ABSTRACT:
Ankylosing spondylitis (AS) is a type of rheumatic disease known as spondyloarthopathies (SpA), and it has a significant link to the HLA-B27 genetic marker. The involvement of spinal joints, particularly the sacroiliac joint, is gradual and insidious. Inflammatory back pain and stiffness are common in the early stages of the disease, but in the later stages of the disease, severe pain and axial immobility or deformity can occur. In this disease, the lack of a successful biomedical treatment results in irreversible malformation. In these instances, several Panchakarma procedures and Ayurvedic medications have shown to be beneficial. The therapy includes rigorous dietary restrictions as well as lifestyle changes. The Ayurvedic method aims to reduce disability while also easing symptoms. Here, we discuss a case of Amavata that was effectively treated with Ayurvedic medicine.

Keywords- Ankylosing Spondylitis, Amavata, HLA-B27, Spondyloarthopathies
INTRODUCTION

Ankylosing spondylitis (AS) happen an incessant inflammation of the vertebrae that generally include the sacroiliac joints and the principal structure of bones in animate being or supports in an object. The disorder occurring every day manifests in young man than in females accompanying the relation of part to whole of nearly 3:1.[1] In women, joints apart the spine are more frequently changed in a bad or artificial way, than in men. Ankylosing spondylitis affects all the age groups, along with children. When it influence the children, it is concern as the juvenile Ankylosing spondylitis. Around 0.25% people in India is predicted to be affected by these diseases. The most average age of attack of sign of illness or problem is in the second and third decades of existence. Inflammation of the spine generally causes pain and inflexibility in and about the spine, containing neck, middle back, lower back in addition to the buttock. In the due course of time, constant redness of the spine (spondylitis) can bring about a complete mixture of the vertebral column, a process referred as ankylosis, that leads to apparent axial immobility and deformities like Kyphosis of the thoracic spine. There happen in addition to difficulty of the peripheral joints and articular structures. Musculoskeletal pain, inflexibility as well as immobility of spine on account of AS, exist the major burden.

Ankylosing spondylitis shares various features accompanying many other arthritis conditions like psoriatic arthritis, reactive arthritis (formerly Reiter's disease), and arthritis associated with Crohn's disease and Ulcerative colitis. In view of their similarities and leaning to cause redness of the spine, these medical conditions exist together refer to as the term "spondyloarthopathies." AS commences as peripheral arthritis in 47%, low back pain in 41%, acute anterior uveitis in 10%, and heel pain in 2% of the affected.[2] The explanation of AS is multifactorial, as in many of the autoimmune diseases, based on endogenous factors, in the way that the very forceful genetic influences of Human Leukocyte Antigen (HLA-B27) situated at chromosome 6 and exogenous factors, like bacterial contamination exceptionally gastrointestinal (accompanying Salmonella, Shigella, Yersinia or Campylobacter) or urogenital (with Chlamydia trachomatis).[3]

In modern science the disease is managed with NSAIDs, steroids and biologics and rehabilitated with physiotherapy. The range of action of this line of treatment is seen to be limited and with low beneficiary effects. Thus, the role of Ayurveda stands important here as it can treat such patients in accordance with Amavata.

In Aamvata, vitiated doshas get lodged within the trika sandhi i.e. lumbo-sacral joints and Sacroiliac joints following which they create stiffness in the entire body (spine too). Stabdha i.e. stiffness will occur because of ankylosis and spondylitis. Jadya has been mentioned as one of the symptoms of Amavata, which describes stiffness and loss of mobility. ‘Saruja Shotha’ is yet another symptom which means painful swelling in body parts (pain and inflammation).[4]

This study shows that the cases of AS may be successfully managed with Ayurvedic treatment.

Present Complaints

A 23-year-old Indian, Unmarried, non-smoking, non-alcoholic male consulted in Out-Patient Department of Govt. Ayurved Research Centre associated hospital of M.M.M. Govt. Ayurved College, Udaipur for a complaint of gradually progressive lower back pain along with stiffening and deformity of the spine and hip since last 3 months. We subsequently
started his treatment on March 02, 2020 at Govt. Ayurved Research Centre, Udaipur. None of the family members had a history of AS.

**Clinical Findings**
The patient has several episodes of low back pain that wakes us up at night, followed by stiffness in the spine in the morning.
The patient had pain and stiffness in both shoulders, hips, knees, and ankles.
Swelling and joint fractures of the left knee have also been reported.
Neck movement was restricted, and both upper limbs had a movement of up to 45°.

**Physical Examination**
The patient was found to be anxious with the followings –
- Appetite - moderate, Vishmagni (unstable digestive functions)
- Sleep - disturbed
- Koshtha - Krura Koshtha (bowel hard to purge)
- Micturation - normal.

**Ashtavidha Pareeksha**
- Nadi - VP
- Mutra – SAMYAK MUTRA PRAVRITTI
- Mala – SAMA
- Jivha – SAMA
- Shabda – SAMYAK
- Sparsha – RUKSHA
- Drika – SAMANYA
- Akriti – KRISHA

**Dashvidha Pareeksha**
- Prakriti - Vatapitta
- Sara (purest body tissue- Madhyam (medium)
- Samhanana (body built) - Madhyam (medium)
- Pramana (body proportion) - Sama (normal)
- Satmya - Madhyam (homologation)
- Satva (mental strength) - Madhyam
- Vyayamshakti (to carry on physical activities) - Avara (least capability)
- Aharshakti and Jaranshakti - Madhyam (medium).

