



AYURVEDIC APPROACH FOR MANAGEMENT OF ANKYLOSING SPONDYLITIS: A CASE REPORT

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Abstract

Background- Our immune system has a very flawless system to keep an individual disease free. One such potentially debilitating autoimmune disease with an insidious onset is Ankylosing Spondylitis. It belongs to a group of spondyloarthropathies having a strong association with HLA-B27 defined as seronegative chronic inflammatory arthritis that primarily affects the axial skeleton with a predilection for the lumbar spine and sacroiliac joint. Modern medicine has no established treatment for it. From the ayurvedic perspective, the disease can fall under Amavata, which may be effectively managed when intervention is started in its early stages. **Aim-** This study aims to reduce disability while also easing symptoms through Ayurvedic intervention. **Material and Methods-** Randomly, a 42 year old female patient known case of Ankylosing spondylitis having HLA-B27 positive came to the OPD of Kayachikitsa department, GACH, Guwahati. Patient complaints of lower back pain, joint pain, stiffness, and loss of mobility of the spine which is managed by Sodhana and Shamana Chikitsa for two months. **Result-** There was a significant improvement in symptoms and laboratory parameters. **Conclusion-** Through this treatment, promising results were found in the management of the disease without causing any adverse side effects.

Keywords: Ankylosing Spondylitis, Aamvata, HLA-B27.

INTRODUCTION

Ankylosing spondylitis is an inflammatory disorder of unknown cause that primarily affects the axial skeleton, peripheral joints and extra articular structures are also frequently involved.^[1] Ankylosing spondylitis is usually present during the third decade of life and is rarely seen after 45 years with a male-female ratio of 3:1. The global prevalence of as is generally believed to be between 0.1% to 0.4% while 0.25% Indian population is said to be affected by this life altering disease.^[2] Ankylosing spondylitis is the archetype of a heterogenous group of arthritis within the rheumatic disease formerly known as seronegative spondyloarthropathies but now commonly referred as spondyloarthritis.^[3] Ankylosing spondylitis shows a striking correlation with the histocompatibility antigen HLA-B₂₇ and occurs worldwide roughly in proportion to the prevalence of B₂₇. Inflammation of the spine initially causes dull pain, morning stiffness in and around the spine, including neck,

middle back, lower back as well as the buttock. In the due course of time, chronic inflammation of spine (Spondylitis) can lead to a complete fusion of vertebrae a process referred as Ankylosis which leads to marked axial immobility and deformities like kyphosis of the thoraco spine. In modern science NSAID, corticosteroids & DMARDs are used to manage. However these treatments are of limited benefit. It is a need of the hour to explore satisfactory treatment modalities available in other medical system for the benefit of these affected.^[4]

The exact signs & symptoms of ankylosing spondylitis does not resemble with any disease mentioned in Ayurveda classics but based on clinical presentation it can be consistent with symptoms of Aamvata. Aamata is a disease of Rasavaha & Asthivaha srotas. The disease is mainly due to derangement of Agni like Jatharatgni, Dhatvagni and Bhutagni resulting in the production of Ama. This Ama circulates in the body by vitiated Vata and gets located in the Sandhis causing disease Amavata. It is mainly caused due to Ama & prakupita vata. The Ama formed due to mandagni is carried by prokupita vata & gets deposited in Sleshma sthanas resulting in features like-Angamarda (Pain), Aruchi (Anorexia), Aalasya (fatigue), Gaurava (heaviness/stiffness), Sandhiruka (joint pain), Sandhisotha (inflammation of Joint).^[5]

This case study is undertaken by keeping all these effects in mind and appropriate treatment plan is designed for the patient for successful management of the disease.

Modified New York Criteria for Diagnosis of Ankylosing Spondylitis^[6]

Clinical criteria
1. Low back pain persisting for ≥ 3 months reduced by exercise and not relieved by rest.
2. Limited motion in the lumbar spine in coronal and sagittal planes.
3. Limited chest expansion compared with normal values for age and sex.
Radiographic criterion
1. Unilateral grade 3 or 4 sacroilitis or bilateral grade 2 sacroilitis on plain radiograph.

The patient is said to have Ankylosing spondylitis if radiographic criterion is present with at least one clinical criterion.

CASE STUDY

A 42 year old female patient came to Kayachikitcha OPD of Government Ayurvedic College and Hospital having complains of low backache and severe stiffness along with bilateral knee joints pain and cervical pain since 4 years. The pain and stiffness of the spine worsen for the last 2 months. Pain is usually severe in the morning and night but is relieved after a few hours of day to day activity. For these complains, initially she consulted an allopathic doctor and diagnosed as a case of ankylosing spondylitis with HLAB27 positive. She was treated with NSAIDs and corticosteroids and got temporary relief. Patient did not get satisfactory result and same complains reoccurred for the last 2 months, so the patient switched towards ayurvedic approach for further treatment.

PAST HISTORY:

No history of trauma, surgery and other severe illness.

