# MANAGEMENT OF ANKYLOSING SPONDYLITIS THROUGH AYURVEDIC MODALITIES W.S.R. GAMBHIR VATARAKTA: A CASE STUDY,

# Corresponding <u>Author-singla.raja37@gmail.com</u>

# Dr Raja Singla

Associate Professor, PG Department of Panchkarma, Institute For Ayurved Studies And Research, SKAU, Kurukshetra (Haryana)

### **ABSTRACT**

Ankylosing Spondylitis is characterized by chronic inflammatory arthritis predominantly affecting the sacroiliac joints and spine which can progress to bony fusion of the spine<sup>(1)</sup>. Chronic back pain and progressive spinal stiffness are the most common features of the disease. Symptoms are exacerbated by inactivity and relieved by rest. Ankylosing spondylitis cannot be directly correlated with any particular disease in Ayurveda. However, on the basis of symptoms of disease, it can be correlated with *Gambhir Vatarakta*. In this article attempt is made to understand the Ankylosing spondylitis and its treatment in *Ayurveda* by *Panchkarma* procedure like *Kala Basti* and some internal medications to relieve the symptoms of *Gambhir Vatarakta*.

**KEYWORDS**: Ankylosing spondylitis, Kala Basti, Gambhir Vatarakta, Panchkarma

#### 1. INTRODUCTION:

Ankylosing Spondylitis is characterized by chronic inflammatory arthritis predominantly affecting the sacroiliac joints and spine which can progress to bony fusion

<sup>\*</sup>Dr.S.BELWIN JOEL, Dr.ARVIND PRASAD, Dr.WINSTON DUNN, \*\*\*\*Dr.WINSTON DUNN

<sup>\*1</sup> Associate Professor, PG Department of Panchkarma, Institute For Ayurved Studies And Research, SKAU, Kurukshetra (Haryana)

<sup>\*2</sup> PG Scholar, PG Department of Panchkarma, Institute For Ayurved Studies And Research, SKAU, Kurukshetra (Haryana)

<sup>\*3</sup>Associate Professor, PG Department of Swasthvritta, Institute For Ayurved Studies And Research, SKAU, Kurukshetra (Haryana)

<sup>\*4</sup> Assistant Professor, Department of Research & Innovation, Shri Krishna Ayush University, SKAU, Kurukshetra (Haryana)

of the spine. (1) Chronic back pain and progressive spinal stiffness are the most common features of the disease. Prevalence of Ankylosing spondylitis in Asia is approx. 16 to 17 persons per 10,000 and male to female ratio is about 3:1<sup>(2)</sup>. Ankylosing Spondylitis arise from interaction between environment pathogens and host immune system in genetically susceptible individuals. The cardinal features of Ankylosing Spondylitis are inflammatory low back ache radiating to buttocks and posterior thigh with early morning stiffness. Symptoms are exacerbated by inactivity and relieved by movement. Extra articular features includes fatigue, anemia, anterior uveitis, prostatitis, inflammatory bowel syndrome, osteoporosis, cardiovascular diseases. Ankylosing spondylitis evolves slowly with fluctuating symptoms and ankylosis i.e. fusion of vertebrae develops in many patients over a period of time. Physical signs includes reduced range of movement of lumber spine in all directions and pain on sacroiliac stressing. Diagnosis of Ankylosing spondylitis typically involves a combination of medical history, physical examination, blood tests (to check inflammation markers like C-reactive protein), imaging tests such as X-ray to detect inflammation and structural changes in spine and joints. More than 90% of those affected are HLA B-27 positive. (3)

The exact sign and symptoms of the Ankylosing spondylitis does not resemble with any particular disease in *Ayurveda*. However on the basis of clinical presentation of the disease, it can be correlated with classical symptoms of *Gambhir Vatarakta*<sup>(4)</sup> like *Sandhi Shoth* ( Joint inflammation) , *Stabdhta* (joint stiffness) , *Dhah* (warmth) , *Kathinyata* (limited joint movement) , *Abhyantra sandhi peda* (joint tenderness) , *Toda* (throbbing pain) in *Kati* (Pelvic region), *Pristha* (Posterior region of trunk from neck upto pelvis), *Trik* (shoulder girdle). These all symptoms are indicative of presence of excessive *Vata* and *Rakta doshas* in the body.

*Basti* is the only *panchkarma* procedures which is very effective in managing *Vata* doshas.<sup>(5)</sup> In this case, *Panchkarma procedures* along with *ayurvedic* internal medication were used for treatment of Ankylosing spondylitis.

