



Review Article

A CONCEPTUAL STUDY ON PANCHAKARMA APPROACH IN THE MANAGEMENT OF ANKYLOSING SPONDYLITIS

Shreyas D M^{1*}, Kiran. M.Goud², Vinaykumar.K.N³, Swathi Deshpande⁴

*¹PG Scholar, ²Professor, ³Reader, ⁴Professor & HOD, Department of PG studies in Panchakarma, SKAMCH&RC, Vijaynagar, Bangalore, Karnataka, India.

ABSTRACT

Ankylosing spondylitis is characterized by a chronic inflammatory arthritis predominantly affecting the sacro-iliac joints and spine, which can progress to bony fusion of the spine. The onset is typically between the ages of 20-30, with male preponderance of about 3:1. The main symptoms like musculoskeletal pain, stiffness and decreased range of movements in the spine. Modern science has very limited options to treat Ankylosing spondylitis. So, the necessity of management through *Ayurveda* is very much essential. Various disease entities like *Amavata*, *Gambhira Vatarakta*, *Asthimajjagata vata* can be considered under the spectrum of Ankylosing Spondylitis. By understanding the symptoms of Ankylosing Spondylitis, the pathology pertaining to the Ankylosing Spondylitis can be considered under the *Sama* and *Nirama avastha*. A thorough differentiation of *Sama* and *Nirama avastha* of Ankylosing spondylitis (*Gambhira Vatarakta*) has to be done based on the same, *Panchakarma* procedures are to be adopted. Among various modalities of treatments, *Panchakarma* can be the better option to treat this condition. Hence, a conceptual study was taken up to develop an approach through *Panchakarma* modalities in the management of Ankylosing Spondylitis.

KEYWORDS: Ankylosing Spondylitis, *Gambhira Vatarakta*, *Sama*, *Nirama*.

INTRODUCTION

Ankylosing Spondylitis (AS) is characterized by a chronic inflammatory arthritis predominantly affecting the sacroiliac joints and spine, which can progress to bony fusion of the spine [1]. The onset is typically between the ages of 20 to 30, with a male preponderance of about 3:1. Musculoskeletal pain, stiffness and decreased range of movements in the spine, bony tenderness at costo-sternal junctions, spinous process, iliac crests etc are the major symptoms of the Ankylosing Spondylitis. In Modern science, long-term use of non steroidal anti-inflammatory drugs (NSAIDs), physical activity, exercises, Anti Tumor Necrosis Factor (TNF) has been used for controlling the symptoms of Ankylosing Spondylitis. Traditional disease-modifying anti rheumatic drugs (DMARDs) used for Rheumatoid arthritis (RA) are not effective in the typical Ankylosing Spondylitis.

Ankylosing Spondylitis in *Ayurveda* is considered under various diseases where in pathology of Anylosing Spondylitis goes in favour of *Amavata*, *Gambhira Vatarakta*, *Asthimajjagata vata*. But meticulous observation into the presentation of *Gambhira Vatarakta* reveals that most of the features of Ankylosing Spondylitis mimic's the *Lakshanas* of *Gambhira Vatarakta*. Hence, the present paper emphasizes on the management of Ankylosing Spondylitis by adopting various *Panchakarma* procedures in *Gambhira Vatarakta*.

Causes and Pathogenesis

The tendency to develop Ankylosing Spondylitis is believed to be genetically inherited, i.e. about 90% of people with Ankylosing Spondylitis are HLA-B27 positive,

and with these the Environmental pathogens also play an important role in developing Ankylosing Spondylitis. Established patients of Ankylosing Spondylitis shows increased fecal carriage of *Klebsiella aerogenes* with increased joint and eye diseases. The wider alterations in the Human gut microbial environment increasingly implicated which could lead to increased levels of circulating cytokines such as IL-23 and hence activate the synovial T cells. The HLA-B27 molecule itself is implicated through antigen presenting function, these could trigger to inflammatory cytokine release by macrophages and dendritic cells thus triggering the inflammatory disease [2].

Clinical Features

► Initial symptoms

- Insidious onset of dull pain in the lower lumbar or gluteal region
- Low-back ache and early morning stiffness of few hours duration that improves with activity and returns following periods of inactivity.
- Pain usually becomes persistent and bilateral - Nocturnal exacerbation.
- Predominant complaint- Back pain or stiffness.
- Bony tenderness may present at- costosternal junctions, spinous processes, iliac crests, greater trochanters, ischial tuberosities, tibial tubercles, and heels.

► Late manifestations:

- Arthritis in the hips and shoulders.

- Arthritis of other peripheral joints: usually asymmetric.
- Pain tends to be persistent early in the disease and then becomes intermittent, with alternating exacerbations and quiescent periods. In a typical severe untreated case- the patient's posture undergoes characteristic changes, with obliterated lumbar lordosis, buttock atrophy, and accentuated thoracic kyphosis. There may be a forward stoop of the neck or flexion contractures at the hips, compensated by flexion at the knees.

