

An Ayurvedic approach towards management of Ankylosing Spondylitis: A Case Report

Case Report

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Abstract

Introduction: Ankylosing spondylitis(AS) is a rheumatic disease that comes under the category of Spondyloarthritides. The symptoms of the disease are usually first noticed in late adolescence or early adulthood, with male to the female prevalence of 3:1. Which can be better managed by a combination of Panchakarma procedures and Ayurveda drugs. **Clinical findings -** We present a case of AS, having symptoms of low back pain along with stiffness unable to bend forward completely, and pain in the nape of the neck with stiffness and restricted movement so it was considered to be Gambhira Vatarakta. **Intervention:** Patient was treated with Panchakarma treatment Vaitrana Basti(Enema with medicated drugs) in Kala Schedule for 9 days and Jambheera Pinda Swedana(JPS) for 6 days along with oral medicines. **Outcomes -** As oral Medication along with Panchakarma procedures help in relieving signs and symptoms like pain and restricted movement and providing best comfort to the patient by reducing the severity of the disability. **Conclusion -** so it can be concluded that Panchakarma is effective in the management of Ankylosing Spondylitis.

Key Words: Ankylosing Spondylitis, *Gambhira Vatarakta*, *Vaitrana Basti*, *Jambheera Pinda Swedana*, *Ayurveda*.

Introduction

Ankylosing spondylitis(AS) is an inflammatory disorder of unknown cause that primarily affects the axial skeleton; peripheral joints and extra articular structures are also frequently involved. The disease usually begins in the second or third decade; male-to-female prevalence is between 2:1 and 3:1(1). The initial symptom is usually dull pain, insidious in onset, felt deep in the lower lumbar or gluteal region, accompanied by low-back morning stiffness of up to a few hours' duration that improves with activity and returns following inactivity (2). Prevalence of AS in India is 0.03% as per surveys conducted by Bone and Joint Decade India from 2004 to 2010(3). On basis of symptoms of Ankylosing Spondylitis in *Ayurveda* it can be compared with various symptoms of *Asthimajjagata vata* ~ bones and marrow, *Amavata* ~ rheumatology, *Gambhira Vatarakta*. On Scrupulous observation, most of the features of Ankylosing Spondylitis imitates the *lakshanas* ~ Symptoms of *Gambhira Vatarakta*. So here we will focus on the management of AS by adopting various *Panchakarma* procedures in *Gambhira Vatarakta*.

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Case Report

Presenting Complaints

A 21 year old male patient NonDiabetes, Non Hypertensive, Not married, non-smoking, non-alcoholic, consulted in Out-Patient Department of *Panchakarma* of Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital Hassan, Karnataka. For the past 4 months, patient was having pain in low back and nape of neck associated with stiffness and restricted movement for which he was taking analgesics and got symptomatic relief in pain but symptoms of stiffness and restricted movement persist as it is, pain also aggravated after stopping the medicine. The case was subsequently admitted to special ward under *Panchakarma* department on 1/10/2020 for administration of *Panchakarma* therapy. None of the family members have history of AS.

Clinical Findings

The patient was apparently alright 4 months back then gradually he developed pain in low back which gradually started spreading to other joints including nape of neck and bilateral shoulder joints with restricted movement of neck associated with pain. The increased pain woke him at night and morning stiffness lasting more than half hour to one hour was present. It relieved after slight movements and exercise. Complain of pain in bilateral flank region made the patient difficult to take lateral movements while sleeping. Pain and swelling over left knee joint was reported after third day of admission. As per clinical presentation, patient

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was diagnosed to be an acute case of AS. On Examination, he had moderate appetite, *vishmagni* ~ unstable digestive functions, *krurkoshta* ~ hard stools with regular micturition. Tongue was slightly coated. Patient is *Vatapitta prakriti* with *Madhyam* ~ medium, *Sara* ~ purest body tissue, *Madhyam Samhanana* ~ medium body built, *Sama Pramana* ~ normal body proportion, *Madhyam Satmya* ~ homologation, *Pravara Satva* ~ mental strength, *Avara Vyayamshakti* ~ least capability to carry on physical activities, *Madhyam Aharshakti* and *Jaranshakti* ~ medium food intake and digestive power. *Asthivaha Srotodusti* ~ pathology in bone. Other examinations- Chest expansion was normal 2.7cm with Schober’s test positive (18cm) on forward bending, tenderness over coccyx region and tenderness along the 10th ribs bilaterally with no difficulty in breathing. X-ray of vertebral column showed no fusion of vertebral bodies and other associated areas. X-ray of Sacroiliac joints showed minimal changes (single erosions and periarticular sclerosis involving small area of iliac or sacral bone).