PERSONAL HISTORY:

- Diet - non veg
- Sleep - disturbed
- Addiction - betel nut
- Appetite - moderate
- Bowel - constipated
- Bladder - normal

FAMILY HISTORY

- Nothing Significant

ON EXAMINATION

- Vitals are within normal limit

ASTAVIDH PARIKSHA

- Nadi - vatapitta
- Sabda - samyak
- Mutra - samyakmutrapravrit
- Mala - malastambha
- Jihva - sama
- Drik - samyak
- Akriti - madhyam

DASAVIDH PARIKSHA

- Prakriti – vatapitta
- Vrikriti – rasa asthi dhatu
- Sara - madhyam
- Samhana - madhyam
- Pramana - sama
- Satmya - madhyam
- Satwa - madhyam
- Vyamashakti - avara
- Aharsakti - madhyam
- Vaya - madhyam



SYSTEMIC EXAMINATION

- No abnormality found

LOCAL EXAMINATION

- On Inspection, normal shape of spine found. On Palpation, tenderness found on bilateral sacroiliac joint, SLR Test +^{VE}

LABORATORY INVESTIGATION

- HB% 12 gm/dl
- ESR 45 mm/1 hr
- CRP 16.3
- HLA-B27 +ve
- RA factor 21.9
- Sr.Ca 8.4 mg/dl

DIAGNOSIS

Considering all these conditions and symptoms of the patient which is explained in ayurveda classics the case can be diagnosed as aamvata.

MATERIAL AND METHODS

The following sodhana (panchakarma procedures) and shamana (oral drug) chikitsa were used during the course of treatment along with physiotherapy.

TABLE 2 : LIST OF SODHANA CHIKITSA

Treatment	Medicine	Dose	Time	Duration
Deepan pachan	Citrakadi vati	125mg + 125mg	7 am and 7 pm one hour before food	4 days
Snehapan	Panchatikta ghrita	Starting with 25 ml in an increasing dosage schedule per day	6 am on an empty stomach	5 days
Abhyanga - swedan	Sahacharadi taila followed by baspa swedan	Quantity sufficient	Morning (between 8 am – 11 am)	3 days
Virecchan	Trivit avaleha	20 gm with usnodaka anupana	7 am on an empty stomach	1 day
Samsarjan Krama	Manda, Peya, Vilepi, Akrutha and Krutha Yusha	Quantity sufficient	8 am and 8 pm	5 days
Matra vasti	Anuvashan – Chandan bala taila Niruha – Pancha Tikta ghrita	40 ml 40 ml	12 pm to 2 pm	15 days
Janu vasti	Mahanarayan taila	Quantity sufficient	12 pm to 2 pm	14 days
Kati vasti	Mahanarayan taila	Quantity sufficient	12 pm to 2 pm	14 days

Table 3: LIST OF SHAMAN DRUGS

Medicine	Dose	Frequency	Anupana
Trayodashang Guggulu	500mg	Twice a day	Lukewarm water
Ekangveer Rasa + Dashmoolarishta	125mg+ 20ml	Twice a day	Lukewarm water
Rasraj Rasa	125mg	Twice a day	Lukewarm water

OBSERVATION:

The total effect of therapy was assessed by Bath Ankylosing Spondylitis Disease Activity Index (BASDAI)

Table 4: Bath Ankylosing Spondylitis Disease Activity Index (BASDAI)^[7]

Symptoms	BT	AT
Fatigue	6	2
Neck pain, back pain and hip pain	10	5
Pain and swelling in other joints	8	5
Joint tenderness	8	4
Morning stiffness (intensity)	9	3
Morning stiffness (duration)	1 - 2 hours	15 - 20 min

RESULT:**Table 5: Symptoms wise result-**

Sl. No.	Symptoms	Before Treatment	After Treatment
1	Cervical pain	+++	+
2	Lower backache	+++	+
3	Morning stiffness	+++	+
4	Knee joint pain	+++	++
5	Sacroiliac pain	+++	+

NSAIDs, corticosteroids and DMARDs were tapered and eventually withdrawn during the course of Ayurvedic treatment.

Investigation wise result-

- HB% 14 gm/dl
- ESR 10 mm/1 hr
- CRP -ve
- HLA-B27 -ve
- RA factor -ve
- Sr.Ca 10.4 mg/dl

DISCUSSION:

Ankylosing spondylitis is a long-term inflammatory condition that causes severe pain and joint stiffness. You can think of this illness as Amavata. Acharya Chakradatta asserts that the fundamentals of Amavata therapy are Langhana, Swedana, medications containing Tikta rasa, Deepana, Virechana, Snehapana, and Anuvasana. With this in mind, Kayashodhana has positive benefits since it cleanses the body of the Prakupita Dosha, which is removed when the situation is in Bahudoshavastha. Virechana is the primary method of treatment for Pitta Dushti, although it is also effective for Vata and Kapha Dushti. Mrudu Samshodhana is another method of Vata Dosha therapy. Since Shodhana is contraindicated in Samavatha, Deepana Pachana must be practised till Niramavasta is attained.