Diagnosis

1. Inflammatory low back pain > 3 months (Age of onset < 40, Insidious onset, Duration longer than 3 months, Pain worse in the morning, Morning stiffness lasts longer than 30 minutes, Pain decreases with Exercise, Pain provoked by prolonged inactivity or lying down, Pain accompanied with constitutional Symptoms- Anorexia, Malaise, Low grade fever)
2. Limited motion of lumbar spine in sagittal & frontal planes
3. Limited chest expansion (<2.5cm at 4th ICS)
4. Definite radiologic sacro-ileitis.

Ayurvedic Understanding

Based on the clinical features of Ankylosing Spondylitis, it can be considered under the heading of *Gambhira Vatarakta*. Generally people who are *Sukumara*, *Misttaanna bojana*, *Sukha bhojana* (sedentary life style) with *Nidana* like increased intake of *Lavana*, *Amla*, *Katu*, *Kshara*, *Asnigdha*, *Ushna*, *Ajeerna Bojana*, *Dadhi*, *Kulathha*,

2. Vamana Karma

A) <i>Deepana and Pachana</i>	<i>Chitrakadi Vati</i> <i>Agnitundi Vati</i>
B) <i>Snehapana</i> (3 to 7 days)	<i>Bala Taila</i> or <i>Moorchitha Tila Taila</i>
C) <i>Vishrama Kala</i> (1 day)	<i>Kapha Uthkleshakara Ahara</i> <i>Abhyanga with Bruhat Sandivadi taila + Bashpa Sweda</i>
D) <i>Vamana Aushadha</i>	<i>Madanaphalapippali Yoga</i>
E) <i>Samsarjana karma</i> (3 to 7 days)	<i>Peyadi Krama</i>

The *Lakshanas* like *Vidaha*, *Vedena*, *Toda*, *Moorcha*, *Trishna*, *Raaga*, *Paaka* holds good with *Pitta pradhana Gambhira Vatarakta*^[5].

3. Virechana Karma

A) <i>Snehapana</i> (3 to 7 days)	<i>Maha Tikthaka Gritha</i> or <i>Guggulu tikthaka Gritha</i>
B) <i>Vishrama Kala</i> (3 day)	<i>Pitta Uthkleshakara Ahara</i> <i>Abhyanga with Brihat Saindivadi taila + Bashpa Sweda</i>
C) <i>Virechana Aushadha</i>	<i>Trivruth Avalehya</i> <i>Gandarva Hasthadi Taila</i>
D) <i>Samsarjana karma</i> (3 to 7 days)	<i>Peyadi Krama</i>

The *Lakshanas* like *Stabdhatta*, *Shoola*, *Thodha*, *Spurana*, *Shotha* holds good with *Vata pradhana Gambhira Vatarakta*^[6].

Viruddha Ahara, *Adhyashana*, and one who will not subject themselves for *Shodana*, will leads to *Raktha dusthi*. Simultaneously increased *Vata Dosha* due to *Ati yaana*, *Vegadharana*, etc reasons gets obstructed by *Dushitha Raktha* hence leading to *Vatarakta*^[3].

By understanding the symptoms of Ankylosing Spondylitis, the pathology pertaining to the Ankylosing Spondylitis can be considered under the *Sama* and *Nirama avastha*. Hence, even though the line of management of *Gambhira Vatarakta* has to be adopted. A thorough differentiation of *Sama* and *Nirama avastha* of Ankylosing spondylitis (*Gambhira Vatarakta*) has to be done based on the same, *Panchakarma* procedures are to be adopted.

Management in Sama avastha of Ankylosing spondylitis (Gambhira Vatarakta)

The initial Stages of Ankylosing Spondylitis (*Gambhira Vatarakta*) depicts with *Abhishyanna srotas*, *Bhuri Shleshma* and *Vishama agni* hence, *Rookshana* will be the First line of Management.

1. Rookshana

- A. *Alepa chikthsa*
- B. *Choorna pinda sweda*
- C. *Dashamoola qwatha pariseka*
- D. *Nirgundi Patra siddha qwatha pariseka*
- E. *Dhanyamla dhara*

The *Lakshanas* like *Sthaimitya*, *Gourava*, *Sneha*, *Supthir mandā cha ruk*, holds good with *Kapha pradhana Gambhira Vatarakta*^[4].

