

MANAGEMENT OF ANKYLOSING SPONDYLITIS THROUGH PANCHAKARMA- A  
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## ABSTRACT

Ankylosing spondylitis is distinguished by a long-lasting inflammatory arthritis that mostly affects the sacroiliac joints and spine and can eventually result in the spine's bone fusion. With a 3:1 male to female ratio, the onset normally occurs between the ages of 20 and 30. The primary signs are back discomfort, stiffness, and a reduction in the range of motion in the spine. There are very few treatment options available now for ankylosing spondylitis. Consequently, it is imperative to manage through *ayurveda*. *Amavata*, *Gambhira Vatarakta*, and *Asthimajjagata vata* are a few disease entities that fall under the umbrella term of ankylosing spondylitis. Understanding the signs and symptoms of ankylosing spondylitis allows one to consider the pathology of the condition under the *Sama* and *Niramaavastha*. A criterion of assessment was based on the scoring of 'Bath Ankylosing Spondylitis Disease Activity Index (BASDAI)'. Total two assessments were carried out before and after treatment. Panchakarma methods must be used once a thorough differentiation of *Sama* and *Niramaavastha* of Ankylosing Spondylitis (*Asthimajjagata vata*) has been made. Panchakarma may be the best option for treating this illness among the many therapy options. In order to design a strategy for the care of ankylosing spondylitis using Panchakarma modalities, a conceptual study was performed.

**KEYWORDS:** Ankylosing spondylitis; *Asthi-majjagata vata*; *Panchakarma*; *Ayurveda*; Bath ankylosing spondylitis disease activity index; BASDAI.

## INTRODUCTION

Ankylosing spondylitis (AS) 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. Typically affects young adults and male-to-female ratio is closer to 3:1. The median age of onset is 23 years.<sup>[1]</sup> Worldwide prevalence of AS is up to 0.9%. Its etiology and pathogenesis are not yet fully understood. AS is a gradually progressive condition over several years until structural damage manifests clinically as sacroiliitis, loss of spinal mobility, extra-articular symptoms, peripheral arthritis and reduced quality of life. Patients with severe AS have a reduced quality of life.<sup>[2]</sup>

Ankylosing spondylitis is one such auto-immune rheumatic disease that shows a strong association with genetic factor HLA-B27.<sup>[3]</sup> In allopathic system of medicine, NSAIDs and steroids are generally prescribed along with physiotherapy. But still it remains as a symptomatic approach. If *Ayurvedic* approaches are intervened appropriately, further progression of the

disease can be prevented. In this attempt, a case of Ankylosing spondylitis has been successfully managed with *Ayurvedic* treatment approaches.

## CASE REPORT

A 39 year-old male patient visited the Panchakarma OPD no.24.

## Complaints of

1. early morning stiffness with asymmetrical inflammation of left knee, right ankle and interphalangeal joints of hands.
2. Tenderness was present over bilateral sacro iliac joints.
3. Weight loss 8 kg in one year all above complaints are seen since 1 year. He was diagnosed with axial and peripheral Ankylosing spondylitis.

## Past History

- No H/O- DM, HTN, Surgical Procedures.
- No F/H/O- Any skin disorder

**On Examination**

- Pulse was 78/min, regular;
- Blood Pressure-120/80mm of Hg, Temperature-99.6 OF,
- Respiratory rate -18/min. Respiratory,
- CVS and CNS did not show any specific abnormality.
- Per abdomen examination was normal.

**Laboratory Reports**

- Hemoglobin level 11.5% for past one year
- ESR was 100 mm
- CRP level 74mg/l.
- HLA-B27 positive

**Past treatment history**

The patient was under the supervision of a rheumatologist for eight months, where combinations of different drugs have been prescribed (Table 1).

	<b>Allopathic Treatment</b>
<b>1</b>	Tab. Etoshine MR (Etoricoxib) 120 mg twice a day
<b>2</b>	Tab. Medrol (Methylprednisolone) 8 mg once/day
<b>3</b>	Tab. Voveran SR (Diclofenac Sodium) 75 mg twice/day
<b>4</b>	Tab. Folvite (Folic acid) 5 mg once a day
<b>5</b>	Acetaminophen 325 mg twice a day
<b>6</b>	Tab. Methocel 15 mg once a week

The above drugs were used for three months by the patient under the supervision of the rheumatologist. Patient got minimal relief.

