

AN AYURVEDIC APPROACH FOR MANAGEMENT OF ANKYLOSING SPONDYLITIS –
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ABSTRACT

Ankylosing spondylitis (AS) is a rheumatic disease with various skeletal and extra skeletal manifestations which belongs to a group of rheumatic diseases known as the spondylo arthropathies (SpA), which show a strong association with the genetic marker HLA-B27. usually begins in the second or third decade of life with a male to female ratio of 3:1. The prevalence rate of AS in India is 0.03%. The people suffering with AS carry the Ankylosing Spondylitis 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. From the Ayurvedic perspective, the disease can fall under *Asthi majjagatavata*, which may be effectively managed when intervention is started in its early stages. No satisfactory treatment is available in modern medicine for this disorder. Various Panchakarma procedures and Ayurvedic drugs have been proved useful for these manifestations. We present a case of AS, which was treated for 3month with a combination of Panchakarma procedures and Ayurvedic drugs. Ayurvedic treatments, in this case, were directed toward alleviating symptoms and to reduce severe disability. The patient was considered suffering from *Asthimajjagata vata*.

KEYWORDS: Ayurveda, *Asthimajjagat vata*, Ankylosing Spondylitis, HLA B27.**INTRODUCTION**

Ayurveda is a science which not only comprises of knowledge about a number of disease but also gives knowledge about a Healthy lifestyle and preventive measures of various disease. Around 90% of histocompatibility antigen HLA-B27. It usually starts in the second and third decade of life with a male to female ratio of 3:1^[1] and prevalence rate of 0.03% in India.^[2] The people suffering with AS carry the Ankylosing Spondylitis 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. Unavailability of satisfactory treatment in modern medicine leads to permanent deformity in this disease, so early diagnosis and treatment are of great important. In Ayurveda there is a description regarding the management of such disorder based on the stages of expression under the concept of *vatavyadhi*. Disease condition like *katigatvata*, *Amavata*, *Ashtimajjagat Vata* etc. can be corelated with ankylosing Spondylitis as per

the stages which were describe in ayurvedic texts. In this case on the basis of *Nidanpanchak* we can co-related this condition to *Ashtimajjagat Vata*.^[3] Ayurvedic *shaman* and *shodhana chikitsa* is found very effective in such type of disease.

AIM

To study the case of Ankylosing Spondylitis Through Ayurvedic management.

OBJECTIVE

To study the role of ayurvedic medicine in the management of Ankylosing Spondylitis.

CASE DESCRIPTION

A 19th year old Indian, unmarried, nonsmoking, nonalcoholic male patient came to our OPD at Radhakishan Toshniwal Ayurvedic Mahavidyalaya, Akola with the complaints of lower back pain (which is dull in character and felt deep in the lower lumber region), neck pain with morning stiffness. The pain was insidious in onset which aggravates during night, early

mornings and after exposure to cold or in the cold season. Morning Stiffness lasts for few hours and gradually improves with activity. The pain became persistent, bilateral and gradually progressive since last 1 year patient was diagnosis as ankylosing spondylitis with HLA-B27 positive. None of the family members had a history of AS. For a long time, now the case was on analgesics and anti-inflammatory when needed for pain relieving.

• **Past history-** No history of any major illness such as HTN, DM, Asthma and Thyroid Disorder.

• **Personal History**

- 1) Occupation – Student
- 2) *Aharaj - Taking mixed type of diet*
- 3) *Viharaj – Ratrijagran and Diwaswap*
- 4) Bowel – regular
- 5) Sleep – Disturbed

INVESTIGATION

A) Laboratory Investigations -

- 1) CBC
- 2) CRP
- 3) ESR
- 4) S. URIC ACID
- 5) RA TEST
- 6) HLA B27

B) Radiological Investigations - X-ray, MRI

Astavidha Pariksha

1. *Nadi- 78/min*
2. *Mala- Prakrut*
3. *Mutra- Samyak*
4. *Jivha - Saam*
5. *Shabda- Spashta*
6. *Sparsha- Anushna sheet*
7. *Druk- Prakrut*
8. *Akruti- Madhyam*

General Examination

1. BP – 110/80 mmHg
2. Wt – 59 kg
3. PR – 78 /min
4. Ht – 5'' .8'

Systemic Examination

- 1) Respiratory System -AEBE Normal
- 2) Central Nervous System -conscious and oriented to person, place and time
- 3) Cardiovascular System -s1 s2 normal

Ayurvedic management of the case of ankylosing spondylitis

Sthanik Snehan and *Swedan* was given followed by Ayurvedic *Shaman Chikista*. In which we gave *Sthanik Snehan* with *Sahacharadi Tail* followed by *Nadi Swedan* by *Dashmool Kwath*.

