Chandraprabha Vati.^[13] Studies show that Chandraprabha Vati has free radical scavenging activity and is very good in inhibiting lipid peroxidation. As we know overproduction of free radicals especially NO is an important mediator of inflammatory state. Thus, this also shows the anti-inflammatory action of Chandraprabha Vati.^[14]

Narayan Tail- It is a unique Taila Kalpana having a wide range of treatments of diseases and extensively indicated

in Vata Pradhana Vyadhi. Most of the ingredients possess Dipana, Pachana, Lekhana, Vilayana, Shothahara, Mutrala, Krimighna, Basti-Shodhana, Srotoshodhana, Vedanahara, Dahashamaka, Jwaraghna, Pramehaghna, Ashmarinashana, Rasayana, Ojovardhaka, Balya, Vrishya, etc. properties.^[15]

Dashamoola tail- Dashamoola as the name suggests contains roots of ten different plants. Of these, five are known as brihad panchamoola and the remaining as laghoo panchamoola.^[16]

Ksheer bala tail- Ksheerbala Taila suppresses nerve inflammation due to its sheet property and promotes nerve regeneration and gives strength to muscles due to its balya and brimhana properties of its drug. It helps in the wear and tear of nervous and muscular tissues. It is said to have effects on all eighty chronic conditions of Vata origin (Vata Nanatmaja Vikara) such as Akshepaka, Vepathu, and Vishada.^[17]

Erandmuladi Niruha Basti- Erandmuladi Niruha Basti is Deepana (~appetizer) and Lekhana (~Scraping) in nature which helps in pacifying Kapha and reduces symptoms like heaviness and stiffness.^[17] Eranda (*Ricinus communis* Linn.) which is the main content of Erandmuladi Niruha Basti possesses anti-inflammatory, anti-oxidant, analgesic, and bone regeneration properties.^[18] This particular Basti consists of 34 medications, with the majority of them possessing Ushna Veerya and being Vatakaphahara in nature. It is also recommended for the Kaphavrita condition, as it plays a significant role in alleviating the Kapha Dosha and reducing symptoms such as stiffness and heaviness.

6. CONCLUSION

The present study reveals that the Ayurvedic method of therapy is effective in managing ankylosing spondylitis. The medications used in Shaman practice target the vitiated Aam and Vata, while the Panchkarma treatments alleviate stiffness and discomfort, leading to improved blood circulation. While there is no definitive cure for ankylosing spondylitis, Ayurveda offers an effective approach to treating the symptoms and slowing down the progression of the disease, without subjecting the patient to the potential side effects of alternative medications, thus ultimately enhancing their overall quality of life.

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