#### 2. SAMPRAPTI GHATAKA

Dosha – Vata Pradhan tridosha

Dushya – Rakta, Asthi, Majja

Srotasa –Rasavaha, Raktavaha, Asthivaha, Majjavaha

Srotodusti –Sanga

Adhishthan-Rakta, Asthi, Majja

Agni –Dhatwaagni

Sadhyasadhyata –Krichasadhya

#### 3. CASE REPORT

A 31 years old male patient resident Piloda, Rajasthan came to the *Panchkarma* Department of Institute of Ayurvedic Studies and Research, SKAU, Kurukshetra on 11 March 2024 with complaints of low back ache and pain in right leg on anterior aspect with mild early morning stiffness since 1.5 year. Extra articular symptom include blurring of vision. Patient was already diagnosed with Ankylosing spondylitis with HLAB-27 positive.

#### 3.1 PREVIOUS HISTORY WITH FAMILY HISTORY

The patient is known case of Ankylosing spondylitis since last 1.5 year and taking allopathic treatment.

Patient had taken NSAIDs and oral corticosteroid, but he doesn't get satisfactory results.

No history of any trauma, surgery and other severe illness, hypertension, diabetes mellitus, thyroid disorder, Cardiovascular and Respiratory diseases.

No specific family history found.

#### 3.2 PATIENT EXAMINATION:

#### 1. Dashavidha pariksha:

- ➤ Prakriti Vatapittaja
- ➤ Vikarti- Vata
- > Satva- Avar
- > Satmya- Sarva rasa
- ➤ Pramana Madhyama
- ➤ Vyayama shakti Madhyama
- ➤ Ahar shakti Madhyama

#### 2. Ashtavidha Pariksha:

- ➤ Nadi- Vatakaphaja
- ➤ Mutra Pitabha
- > Mala-Sama
- ➤ Jihwa Awarita

### 3.3 SYSTEMIC EXAMINATION

On examination, the patient is mild pallor and his vitals are within normal range as

BP- 122/84mm Hg

Pulse rate-88 per minute

Temperature-97.2F

Respiratory rate - 20 /min

Pallor – Mild

Appetite-Normal

Sleep-Normal

**Bowel-Constipated** 

Urine-Normal

No history of active bleeding per rectum or rectal prolapse

### 3.4 ASSESMENT CRITERIA:

Parameters	Severity of sign and symptoms	Score
1. Sandhitoda	No pain	0
(Pain)	Occasional pain (1 to 2 hours per day)	1
	Mild pain (no difficulty in walking)	2
	Moderate pain (slightly difficulty in walking)	3
	Severe pain (severe difficulty in walking)	4
2. Stabdhta	No stiffness	0
(Stiffness)	Stiffness lasting for 20 min to 2 hours	1
	Stiffness lasting for 2 to 5hours	2
	Stiffness lasting for 5to 8 hours	3

	More than 8 hours	4
3. Abhyantar-	No tenderness	0
sandhi	Occasional tenderness	1
pida (Joint	Mild tenderness	2
tenderness)	Moderate tenderness	3
	Severe tenderness	4
4. SLR	Up to >90°	0
	71-900	1
	51-700	2
	31-500	3
	<300	4

### 3.5 PHYSICAL EXAMINATION

S.no	Examination	Right	Left
1.	SLR	Negative	600
2.	Pump handle test	Positive	Positive
3.	Faber's test	Positive	Positive
4.	Gaenslen test	Positive	Positive

### 3.6 INVESTIGATIONS

**Hb-**11.5gm

ESR-25mm/hr

CRP-26.1mg/L

**HLA-B27**- Positive

### 3.7 MRI FINDINGS

Irregularity of articular margins with marrow edema of sacral and iliac aspects of left SI joint seen s/o inflammatory left sacroilitis.

### 4. TREATMENT PROTOCOL

In accordance with the signs and severity of symptoms, the definitive treatment protocol has been planned.

## 4.1 SHAMANA CHIKITSA (Duration-16days):

S.No.	MEDICATION	DOSE
1.	Kaishore Gugullu <sup>(6)</sup>	2 TDS
2.	Giloy Satva	125mg BD
3.	Praval Pisthi	125mg BD
4.	Vatavidhwansana Ras	1 BD
5.	Guduchyadi Kashayam <sup>(7)</sup>	15ml TDS

### 4.2 SHODHANA CHIKITSA:

S.No.	TREATMENT	DURATION	
1.	Churan Pinda Swedan <sup>(8)</sup>	14 days	
2.	Kala Basti <sup>(9)</sup>	16 days	
	A) Anuvasan Basti	10days	
	<b>B)</b> Niruha Basti	6 days	

