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# MANAGEMENT OF ANKYLOSING SPONDYLITIS: A CASE STUDY

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#### **ABSTRACT**

Ankylosing spondylitis is a rheumatic disease which shows a strong association with the genetic marker HLA B27. It is chronic inflammatory disorder that primarily involves the sacroiliac joints and axial skeleton. AS is one of the most common rheumatic disease frequently referred as spondyloarthopathies. No satisfactory treatment is available in modern medicine for this disorder. Selected *Panchkarma* procedures and *Ayurvedic* drugs have been proved valuable in these manifestations. *Ayurveda* approach is directed towards alleviating the symptoms and also to reduce the disability. According to sign and symptoms AS is correlated with *Vatavyadhi* with special reference to *Asthimajjagata vata*. A 45 year old male patient presented AS, which was treated for 45 days with a combination of *Panchkarma* procedures and selected *ayurvedic* drugs. Patient was considered suffering from *Asthimajjagata vata* and treated with *Snehana* with *Ashwgandha siddha oil*, *Shalishashtik pinda sweda*,for 45 days, *Yoga basti* for 8 days and *Panchtiktaksheerbasti* for 1 month. Patient showed improvement remarkably and could do all routine work properly.

KEYWORDS: Asthimajjagata vata, Ankylosing spondylitis, Basti (Yogabasti and Panchtiktaksheer basti).

## INTRODUCTION

Ankylosing spondylitis is a chronic inflammatory disorder that primarily involves the sacroiliac joints and axial skeleton. Persistant pain and stiffness for more than 3 months associated with morning stiffness and improvement with exercise or worsening with rest. Prevalence of Ankylosing Spondylitis in India is 0.03% as per the study conducted by bone and joint Decade India. Over time it causes small joints in spine to fuse. This fusing makes spine less flexible and can result in hunched forward posture.

The cause of Ankylosing Spondylitis is unknown, it is believed to involve a combination of genetic and environmental factors. The underlying mechanism is believed to be autoimmune or autoinflammatory. Bamboos spine develops when the outer fibers of the fibrous ring of the intervertebral disc ossify which result in the formation of marginal syndesmophytes between adjoining vertebrae.

Satisfying treatment is not available in modern science. Various *Panchkarma* procedures and *Ayurvedic* drug have been proved useful for these manifestation. *Ayurveda* considers vitiated *vata dosha* that affect the *majja dhatu* and correlate it with *Asthimajjagata vata*. We present a case that was successfully treated on the line of *Ayurvedic* management of *Asthimajjagata vata*.

# A CASE STUDY

# **History of present illness**

A 45 year old male patient comes in an opd with complaints of severe pain in low back (lumbar region), stiffness and difficulty in bending and walking since 10 years. Patient underwent for several allopathy treatment but got temporary relief. Then patient come to the Nidan OPD of Government Ayurved Hospital, Nanded on the date 19-02-2019. Then patient admitted one the same day for further *ayurvedic* treatment.

Chief Complaints of Patient.

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	Sr. No	Chief Complaints	Duration				
	1	Severe pain in low back (lumbar region )	10 years				
	2	Stiffness in lumbar region	10 years				
	3	Difficulty in bending forward and backward	10 years				
	4	Difficulty in walking	10 years				

## History of past illness

No history of past surgical illness. No history of DM, HTN, BA. No any history of major illness.

#### **General Examination**

Nadi – 74/min

Mala-Baddhamalapravrutti

Mutra – Samyaka

Jivha – Sama

Shabda – Spashta

Sparsha – Samshitoshna

Druka – Spashta

Akruti – Krusha

Prakruti – Vata-Pittaja

Weight – 45 kg

Blood pressure – 120/70 mm of hg

Temperature – 97.2°F

# **Investigations**

Hb - 11.2 g%

TLC - 5700/cumm

ESR - 30 mm/hr

X-ray of LS Spine – Osteoarthritic changes with marginal sclerosis, destruction of SI joint margins. Complete fusion of the vertebral bodies by syndesmophytes and other related ossified areas produced the characteristics bamboo spine appearance.

#### **Assessment Criteria**

Assessment of sign and symptoms of patient.

1) Low back pain.

