



Review Article

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ROLE OF PANCHAKARMA IN THE MANAGEMENT OF ANKYLOSING SPONDYLITIS: A REVIEW

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ABSTRACT

Ankylosing spondylitis is an auto immune, systemic rheumatic disease, meaning it affects the entire body. A type of arthritis in which there is long term inflammation of the joints of the spine. Typically, the joints where the spine joins the pelvis are affected. Occasionally other joints such as the shoulders or hips are involved. Modern science has very limited option to treat Ankylosing spondylitis. So there is a growing interest towards Ayurvedic system of medicine for the treatment of Ankylosing spondylitis. Panchakarma procedures like Virechana, Basti, Nasya, etc play a significant role in the management of Ankylosing spondylitis. Hence this article highlights the importance of Panchakarma in the management of Ankylosing spondylitis.

Keywords: Ankylosing Spondylitis, Gambhira Vatarakta, Panchakarma

INTRODUCTION

Ankylosing spondylitis is an auto immune, chronic inflammatory arthritis with a predilection for the sacroiliac joints and spine. Ankylosing spondylitis is a gradually progressive condition characterised by progressive stiffening and fusion of axial skeleton. The extra-articular structures are also frequently involved¹. It is more common among males than females; the ratio is 4:1. The presence of the HLA-B27 gene is seen among 90% people with Ankylosing spondylitis. It commonly occurs among younger people between ages 17 and 45. It can affect children and elderly.² The rate of Ankylosing spondylitis in Asia is 16.7 per 10,000 people. Its aetiology and pathogenesis are not yet fully understood. The presentation of Gambhira Vatarakta reveals that most of the features of Ankylosing Spondylitis mimic's the Lakshanas of Gambhira Vatarakta. So, Ankylosing spondylitis can be managed by adopting various Panchakarma procedures.

Ankylosing Spondylitis

Causes

The tendency to develop Ankylosing Spondylitis is believed to be genetically inherited, i.e. about 90% of people with Ankylosing Spondylitis are HLAB27 positive and with these the environmental pathogens also play an important role in developing Ankylosing Spondylitis.²

Pathology

Early in the process, there is inflammatory granulation tissue at the junction of annulus fibrosus and vertebral bone, leading to erosion of outer annular fibers; they are eventually replaced by bony formation i.e. the bony syndesmophytes, the growth is continued by causing endochondral ossification i.e. bridging of adjacent vertebral bodies. The Ascending progression of this process leads to Bamboo Spine.²

Clinical Features

Ankylosing Spondylitis is a gradually progressive condition over several years. The initial symptoms is usually dull pain, insidious in onset, felt deep in the lower lumbar or gluteal region, accompanied by morning stiffness that improves with activity and returns following inactivity. Nocturnal exacerbation of pain that forces patient to rise and move around may be frequent. Bony tenderness (Enthesitis) may accompany back pain and stiffness or may be a predominant complaint, usually asymmetric and can occur at any stage of the disease. As the disease progresses, loss of spinal mobility, with limitation of anterior and lateral flexion and extension of the lumbar spine and of chest expansion is noted. The disease tends to ascend the spine slowly and eventually after several years, the whole spine may be affected, also causes extra-articular symptoms, peripheral arthritis and reduced quality of life.

Diagnostic Criteria

Table 1: Diagnostic criteria of Ankylosing Spondylitis

Modified New York criteria (1984)	
Criteria	
Low back pain at least 3 months duration improved by exercise and not relieved by rest.	
Limitation of lumbar Spine in Sagittal and frontal planes	
Chest expansion decreased relative to normal values for age and sex	
Bilateral Sacroiliitis grade 2 to 4	
Unilateral Sacroiliitis grade 3 to 4	
Definite Ankylosing Spondylitis	
Unilateral grade 3 or 4, or bilateral grade 2 to 4 Sacroiliitis and any clinical criterion. ²	

Management

Treatment includes medication, exercise and surgery. NSAIDs and analgesics are often effective in relieving symptoms but do not alter the course of the disease.²

Ankylosing Spondylitis in Ayurveda

Ankylosing spondylitis can be correlated to Gambhira Vatarakta. All features of Gambhira Vatarakta may not mimic the features of Ankylosing Spondylitis. In Gambhira Vatarakta there will be

involvement of Mamsa, Asthi, Sira Snayu, in later stages of the disease there will be formation of deformities.³ Generally people who are Sukumara, who consume Mishthaanna Bhojana, Sukha Bhojana (sedentary life style) with Nidana like increased intake of Lavana, Amla, Katu, Kshara, Asnigdha, Ushna, Ajeerna Bhojana, Dadhi, Kulatha, Viruddha Ahara, Adhyashana and one who do not undergo proper Shodhana will lead to Rakta Dushti. Simultaneously increased Vata Dosha due to Ati Yaana, Vegadharana etc reasons, it gets obstructed by Dushita Rakta hence leading to Vatarakta⁴.