<b>Chief complaints</b>	<b>Present</b>
<i>Asthibheda</i> (stabbing pains in bones)	++
<i>Parvabheda</i> (pain in joints of fingers)	+++
<i>Sandhishoola</i> (pain in joints),	++
<i>Mamsakshaya</i> (depletion of muscular tissue)	++
<i>Balakshaya</i> (decreased vitality and strength)	++
<i>Aswapana</i> (sleeplessness)	++
<i>Satataruka</i> (continuous pain)	++

These above symptoms can be compared with symptoms of *Asthi-majjagatavata*.<sup>[4]</sup> *Adhyasthi* (Fusion of syndesmophytes) is the manifestation of *Asthipradoshavikara* (Diseases of bones).<sup>[5]</sup> *Vinamata* (bending of the body as kyphosis) is the manifestation of *Majjavritavata*.<sup>[6]</sup> The patient was in *Niramavastha* (stage of disease without *Ama*) condition with apparently normal appetite and no *Rakta Dusti* (vitiation of blood) and *Purvaroop* (prodromal symptoms) of *Vatarakta* was evident, thus patient considered to suffer from *Nirama Vata Vyadhi* (*Vata* disease without *Ama*). As the disease had become deep-seated showing the features of *Asthi-majjagata vata*, thus it was considered as *Ayurvedic* diagnosis for the case-

**Astha Sthana Pariksha**

1	<i>Nadi</i>	<i>Vataj Pitta</i>
2	<i>Mala</i>	<i>Asmayak</i>
3	<i>Mutra</i>	<i>Prakrita</i>
4	<i>Jihva</i>	<i>Lipta</i>
5	<i>Sabda</i>	<i>Prakrita</i>
6	<i>Sparsha</i>	<i>Ruksha</i>
7	<i>Druk</i>	<i>Prakrita</i>
8	<i>Akriti</i>	<i>Madhyam</i>

**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.*

**DIFFERENTIAL DIAGNOSIS**

in the case

*Amavata* and *Vatarakta* (~various diseases of the rheumatic spectrum)

**DIGNOSIS**

A criterion of assessment in present case was based on the scoring of 'Bath Ankylosing Spondylitis Disease Activity Index (BASDAI).<sup>[7]</sup> The BASDAI has been the most frequently used measure for AS and has become the gold standard measure for use in clinical trials. The purpose of BASDAI is to measure patient-reported disease activity in patients with AS.

The baseline score (before starting our treatment) on BASDAI was '4.6'

## TREATMENT

### Panchakarma Treatment Duration-

<i>Dipanapachana</i>	5days
<i>Snehapana(tiktakaghritam)</i>	5days
<i>Abhyanga(Tilataila)</i>	3days
<i>Swedana(Fomentation)</i>	3days
<i>Virechana(Trivrutadiavaleha)</i>	1day
<i>Samasarjanakrama(Dietaryregime)</i>	7days
<i>Karma vastiAnuvasanavasti(Narayanataila)Yapanavasti(Mustadiyapana)</i>	15days
<i>Shastishalipandaswedana</i>	15days
<i>Saravangaswedana[withdashamulaandnirgundi]</i>	15days
<i>Pratimarshanasya(Anutaila)</i>	15days

Considering the condition of the patient; Panchakarma procedures were planned that were followed by internal medications for 45 days.

### Besides these Internal medicine

First two weeks	This was followed by
<i>Kaishora guggulu</i> (500mg thrice),	<i>Kaishora guggulu</i> (500 mg thrice)
<i>Sanshamani vati</i> (250 mg twice)	<i>Sanshamani vati</i> (250 mg twice)
<i>Punarnavadi kwatha</i> (15 ml twice)	<i>Rasna kashayam</i> (15 ml twice)
Blend of <i>Amalaki, Musta, Guduchi</i> powders (1geach with warm water)	<i>Rasraj rasa</i> (500 mg thrice) <i>Gangharv haritaki churna</i> (3gms HS with warm water)
<i>Gangharv haritaki churna</i> (3gms HS with warmwater)	<i>Dharasana lepa</i> for external application overswollen, inflamed parts

## OBSERVATIONS

1. Patient was analysed by following Ayurvedic principles. On examination; it was observed that patient had symptoms of *Ama*, so *Ampachana* was suggested with *Aampachak kashayam* that is generally used in vitiation of Tridoshas and is also indicated in *Jwara*. *Amapachana* is a crucial step that is done before *Snehapana* followed by *Virechana*. Considering severity of the disease and *Samata* of *Mala*, as well as dominance of *Vata* and *Pitta*; *Virechana* was planned. *Snehapana* with *Tiktak ghritam*. *Tikta Rasa* are indicated for bone pathology.<sup>[8]</sup> Foods and drugs having sweet and bitter properties are indicated in *Majja-pradoshaja* (disease occurring in vitiated bone marrow) diseases. *Virechana* was given with *Trivrutadi avaleha*<sup>[9]</sup> considering vitiation of *Pitta* and *Kapha*. *Trivrit* helps in eliminating *Pitta* followed by *Kapha* and is also well tolerated by the patient. After *Virechana* Patient was given *Karma vasti* with alternate *Anuvasana* and *Yapanavasti*. *Anuvasana vasti* was given with *Narayana taila*<sup>[10]</sup> that acts very well on lower part of the body. *Mustadi yapana basti*<sup>[11]</sup> was given considering *Madhyamabala* of the patient as well as its efficacy on *Vata dosha*. *Mustadi yapana* is good in the involvement of *Asthi* and *Majja*. *Mustadi yapana Basti* is a combination of drugs, which are having *Tikta* and *Madhura Rasa* (bitter and sweet taste) dominance. *Tikta Rasa* has