G0	No pain
G1	Mild pain
G2	Moderate pain
G3	Severe pain

2) Stiffness in lumbar region.

G0	No stiffness
G1	Mild stiffness
G2	Moderate stiffness
G3	Severe stiffness

3) Difficulty in bending forward and backward.

	in something for war a time section at					
G0	Easy bending in forward and					
	backward					
G1	Easy bending in forward but					
	difficulty in backward					
G2	Easy bending in backward but					
	difficulty in forward					
G3	Difficulty in both forward and					
	backward					

4) Difficulty in walking.

G0	No pain
G1	Mild pain +no difficulty in walking
G2	Slight difficulty in walking
G3	Much difficulty in walking

## Nidana Panchaka

## \*Nidana (Causative factors)

History of trauma on back 12 years back, prolonged continuous standing and heavy weight lifting.

### \*Poorvarupa (Prodromal symptoms)

Pain and stiffness in lumbar and low back region.

# \*Roopa (Manifestations)

Difficulty in walking, difficulty in bending forward and backward. Severe pain in back.

## \*Samprapti (Pathogenesis)

Vata dosha is vitiated due to Nidana sevana such as continuous standing and heavy weight lifting. Such vitiated vata dosha causes Rukshata, Kharata, in lumbar vertebrae which causes severe pain in that region. These leads to loss of functioning of Sheshaka Kapha i.e. decrease elasticity and flexibility of disc, because of which patient gets difficulty in bending forward and backward.

### Vyadhi Ghataka

Dosha involvement – Vata, Kapha

Vikruta Srotasa – Asthivaha srotasa, Majjavaha srotasa Avastha – Jirnavastha

## **Treatment Plan**

In this case study the treatment plan for patient includes Sarvanga Snehana, with Ashwagandha tail and Shalishashtika Pinda Sweda followed by Yoga Basti, karma (therapeutic enema), for 8 days. After 8 days Panchtiktaksheer Basti given for 1 month along with internal medicine Panchtikta gruta guggula 2 BD for 15 days.

# **Detailed of treatment**

## Snehana

Ayurvedic massage was done on complete body with Ashwagandha tail for 20 min daily.

Snehana is the line of treatment for Nirama vata vyadhi according to classical text. Snehana is useful for Vata Shamana, here we used Ashwagandha tail for snehana. Ashwagandha has Rasayana (Immunomodulator), and Balya (Anabolic) properties. Snehana with Ashwagandha tail reduces Vata vitiation and improves immunity as Ankylosing Spondylitis is a autoimmine disease.

# Swedana

Shalishashtik pinda sweda was given for lumbar and sacral region for 20 min.

Shalishashtik pinda sweda provides nourishment to muscles, bones, and peripheral nerves, reducing fasciculation and inflammation. Bala and Ksheer both are Bruhaniya and Jivaniya that's why provides nourishment.

### Basti (Therapeutic enema)

Yoga basti was given for 8 days followed by Panchtiktaksheer basti for 14 days.

Yoga basti includes two types of Basti

- Anuvasana Basti (oil enema) with Ashwagandha tail
   120 ml
- 2. Niruha Basti (Decoction enema) which includes following ingredients

Ingredient of Niruha Basti<sup>[4]</sup>

Sr.no	Ingredient	Quantity
1	Saindhava (Rock salt)	5 gm
2	Honey	60 ml
3	Kalka of Triphala, Erandmula and Madanphala	20 gm
4	Oil- Ashwgandha tail	120 ml
5	Dashmoola decoction	400 ml

Schedule of Yoga basti is as follows.

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Days	1	2	3	4	5	6	7	8
Basti type	Α	N	A	N	A	N	Α	Α

## Kalka drugs

Triphala i.e. *Haritaki* (Terminalia chebula), *Bhibhitaki* (Terminalia belerica), *Amalaki* (Terminalia officinalis), *Erandmula* (Ricinus communis), *Madanphala* (Randia spinose)

### Drugs of Dashmoola decoction

Shalparni (Desmodium gageticum), Prushniparni (Urarica picta), Kantkari (Solanum surattenese), Bruhati (Solanum Indicum), Gokshura (Tribulus teraestris), Bilva (Aegle marmelos), Agnimantha (Premna integrefolia), Sonapatha (Oroxylum arborea), Patala (Sterospermum surveoleus), Gambhari (Gmelina arborea).