Shaman Chikitsa

Sr.No	Medicine	Dose & Anupan	Duration	Sevankal
1	<i>Gokshuradi Guggul</i>	250mg 2-Tablets twice with lukewarm water	3 Month	<i>Paschatbhakta</i>
2	<i>Guduchi Ghan Vati</i>	250mg 2-Tablets twice with lukewarm water	3 Month	<i>Paschatbhakta</i>
3	<i>Agnitundi Vati</i>	250mg 2-Tablets twice with lukewarm water.	3 Month	<i>Paschatbhakta</i>
4	<i>Guggultiktam Ghruta</i>	10 ml two times with lukewarm water.	3 Month	<i>Paschatbhakta</i>
6	<i>Ashwagandha Churna</i>	3 gm twice a day with ghruta.	3 Month	<i>Paschatbhakta</i>
5	<i>Sahacharadi Tail</i>	Local application	3 Month	Morning

(Table No .1)

Diagnosis and Assessment

A criterion of assessment in present case was based on the scoring of Bath Ankylosing Spondylitis Disease Activity Index (BASDAI).^[4] 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. It consists of 6 items which measures patient-reported levels of back pain,

fatigue, peripheral joint pain and swelling, localized tenderness and the duration & severity of morning stiffness. Numeric response scale (0-10) anchored by adjectival descriptors 'none' and 'very severe'. The final score of BASDAI ranges from '0' (which indicates no disease activity) to '10' (which indicates maximum disease activity). A cut off score of 4 is used to define active disease. Total two assessments were taken, pretreatment (baseline) and post treatment.

Follow up and outcomes

Domain	Instrument	Before Treatment	After Treatment	% Relief
Function	BASFI	9.4	4.8	48.9
Pain	NRS	10	3	70
Stiffness	NRS	9	3.1	66.67
Fatigue	BASDAI	8.7	3.5	59.77

Affected peripheral joint Peripheral joint count	Peripheral joint count	14	0	100
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(Table No .2)

[BASFI - Bath Ankylosing spondylitis functional index is a scale to determine the degree of functional limitation. NRS - Numeric rating scale (0-10) is used to

assess the intensity of pain and stiffness. BASDAI - Bath Ankylosing spondylitis, disease activity index is a scale to assess the disease activity]

Investigation	Before Treatment (08/01/2022)	After Treatment (05/03/2022)
Hb	9.3g%	10.9g%
ESR	66 mm/h	30 mm/h
CRP	15.5 mg/l	5.2 mg/l
RA Test	Negative	Negative
HLA B27	Positive	Positive
Uric Acid	7.8 mg/dl	4.9 mg/dl

(Table No. 3)

Hematological parameters were reinvestigated on 05th march 2022. As shown in (table no. 3) Very good response was noted on various parameters in this case. Spinal mobility, stiffness, fatigue, pain, and acute phase reactants (ESR) were reduced after treatment. There was an improvement in functional capacity and global condition of the patient. The patient had improved physical strength, and 2.1 kg body weight was increased during the treatment. The patient had both upper limbs movement range up to 90° and neck movement up to 75° in the left side and up to 60° in the right side.

DISCUSSION

AS belongs to the group of spondyloarthropathies (SpAs) and it is one of the common autoimmune diseases. Sacroiliitis is the earliest recognized manifestations of AS, but peripheral joints and extra-articular structures may also be affected. It is insidious in onset, striking individuals, mostly men at an early age, subsequently progresses over several years and leads to deformity.^[5] The patient has been taking various NSAIDs, corticosteroids and DMARDs, which were gradually tapered and completely withdrawn during the initial stages of Ayurvedic treatment. As per diagnosis of *Asthimajja gata vata*, treatment protocol was followed. Ayurvedic *shaman chikitsa* and *sthanik snehana* and *swedan* given. *Gokshuradi* Guggulu contains some ingredients which have anti-inflammatory and anti-rheumatoid properties and are thus helpful in providing relief from the symptoms of AS.^[6] *Agnitundi vati* having *Deepana* and *pachana* properties and it's found more significant in *stambha* (stiffness) & *shool* (pain). As Ankylosing Spondylitis is autoimmune diseases, we have given *guduchi ghanvati* which correct the immunity of the patient and it is *tikta ras pradhan* and *tridoshshamak* drug.^[7] *Ashwagandha* is *Ushna* in *Veerya*, *Balya*, and *Shothahara* and possesses *Rasayana* properties.^[8] *Abhyanga* was done with *Sahcharadi Taila* As it is *Vata Shamaka*, *Balya* and *Shrama Hara*. It was followed by *Nadi Sweda* with *Dashamoola Kwatha*, which is *Vata Kapha Shamaka*, *Shotha Hara*, *vedana sthapak* and *stroto shodhak*. *Guggul Tiktam ghrutam*

which is *Vataghna* Vata pacifier in nature. Above used drugs in the management of AS showed properties to treat the symptoms such as pain, fatigue, inflammation, stiffness, and weight loss. No adverse effects were reported by the patient. The patient got clinically meaningful improvement by internal medicines along with dietary restrictions (advised to avoid dairy products and to drink hot water) and life style changes. Ayurvedic treatment seems to be promising in the management of AS with in short period of time and without causing any adverse effect.

CONCLUSION

This combined Ayurvedic treatment of above mentioned oral Ayurvedic drugs and *Panchakarma* procedures were helpful in treating the patient of AS. Proper protocol of treatment i.e. *Snehan*, *Swedan* and *Shaman chikitsa* should be planed on the basis of *Samprapti Ghataka* and gives promising results especially in reducing the pain and other symptoms. Decreasing the severity of deformities and also improving quality of life within short time and without causing any adverse effect in present case. As this is a single case study, further trial needed in large sample size for longer duration using control group.

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