*Shothaghna* (anti-edematous and anti-inflammatory) and *Pittahara* properties (suppression and elimination of vitiated *Pitta dosha*). *Majja* (bone marrow) was used instead of *Mamsa Rasa* (meat soup) for the formation of *Basti*. *Majja* which was used in *Basti* improved the quality of various tissue especially blood and bone marrow of the case and alleviates symptoms.

- Shastika shaali panda sweda* given for the relief of pain and swelling, nourishment to muscles, bones and peripheral nerves, reducing fasciculation, dyspnea (due to atrophy of respiratory muscles) inflammation, enthesitis, and peripheral neuropathy, *Sarvanga sweda*<sup>[12]</sup> with *Dashamoola* and *Shigru* was also given for relief of pain and removing *Stambha* (stiffness).
- Pratimarsha nasya* with *Anu taila* is helpful in alleviating the diseases above supra clavicular region such as *Galgraha* (stiffness of neck) and *Hanugraha* (stiffness of jaw). The stiffness of spine and lock jaw condition are the main complaint in AS thus this drug is helpful.

## SHAMAN CHIKITSA

- Kaishora guggulu* and *Sanshamani vati* - Were selected considering their action on *Vata, Pitta, Kapha, Rasa, Rakta* and *Mamsa*. *Amalaki, Guduchi* and *Musta* in a combination is known for its role in *Asthimajjagata dosha pachana*.

2. **Gangharv haritaki churna-** 3 gm given at night with warm water for *Vatanulomana*.
3. **Punarnavadi kwatha** - Also shows action on Rasa, Rakta, Mamsa and possess Shothahara property.
4. **Rasna kashayam-** Added to the list of medicines in further stages of treatment, as it pacifies pain due to *Vata* mainly in lower limbs and back. It also reduces *Shotha* due to *Vata*.
5. **Rasraj rasa-** Has *Balya* (anabolic) and *Vajikarana* (aphrodisiac) properties. It is indicated in Paralysis, all type of *Vatajvikara* (diseases due to *Vatadosha*), *Dhanustambha* (stiffness of spine), *Hanustambha* (lock jaw), *Apatanaka* (spasm of muscles and tetanus like condition) and vertigo. *Ashwattha churna* was administered as it controls vitiated *Vata* and *Rakta*. These drugs and procedures have the properties to treat the manifestation of AS such as pain, inflammation, stiffness, scoliosis, kyphosis, fatigue, and weight loss.<sup>[13]</sup> was added in follow up treatment to control *Vedana* and *Shopha* (analgesic and anti-inflammatory) action locally.<sup>[14]</sup>
6. **Physiotherapy** - With stretching exercises were advised to relieve stiffness of muscles as well as joints.
7. The baseline score (before starting our treatment) on BASDAI was '4.6' and after completion of treatment the score on BASDAI was reduced to '0.9' i.e., there was '80%' of improvement found.
8. All the allopathic medicines were gradually withdrawn by 21st day of commencement of Ayurvedic treatment. After withdrawing NSAIDs; both pain and swelling were aggravated, but they were tolerable. After completion of Panchakarma therapy, sacro-iliac joint pain was completely reduced, while morning stiffness was reduced significantly. Mild swelling was observed over left knee and right ankle joints especially in the morning hours, which was reduced with physiotherapy. After one month of follow up, only mild tolerable swelling over right ankle was complained. This swelling was further reduced with continuous physiotherapy. Hematological profile of the patient was significantly improved. Good improvement in hemoglobin percentage was seen. ESR and CRP were also reduced. Patient gained 9 kg weight within two months after completion of the treatment. By the end of treatment, no need of conventional analgesics or anti-inflammatory drugs was needed by the patient.

## CONCLUSION

There was marked improvement in this case of AS. Hence *Virechana karma* followed by *Tiktaksheer Basti* with *Shashti Shali Pinda Swedana*, *Patimarsha nasya* and *Shamana* drugs was found to be effective in this case of Ankylosing Spondylitis.

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