The ultimate *upkrama* for *vata* disorder is *Niruha*. We used *Dashmoola Kwatha* for *Niruha*. *Dashmoola* includes *Tikta rasa* drugs which shows *Shoshana* and *Khara Gunas* similar to *Asthidhatu* resulting in *Asthidhatu vriddhi* as per *Samanya vishesh siddhanta*. <sup>[5]</sup> *Dashmoola* content having *Ushna Virya* which plays important role in pacifying *Vata dosha*. *Pakwashaya* is the *Sthana* of *Vata dosha* and *Basti* acts on *Pakwashaya*. With the help of *Niruha basti* we done *Pakwashaya Shuddhi* of Patient then we used *Panchtiktaksheer basti* for *Bruhan* and *Shaman Chikitsa*.

#### Panchtikta ksheer basti

After 8 days of *Yoga Basti*, *Panchtikta ksheer basti* was given for 1 month.

## Ingredient.

Sr.No	Ingredient	Quantity
1	Ksheer	60 ml
2	Ashwagandha ghrita	20 ml
3	Kalka of Guduchi, Kiratatikta, Patola and Yashtimadhu	Each 10 gm

# **Procedure**

Guduchi, Kiratatikta, Patola and Yashtimadhu each 10 gm churna was taken and 160 ml of water was added to make decoction.

Godugdha 60 ml is added to above decoction and heated till all water in decoction evaporated and only Godugdha is remained.

Add 20 ml of Ashwagandha Grita in above mixture.

Keep it warm and used for Panchtiktaksheer basti.

Drugs used for decoction having *Tikta Rasa* which shows *Shoshan* and *Khar gunas* similar to *Asthidhatu* resulting in *Asthidhatu vridhi* as per Samanya *Vishesh* 

Siddhanta. Basti and Ghrita proceed with Tikta Rasa is therefore indicated for Asthimajja pathology in the classics. [6]

# Content of *Panchtikta ghrita guggula*<sup>[7]</sup>

Nimba (Azadirecta indica), Patola (Trichosanthes dioica), Vyaghri (solanum xanthocarpum), Guduchi (Tinospora cordifolia), Vasa (Adhatoda vasica), Shuddha guggula (Purified commiphora mukul), Ghrita and water for decoction.

Ingredient in *Panchtiktagrita guggula* act on bone, joints, muscles, spine, mainly it has inflammatory, antitoxin and antipruritic action. Drugs pacifices *Tridosha* mainly *Vata* and *Pitta dosha*. *Panchtikta ghrita guggula* provides nourishment to *Asthi* and *Majja dhatu*.

## Observation

Assessment between before and after treatment.

Sr.no	Clinical features	Before	After
1	Low back pain	G3	G0
2	Stiffness in lumbar region	G2	G0
3	Difficulty in walking	G3	G1
4	Difficulty in bending forward and backward	G3	G1

## **DISCUSSION**

In this case study, we treated the patient by *Shodhana chikitsa* i.e. *Basti* and *Shaman chikitsa* i.e.internal medicine. We treated the patient according to the management of *Asthimajjagata vata*. Total two types of *Basti* were given along with *Snehana* and *Swedana*. First is *Yoga Basti* with schedule of 8 days alternate day oil enema and decoction enema. After *Yoga basti*, *Panchtiktaksheer basti* given to patient for 1 month with continue internal medicine *Panchtikta grita guggula* 2 tablets BD for 15 days.

After all the treatment patient show great improvement in his health about 70-80 % pain and stiffness reduced. Patient show significant result in forward and backward bending. Now he can do all routine activities properly.

#### CONCLUSION

Ankylosing spondylitis is not described separately in *Ayurvedic* classical text, but the symptoms and the cause can be compared with *Vata vyadhi* with special reference to *Ashtimajjagata vata*. We treated the patient by *Shodhana chikitsa* i.e. *Basti* and *Shaman chikitsa* i.e.internal medicine. This combined *Ayurvedic* treatment had given promising result in management of Ankylosing spondylitis. This approach may taken into consideration for further treatment of Ankylosing spondylitis.

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