Hematological investigations

As on 2/10/2020 hemoglobin(*Hb*) - 13.2 gm%, total leukocyte count – 10,800 Cells/CMM, Erythrocyte sedimentation rate (*ESR*) - 70 mm/hr and C-reactive protein was positive.

Diagnostic Focus and assessment

On the basis of patient’s complaints like continuous low back pain with restricted forward bending, pain in nape of neck with restricted range of movements associated with morning stiffness, these symptoms can be compared with symptoms of *Gambhera Vatarakta*, *Amavata* and *Ashti-majjagata Vata* as per *Ayurvedic* perspective. On Scrupulous observation, most of the features imitated the lakshanas of *Gambhira Vatarakta* such as *svayathuh* ~ edema in the involved parts of the body, *stabdhaḥ* ~ stiffness of joints, *kaṭhinontarbhysartiman* ~ hardness of the part, severe pain inside (4). Hence the case was diagnosed as *Gambhera Vatarakta* and patient was admitted for treatment with Classical *Panchakarma* procedures. Changes observed during the course of treatment were assessed and compared using standard parameter scales BASDAI, BASFI, BASMI, NRS with numerical scale value of 0-10 on two interval, before and after the treatment.

Therapeutical Intervention

Patient was admitted to In-Patient department of *Panchakarma* for Classical *Panchakarma* procedures like *Parisheka* ~ Pouring medicated water over body, *Abhynaga* ~ Massage, *Vaitrana basti*, *Upnaha* ~ Poultice, *Jalaukavcharan* ~ Leech Therapy, *Pichu bandan* ~ Poultice along with certain oral medicines for *deepan pachan* ~ Appetite enhancer shown in table below.

Table 1: Treatment protocol

S.No.	Internal Medication	Duration
1	<i>Chitrakadi Vati</i> (500mg) 2tab - 0-2tab (Before Food)	1/10/2020 - 5/10/2020
	External Intervention	
1	<i>Sarvanga Parisheka with Dashmoola Kashaya</i>	1/10/2020 – 3/10/2020
2	<i>Sarvanga Abhyanga with Mahavishgarbha taila + Jambheera Pinda Swedana</i>	4/10/2020 – 9/10/2020
3	<i>Kati Upnaha and janu upnaha (kolakulathadi choorna + godhuma+ saindhav+ Mahavishgarbha taila+ Dashmoola Kashaya)</i>	4/10/2020 – 9/10/2020
4	<i>Pichu Bandhan to Coccyx region with Mahavishgarbha taila</i>	1/10/2020 – 6/10/2020
5	<i>Vaitrana Basti</i>	1/10/2020 – 9/10/2020
6	<i>Jalaukavcharan</i>	7/10/2020
7	<i>Yoga and Physiotherapy exercises</i>	1/10/2020 – 9/10/2020

Table 2: Ingredients of Vaitrana Basti(5)

<i>Vaitrana basti</i>	
<i>Anuvasan basti</i>	<i>Dhanvantaram taila</i> – 80ml
<i>Niruha Basti</i>	<i>Guda</i> -24gm <i>Saindava</i> -10gm <i>Sneha (Sahacharadi Taila)</i> -50ml <i>Chincha</i> -50ml <i>Gomutra</i> -200ml

Day	1st	2rd	3th	4th	5th	6th	7th	8th	9th
Type of Basti	A	N	N	N	N	N	N	A	A
		A	A	A	A	A	A		

A – *Anuvasana Basti*, N – *Niruha Basti*

Follow up and Outcomes

During the course of treatment patient pain and stiffness was reduced so patient had sound sleep. Until the time of discharge, patient got 70% relief in back pain. Tenderness over coccyx region was relieved completely after 6 days of treatment. Stiffness and Range of Movement of neck joint was improved by 60% along with reduction on stiffness and pain. Before and after assessment of various parameters is mentioned in table below.

Table 3: Assessment criteria

Domain	Instrument	BT	AT	Percentage relief
Function	BASFI	8.1	4.9	39.5
Pain	NRS	10	3	70
Spinal Mobility	BASMI	7.1	4.6	35.21
Patient Global	NRS	9	3	66.66
Stiffness	NRS	10	4	60
Acute phase reactants	ESR	70	40	42.85
Fatigue	BASDAI	7.3	3.5	52.05

BASDAI= Bath Ankylosing Spondylitis Disease Activity Index, *BASFI*= Bath Ankylosing Spondylitis Function Index, *BASMI*= Bath Ankylosing Spondylitis Disease Metrology Index, *ESR*= Erythrocyte sedimentation rate, *NRS*= Numerical rating scale 0-10, *BT* = Before treatment, *AT*= after treatment.