(food intake and digestive power)

**Systemic Examination**
- Asthivaha Srotodusti (pathology in bone) and
- Majjavaha srotodusti (pathology within the bone marrow) were the foremost prominent.
The examination conjointly disclosed humpback, neck strain and flexion of each hip joints. There was a loss of the lateral and posterior flexions of the lumbar spine and tenderness on top of the sacroiliac joint.

**Laboratory Investigations**
- HLAB27- Positive
- E.S.R. - 12 mm after 1h (Normal)
- C.R.P. - 0.0 MG/L (Normal)

**Samprapti Ghatak**
- Dosa – Vata Pradhana Tridosha
- Dushya – Rasa, Rakta, Asthi, Mamsa
- Srotasa – Annavaha, Raktavaha, Rasavaha, Asthivaha, Mamsavaha
- Srotodushiti lakshana – Vimargagamana (movement in abnormal pathways)
- Vyadhi Marga – Madhyama (since joints are involved)
- Agni – Agnimandya (weak digestion in stomach)
- Ama – sama (associated with ama)
- Udbhava sthana (seat of origin) – Amashaya (stomach)

**Sanchara Sthana (movement)** – Sarvanga (all through the body), Dhamani (arteries), Srotasa (all channels of transportation)
- Vyakta Sthana (seat of manifestation) – Asthi, Sandhi
- Sadhya Asadhyata – Kashtasadhya (curable with difficulty)
THERAPEUTIC FOCUS
This was a newly diagnosed case of AS, So we have only given Samshaman Chikitsa.

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Dose</th>
<th>Duration</th>
<th>Anupana</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Castor Oil</td>
<td>15 ml</td>
<td>At night, for 1 month</td>
<td>Milk</td>
</tr>
<tr>
<td>2. Sameer pannag Rasa Amavatari Rasa</td>
<td>100mg</td>
<td>B.D. for two months</td>
<td>honey,</td>
</tr>
<tr>
<td>Chausath Prahari Pippali churna</td>
<td>250mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narsinha Churna</td>
<td>500mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mahavatavidhwansan Rasa</td>
<td>2gm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>250mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Nirgundi Rasna Arka</td>
<td>4tsp</td>
<td>B.D. for one month</td>
<td>Water (in equal amount)</td>
</tr>
</tbody>
</table>

No contributing allopathic medication was given all along this whole treatment extent of time.

**Follow-ups**
Treatment of Ankylosing Spondylitis is frequently longstanding & need consistent and attentive follow-ups. So, there were several follow-ups & now, the patient is under regular observation and oral treatment. The quality of life of the patient has enhanced. There is no impair of any symptoms and sign till July 2021.

**DISCUSSION**
Various Panchakarma procedures and internal Ayurvedic medicines have been proven useful in the management of AS. As in about mid of the march, 2020 Covid-19 came in light, we were unable to perform Panchakarma procedures due to extreme covid conditions in that time, that's why we only used oral medications in this patient. In above mentioned medications,

- Castor oil have or obtain feature which causes increase in digestive fire, get through into microchannels, mitigate Vata-Kapha Doshas & eliminate them by purification.
- Sameer pannag Rasa balances all three Doshas mainly Vata & Kapha. It is used to open the block channels – stiff joint disorders.
- Amavatari Rasa is Deepaka, Pachaka, Vatashamaka, helps to relieve pain, inflammation and improves joint movement and flexibility & it is used in the extreme terrible condition of Amavata.
- Chausath Prahari Pippali is beneficial in Vatakaphaja (diseases due to Vata and Kapha dosha) disorders, cough, dyspnea etc.
- Mahavatavidhwansan Rasa have the properties to treat the manifestation of AS such as pain in inflammation region, uneasiness & it is best in the acute condition of Amavata.
- Narsimha Churna have Deepana Pachana qualities and it is Strotoshodhak. It will destroy all types of Pain(Ruja) & all the 80 types of Vata Vikara.
- Nirgundi works as Vata-Kapha Shamaka in Nirgundi-Rasna Arka preparation whereas, Rasna is one of the best amahara (expels...
metabolites and detoxifies the system) it is also used in back pain occurring due to inflammatory arthritis like Amavata.\cite{12} So all the drugs have the properties of reducing the pain, inflammation & they all are Vata Shamak.

**CONCLUSION**

Ankylosing Spondylitis is not mentioned as a separate entity in the Ayurvedic classical texts. But considering the symptoms and the cause, disease can be approached with the concept of Vatavyadhi with special reference to Amavata. After assessing the associative doshas and Ama status, the protocol is to be designed along with administration of internal medicines. The Ayurvedic treatment of the above mentioned oral Ayurvedic drugs had given promising result in the management of AS. This approach could also be taken into consideration for further treatment and studies have to be conducted in this regard, in order that we will effectively use the Ayurvedic principles for helping the affected mankind in such conditions as spondyloarthopathies.

**Outcome Of The Treatment**

Spinal mobility, stiffness, fatigue & pain were reduced after the treatment. The restriction within the inspiration was also slightly improved. The patient was ready to lie in the prone similarly as supine positions, without much effort or pain. There was an overall improvement in functional capacity of the patient.

**Patient consent**

Written permission for publication of this case study had been obtained from the patient.

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**Conflict of Interest:** Nil

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