Table 2: Probable co-relation of features of Gambhira Vatarakta with ankylosing spondylitis

Gambhira Vatarakta	Ankylosing Spondylitis
Stabdatha (Stiffness)	Morning stiffness and stiffness. Common sites: Cost sternal junction, spinous process, Ischial tuberosities, heels etc.
Toda / Ruk (Pain)	Pain in low back, Cost sternal junction, spinous process, Ischial tuberosities, heels etc.
Atyanta-Vaikruta (Deformities)	Kyphosis, lordosis
Antar Bhrusha Arti (excruciating pain)	Nocturnal exacerbation of pain that forces patient to rise and move around may be frequent

Hence, the line of management of Gambhira Vatarakta has to be adopted.

Role of Panchakarma

1. Deepana and Pachana

It is carried out as Purva Karma to Shodhana Chikitsa for Ama Pachana and Agni Deepana with Tikta, Katu Rasa and Ruksha Guna Pradhana drugs according to Rogi and Roga Bala.

Table 3: Deepana and Pachana Dravya, Dose and Anupana

Dosha	Dravya	Dose	Anupana
Vataja	Ajmodadi Choorna	3 – 6 grams before food	Ushna Jala
Pittaja	1. Jeerakadi Choorna	3 – 6 grams before food	Honey / Ushna Jala Honey /Ushna Jala
	2. Drakshadi Choorna	3 to 6 grams before food	
Kaphaja	1. Hinguwashtaka Choorna	3 to 6 grams TID before food	Ushna Jala
	2. Lavana Bhaskara Choorna		
	3. Agnitundi Vati		
	4. Chitrakadi Vati		

2. Swedana

In Ama Avastha (Aruchi, Gaurava) if Stambha, Shoola are present then Ruksha Sweda should be the first line of management.

Table 4: Ruksha Sweda and drugs used

S. No.	Ruksha Sweda	Drugs
1.	Parisheka	Dhanyamala, Dashmoola Kashaya
2.	Choorna Pinda Sweda	Kolakulathadi Choorna, Triphala Choorna

In Nirama Avastha, if Stambha, Shoola, Shotha are present then Snigdha Sweda should be done.

Table 5: Snigdha Sweda and its mode of action

Snigdha Sweda	Mode of action
Patra Pinda Sweda	Vatahara, Shoolahara
Jambira Pinda Sweda	Vatakaphahara, Shoolahara
Kukutanda Sweda	Balya, Stambha hara
Prushta Basti	Shoolahara, Sthanika Chikitsa
Shastika Shali Pinda Sweda	Bhrumhana, Vatahara, Balya

3. Snehana

Both Shodhananga Sneha as well as Shamananga Sneha was indicated in Vatarakta. As Poorva Karma to Virechana, patient is subjected to Shodhananga Sneha.

Table 6: Dosh predominant and Sneha

Dosha predominant	Sneha
Vata Pradhana Vatarakta	Shadhphala Ghrita, Madhuyashtyadi Ghrita, Dhanvantara Ghrita
Pitta Pradhana Vatarakta	Mahatiktaka Ghrita, Panchatiktaka Ghrita, Shatavari Ghrita
Kapha Pradhana Vatarakta	Guggulu Tiktaka Ghrita, Madhuyashtyadi Taila, Guduchyadi Ghrita

4. Virechana

Table 7: Virechana Dravyas, Anupana and Dosage

Virechana Dravya	Anupana	Dosage
Mridu Virechana with 1. Eranda Taila 2. Amruta + Eranda Taila ²	Ksheera / Ushna Jala. For 3 days	Nitya Virechana – 10-15 ml at night
Sneha Purva Shodhana Trivita lehya	Draksha Kashaya	40-60 grams

5. Basti

Vatarakta is better treated by Basti Chikitsa.⁵ In case of all types of Vatarakta, especially in Vata Pradhana Vatarakta, Ksheera Basti or Guduchyadi Ksheera Basti is advised⁶.