### 4.3 PANCHKARMA PROCEDURE:

1. Anuvasana Basti	Murchita Til Tailam
2. Niruha Basti	Guduchyadi Niruha Basti <sup>(10)</sup>

### **4.4 BASTI ADMINISTRATION:**

1 <sup>s</sup>	2 <sup>n</sup>	3 <sup>r</sup>	4 <sup>t</sup>	5 <sup>t</sup>	6 <sup>t</sup>	7 <sup>t</sup> h	8 <sup>t</sup>	9 <sup>t</sup> h	10 th	11 th	12 th	13 th	14 th	15 th	16 th
A	A	A	N	A	N	A	N	A	N	A	N	A	N	A	A

### **4.5 FOLLOW UP AND OUTCOMES:**

The treatment was continued for 16 days with a follow-up on 0<sup>th</sup>, 8<sup>th</sup>, and 16<sup>th</sup>. The changes observed at regular interval shown in the table below:

Parameters	Score	BT (0 <sup>th</sup> day)	AT(8 <sup>th</sup> day)	AT(16 <sup>th</sup> day)
1. Sandhitoda	0-4	4	3	1
(Pain)				
2. Stabdhta	0-4	2	1	0
(Stiffness)				
3. Abhyantar-	0-4	3	3	1
sandhi pida				
(Joint				
tenderness)				
4. SLR	0-4	4	3	2

### **Objective parameters:**

S.no	Examination	Left leg
1.	Pump handle test	Negative
2.	Faber's test	Positive
3.	Gaenslen test	Negative

### 5. Discussion:

In Ayurveda, Ankylosing spondylitis is compared with *Gambhir vatarakta*. The pathophysiology of *vatarakta* is very unique as there is *dusti* of *vata* and *rakta doshas* simultaneously.

Vatarakta is caused by Vataprakopaka and Raktaprakopaka hetu. Due to hetu sevan, there is Vimarag gaman of vata dosha and elevates sara & tikshan guna of rakta dosha. Both dosha take sthanasanshraya in sandhi sthana and leads to reduction in Shaleshmak kapha. This lastly result in the symptoms of Gambhir vatarakta.

In classical texts, Basti is mentioned treatment for vatarakta. Basti is a versatile therapy with multiple benefits, serving not only to eliminate and alleviate doshas but also to nourish and rejuvenate the dhatus.

In this study, *Guduchyadi Niruha Basti* was selected for Ankylosing spondylitis because this possess properties like *Tikta rasa*, *Madhura vipaka*, *Sheeta virya*.

Tikta rasa and sheeta viryata helps in reducing the sarpata and tikshanta of rakta and madhura vipaka alleviates the vata doshas.

Tinosporine, a natural compound, possesses analgesic and anti-inflammatory properties. *Guduchi*, with its predominant bitter taste (*Tikta Rasa*) and cooling properties (*Sheeta Guna*), aids in alleviating blood impurities (*Raktadushti*).

*Giloy* possesses *Kashaya*, *Katu*, and *Tikta* qualities, which aid in its effective absorption within the body. Enriched with *Laghu* and *Snigdha* properties, it nourishes the *Dhatus* and helps in balancing *Pitta Dosha* when administered in the appropriate formulation.

Churna Pinda Sweda is a form of Ruksha Shankara Sweda, characterized by its Ruksha Ushna. This Swedana Karma, or therapeutic sweating treatment, utilizes heat to promote vasodilation, reduce fluid viscosity, alter nerve conduction, and increase metabolic activity. It is commonly used in rehabilitation to enhance collagen tissue extensibility, reduce joint stiffness, alleviate pain, relieve muscle spasms, and decrease inflammation and heaviness in the body. The Ushna quality of Swedana stimulates the sympathetic nervous system, causing vasodilation and increased circulation of Rasa and Rakta throughout the body. Additionally, due to the Sara and Ushna properties of Swedana Dravya, stagnant Doshas in the body are liquefied and expelled through the skin's sweat glands

Medicines like *Kaishore Guggulu* are chosen for their unique *Rasayana* (rejuvenating) properties, particularly due to their ability to enhance blood circulation. The primary ingredients, such as *Guduchi*, *Triphala*, and *Trikatu*, when combined with *Guggulu*, create

a powerful detoxifying and rejuvenating blend with *Vatahara* (Vata-balancing) qualities. This combination supports the body's overall detoxification and rejuvenation processes.

*Vatavidhvansa Ras* is well established medicine to control vitiation of *Vata dosha* thereby it reduces pain, swelling, stiffness, tenderness at joints.

### 6. CONCLUSION:

The Ayurvedic diagnosis of *Gambhir vatarakta* is made for Ankylosing spondylitis. Various internal medication and *Panchkarma* procedures like *Kala basti* and *churan pinda swedan* have provided promising result in reducing pain and stiffness. This study shows that patient can attain quality of life with the help of Ayurvedic modalities.

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