Patient was called for follow up after 18 days of *Parihaarakala* ~ Resting Period, on follow up patient was not having any complain of pain, slight morning stiffness in nape of neck which was relieved after doing morning exercise overall patients daily routine activity was improved.

Discussion

The symptoms of Ankylosing Spondylitis can be compared with the lakshanas mentioned for the *Gambhira Vatarakta* such as *svayathuh*, *stabdhah*, *kathinontarbhysartiman* and on the basis of *Sama* and *Niram avastha* ~ Stage of *vyadhi* ~ Disease treatment protocol for the patient was planned accordingly. Initially due to *Sama Avastha*, *Rookshan chikitsa* with *Parisheka* was applied following which patient got 70% relief in back pain. Tenderness over coccyx region was relieved completely after 6 days. Stiffness and Range of Movement of neck joint was improved by 60% after 7-8 days of treatment and after single sitting of *Jalaukavcharan* patient got instant relief in stiffness of neck and pain also subsided. The following is the probable mode of action of the intervention carried out over the patient.

Deepan and pachan chikitsa

Chitrakadi vati Because of its *Laghu*, *Tikshna*, *Ruksha Gunas* and *Katu*, *Tikta - Rasa* (dominant with *Agni*, *Vayu* and *Akasha Mahabhuta*) it subsides the aggravated *Kapha*. While, by *Usna Virya* and *Tikshna*, *Snigdha Guna* it counteracts *Vata*.

Seka chikitsa(6)

Parisheka in this *Dashmoola* drugs are boiled in water and the resultant *kashaya* is poured over the body till *samyak swin lakshan* are observed this treatment modality is applied in *vata dosha* or *vata kapha dosa* dominant conditions.

Upanaha Chikitsa(7)

This is a modality of *lepa* done in cases of *Sotha* and *kaphavata* involvement. *Kolakulathadi choorna* mixed with *Godhuma* ~ Wheatflour, *haridra* ~ Turmeric, *Saindhav* ~ Rock Salt, *Mahavishgarbha taila(8)* and *Dashmoola Kashaya* as a paste was made and tied over back region for minimum 6-7hr.

Jambeera pinda swedan

A type of *Sankara sweda*. Mainly applied in *Vata-kapha* predominant conditions. It is *Sophahara* ~ Anti Inflammatory, *Rooksha* & *Theekshna*. It leads to the relief in stiffness and pain.

Jalaukavcharan(9)

As increased *Vata* is obstructed by *Dushita Rakta* ~ Impure Blood leading to *Vatarakta* for *Sthanika dosha chikitsa*, *jalauka* was applied over nape of neck. As when *jalauka* sucks the blood then it releases *Hirudin*, *Celin*, *Histamine* in blood stream as *histamine* has anti-inflammatory action which leads to improved Range of Movement and stiffness was also relieved.

Vaitrana Basti(10)

Ingredients of *Vaitrana basti* mainly possess *deepan*, *pachana*, *ushna*, *sukshma*, *laghu*, *teekshna* and *lekshana gunas*. These *gunas* help to alleviate *ama* and *vata* in the body. As indicated in *Soola*, *Amavata*, *Sopha of Kati Uru*, *Prushtha* etc. *Gomutra*, chief content of *basti* helpful to reduce the *shotha* and *ruja*. *Basti* helps in *Srotovishodhana* thereby decreasing the *Srotobhishyandana* which intern leads to *Vatanulomana* because of removal of obstruction and finally expels *ama* and *kapha vata* out of the body.

Yoga Pranayam and Physiotherapy

As morning stiffness and restricted movement are cardinal features of AS which get improved by regular exercises so patient was advised for daily *Yoga* practice and *Physiotherapy* exercises post which morning stiffness was relieved early in the morning with better ROM.

Conclusion

As this is an incurable Rheumatic Disorder and no Satisfactory treatment is available in modern medicine for this disorder, it can be better managed by a combination of oral medication and *Panchakarma* procedures for relieving sign and symptoms and providing best comfort to patient by reducing the severity of disability. Hence, this kind of approach may be taken into consideration for further treatment and research work for AS.

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