Anuvasana Basti

Table 8: Drugs used in Anuvasana Basti

Ghrita/taila	Gunas
Panchatikta Ghrita	Tikta Rasa, Katu Vipaka, Sheeta -Virya, Ruksha Guna Pradhana, Vatapitta hara
Madhuyashtyadi Taila	Madhura Rasa, Madhura Vipaka, Sheeta Virya, Pittahara
Balaguduchyadi Taila	Madhura Tikta Rasa Pradhana, Madhura Vipaka, Sheeta Virya, Vatapitta hara
Shatavari Ghrita	Madhura Rasa, Sheeta-Virya, Madhura-Vipaka, Pittahara
Sukumara Ghrita	Kashaya Madhura, Tikta-Rasa, Katu-Vipaka, Ushna -Virya, Ruksha and Laghu Guna, Vata Pittahara

Niruha Basti

Table 9: Niruha Basti in Ankylosing Spondylitis

Basti	Contents	Basti Kala
Ksheera Basti Panchatikta Ksheera Basti	Madhu - 50 ml, Saindhava - 10 grams, Panchatikta Guggulu Ghrita – 80 ml Shatpushpa Kalka – 30 grams, Dashmoola Kashaya – 250 ml Go Ksheera - 250 ml	Yoga Basti or Kala Basti
Guduchyadi Yapana Basti	Madhu – 50 ml, Yashtimadhu Taila - 100 ml Putoyavanyadi Kalka – 10 grams, Guduchi Siddha Ksheera Paka - 500 ml	Yoga Basti or Kala Basti Yoga Basti or Kala Basti
Ardhamatrika Basti	Madhu – 2 Pala, Saindhava Lavana – 1 Karsha Sneha – 2 Pala, Shatpushpa Kalka – 1 Karsha Dashmoola Kashaya - Madanphala - 1	Yoga Basti or Kala Basti
Mustadi Yapana Basti	Madhu - 25 ml, Saindhava Lavana: 5 g, Ashwagandha Taila: 50 ml Panchatikta Ghrita 25 ml, Ksheerpaka of Mustadi Yapana Basti Kwath Choorna: 300 ml Mamsa Rasa (goat femur bone marrow): 50 ml	Kala Basti

6. Nasya

After Parihara Kala of Basti, Nasya Karma has to be adopted. Karpasasthyadi Taila, Anutaila or Shatbindu Taila can be used for Nasya. Dose is 4 Bindu each nostril for 7 days. Nasya helps in

alleviating the diseases above Supraclavicular region such as Greeva Stambha (stiffness of neck) and Hanugraha (stiffness of jaw).

7. Raktamokshana

Prior to Rakta Mokshana certain measures like Snehana, Mridu Virechana and Basti should be followed. In Gambhira Vatarakta Siravyadha is indicated. Raktamokshana by the Jalaukavacarana method is preferred if the affected site exhibits symptoms like Daha and Shoola .

8. Bahirparimarjana Chikitsa

It is the external purificatory measures like Abhyanga, Sweda and Lepa etc. ⁷

Table 10: Bahirparimarjana Chikitsa

Chikitsa	Drugs used
Avagaha	Dashmoola Kashaya, Guduchi Kashaya
Lepa	1. Dashanga Lepa 2. Triphala Lepa 3. Saindhava Lavana + Eranda Taila + Marma Gulika
Abhyanga	Madhuyashtyadi Taila, Murchita Tila Taila

9. Guduchi Prayoga

Guduchi in the form of Swarasa, Kalka, Choorna, Kwatha can be administered in Vatarakta⁸ Guduchi should administered with Guda in conditions of Vata, with Sita in conditions of Pitta, with Madhu in conditions of Kapha. In severe condition it should be administered with Eranda Taila.⁹

DISCUSSION

Cardinal features of Ankylosing spondylitis are stiffness, deformity and restricted range of movement. When stiffness is produced due to Vata which may be associated with Ama or Kapha, the Ruksha therapies are adopted like Ruksha Pottali Sweda, Dashmoola Kashaya Seka, Dhanyamala Dhara and Alepa. After Rukshana and in Nirama Avastha, Shodhananga and Shamananga Sneha can be adopted. Mridu Virechana prevents the aggravation of Vata in the Vatarakta. Either classical Virechana or Mridu Shodhana for 3 days can be adopted. Snigdha Virechana reduces the Stabdhatta and as the axial skeleton is mainly involved it is a Madhya Sharira Vata Vyadhi, Virechana is the choice of treatment. Tikta nourishes the Asthi as its Ruksha and when it is given with Eranda Taila or Ghrita it causes Shamana of Vata. Tikta Rasa is the best for treating at the Dhatwagni level, specifically for Asthi dhatu, so Amruta is the choice of drug. Amruta acts as Rasayana, its Balya and Deepaniya. Tikta Ksheera Bastis are best in the Asthiashrutha Vyadhi.

CONCLUSION

Ankylosing Spondylitis is not mentioned as separate entity in the Ayurvedic classical texts. But considering the symptoms and the cause, disease can be approached with the concept of Gambhira Vatarakta. After assessing the associative Doshas and Ama status if any; the Shodhana should be planned according to the Avastha, along with administration of Shamana Aushadhis and Pathya.

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