4. Basti Karma

A) Anuvasana Basti	Sahacharadi Taila (Dose - 80ml)
B) Niruha (Vaitarana) Basti	Guda -24gm Saindava -10gm Sneha (Sahacharadi Taila) -80ml Chincha -60ml Gomutra -200ml

5. Nasya Karma

Aushadha	Anutaila or Karpasasthayadi Taila (Dose-8 Bindu) (Course- 7days)
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Management in Nirama avastha of**Ankylosing spondylitis (Gambhira Vatarakta)**

The Later manifestations of Ankylosing Spondylitis with symptoms like *Sthabdha*, *Khatina*, *Antharbhrustha arathi*, can be considered under *Gambhira Vatarakta*^[7] hence, *Bhrumana* can be adopted by means of

- Sarvanga Abhyanga*
- Shastika shaali pinda sweda*
- Patra pinda sweda*
- Jambhira pinda sweda*
- Prushta basti*

Based on the condition and intensity of the disease, one as to select the

1) *Mridu Vamana Karma* or *Virechana Karma*

2) Basti Karma

Anuvasana basti	Ksheera Bala Taila (Dose-80ml)
Niruha basti (Musthadi Yapana Ksheera Basti)	Madhu-80ml Saindava-12gm Ksheera Bala Taila -120ml Shathapushpa Kalka-24gm Musthadi Ksheerapaka-400ml

3) Nasya Karma

Aushadha	Ksheerabala Taila (101) Avarthitha (Dose-8 bindu) Course: 7 to 21days
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DISCUSSION

The *Nidanas* mentioned under *Vatarakta* can be considered under the environmental pathogenesis, associated with increased microbial activity of the gut. The symptoms with which Ankylosing spondylitis presents can be considered under *Sama* and *Nirama avasta*, hence patients with *Sama avasta* should be employed with *Rookshana* as a first line of approach. i.e.

In mild intensity of disease we can opt for -

- Alepa chikitsa:** This is a modality of *Lepa* adopted in *Shotha* and *Kaphavataja Doshai*k involvement, where in five dry drugs *Lavanga*, *Sarshapa*, *Lashuna*, *Haridra*, *Maricha* and five wet drugs *Tulasi*, *Agnimantha*, *Nirgundi*, *Bandha*, *Parpata* leaves are made into a paste form and applied all over the body and the same is given internally - 5gms twice daily.
- Choorna pinda sweda:** This is a form of *Rookshasweda*. Where in drugs like: *Kottamchukkadi choorna*,

Jadamayadi choorna, *Kolakullathadi choorna*, *Triphala choorna* are used.

- Dashamoola/Nirgundi qwatha seka:** These are a types of *Pariseka sweda*, which are employed when there is increased *Vata dosha/Vata kapha dosha*, these two can employed by boiling this drugs in water and the same is poured all over the body till we get *Samyak Swedana lakshanas*.
- In severe cases, *Dhanyamla dhara* - a fermented preparation, relieves the *Stambha* by its *Tikshna* and *Ushna guna* and drastically bring down the symptoms of Ankylosing spondylitis.

After attaining *Samyak Rookshana lakshanas*, *Kramathaha shodhana* is Advised i.e., *Vamana karma* followed by *Virechana karma* (*Rooksha* or *Snigdha Virechana*), and on 9th day after *Virechana karma* one has to adopt *Basti Karma* for a duration of atleast 16days (*Kaala basti*) after *Dwiguna parihara kala*, *Nasya Karma* has to be employed for duration of 7 days.

In *Nirama avastha* of Ankylosing spondylitis, by assessing the stage or presentation of the disease one has to opt for *Mridu Vamana karma* or *Virechana karma*, where in this stage the Osteoporotic changes are appreciated hence *Vamana Karma* and *Virechana Karma* are adopted only if condition demands. Hence, *Bhrumana* can be adopted by means of.

- Shastika shali pinda sweda:** a type of *Sankara Sweda*. By adopting this we can achieve *Brimhana* effect and *Vata shamana* effect.
- Patra pinda sweda:** a type of *Sankara sweda*. By application of this *Stambha* can be relived.
- Prushta Basthi:** a type of *Bahya swedana Karma*. *Basti Karma (Musthadi Yapana Ksheera Basti)* in *Kala* or *Karma Basti* pattern has to be adopted and after giving *Dwiguna parihara kala*, *Nasya karma* has to be adopted for 7 to 21days.

CONCLUSION

The curable diseases can be cured where as the incurable diseases has to be best managed and this disease cannot be completely cured but can best managed in relieving the signs and symptoms and providing the best comfort by judiciously adopting various *Panchakarma* procedures at regular intervals based on *Avastha* of the condition. Ankylosing spondylitis is a disease which cannot be cured completely but can be best managed by adopting various modalities of *Panchakarma* by thorough understanding of *Sama* and *Nirama avastha* of the

Condition. *Panchakarma* procedures have been proved useful for this manifestation in alleviating symptoms and to reduce severe disability. The present study sheds light on different *Panchakarma* procedures in Ankylosing Spondylitis.

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*Address for correspondence

Dr Shreyas D M

PG Scholar, Department of PG studies in Panchakarma SKAMCH&RC, Vijaynagar, Bangalore, Karnataka, India.

Email:

shreyasdmams@gmail.com

Phone number: 9880920154

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