Chitrakadi vati: It is Deepak, pachak, Rochak, Anulomaka, Shulahara, Sothahara, Arochak, Vivandhahara, good in asthi parbaruka.^[8]

Panchatikta Ghrita: It is tridosahara, best in diseases of asthi, sandhi & majja. Also anti-inflammatory, anti-microbial, analgesic, hypolipidemic.^[9]

Trivrit Avaleha: It is Sukha virechak, mridu virechak, practised in bahudoshavastha.^[10]

Chandan BalaLakshadi taila: It is anti-inflammatory, sresthasaptadhatu bibandhana.^[11]

Sahacharadi taila: It is used in kapha predominance symptoms like Gourava, graha, stambha etc.^[12]

Mahanarayan Taila: It is used in vata predominance symptoms like ruka, toda, sakthikshepanigraha.^[12]

Ekangveer Ras: All three Doshas are balanced by the combination, particularly Vata and Kapha. It relieves rigidity brought on by Kapha Vata Anubandh. It enhances CNS and PNS metabolic activity, which promotes effective neuromuscular transmission.

Dashmoolarishta: It contains analgesic, anti-inflammatory, and Balya and Shothhar qualities in addition to acting on the vitiated Vata and Kapha Dosha.

Trayodashang Guggul: Tikta, Katu, Kashay Rasa, Ushna Virya, and Madhur Vipaka are among the medications it includes. Together, these traits have Vata Hara and Kapha Hara qualities. It enhances bone and joint strength and works wonders as an analgesic and anti-inflammatory.

Rasraj Ras: It affects all three Doshas, but Vata in particular. It works wonders as a cardiac and nervine tonic. It aids in restoring blood vessel and nerve function and fortifies the nerves' muscles.

CONCLUSION:

The current study demonstrates that the Ayurvedic form of treatment is successful in treating ankylosing spondylitis. Ankylosing Spodylities may be consistent with Pravruddh Aamvata based on clinical presentation. The Shaman medications operate on the vitiated Aam and Vata, while the Panchkarma treatments reduce stiffness and discomfort by Mraduta, which also improves blood circulation. Although there is no definitive treatment for ankylosing spondylitis, the symptoms and disease progression can be effectively treated by Ayurveda, sparing the patient from the potential adverse effects of other medications and eventually enhancing their quality of life.

References:

- 1) Masters, B. R. (2012, May 25). *Harrisons's Principles of Internal Medicine*, 18th Edition, two volumes and DVD. Eds: Dan L. Longo, Anthony S. Fauci, Dennis L. Kasper, Stephen L. Hauser, J. Larry Jameson and Joseph Loscalzo, ISBN-13: 9780071748896 McGraw Hill. *Graefe's Archive for Clinical and Experimental Ophthalmology*, 250(9), 1407–1408. <https://doi.org/10.1007/s00417-012-1940-9>
- 2) Braun, J., Bollow, M., Remlinger, G., Eggens, U., Rudwaleit, M., Distler, A., & Sieper, J. (1998, January). Prevalence of spondylarthropathies in HLA-B27 positive and negative blood donors. *Arthritis & Rheumatism*, 41(1), 58–67. [http://dx.doi.org/10.1002/1529-0131\(199801\)41:1<58::aid-art8>3.0.co;2-g](http://dx.doi.org/10.1002/1529-0131(199801)41:1<58::aid-art8>3.0.co;2-g)
- 3) Spondyloarthropathies (including psoriatic arthritis). (2015, April 20). *Rheumatology*. <https://doi.org/10.1093/rheumatology/kev154>
- 4) Masters, B. R. (2012, May 25). *Harrisons's Principles of Internal Medicine*, 18th Edition, two volumes and DVD. Eds: Dan L. Longo, Anthony S. Fauci, Dennis L. Kasper, Stephen L. Hauser, J. Larry Jameson and Joseph Loscalzo, ISBN-13: 9780071748896 McGraw Hill. *Graefe's Archive for Clinical and Experimental Ophthalmology*, 250(9), 1407–1408. <https://doi.org/10.1007/s00417-012-1940-9>
- 5) Shastri S. (2009), Madhavkara, Madhav Nidan, Madhukosa Sanskrit Commentary by Vijayraksita Srikantha Datta & Vidyatini Hindi Commentary. Upadhyaya Y. (E.d), Nidan sthan 25/5, Choukhambha Prakashan, Varanasi, India, Page- 509.
- 6) Steven, M. M., Van Der Linden, S., & Cats, A. (1985, January 1). Evaluation of Diagnostic criteria for ankylosing spondylitis: a comparison of the rome, new york and modified new york criteria in patients with a positive clinical history screening test for ankylosing spondylitis. *Rheumatology*; Oxford University Press. <https://doi.org/10.1093/rheumatology/24.3.242>
- 7) BASDAI Bath Ankylosing Spondylitis Disease Activity Index. (n.d.). <http://www.basdai.com/>
- 8) Agnivesha, Charaka samhita, edited by Vaidya Yadavaji Trikamji Acharya, Chaukhamba Sanskrit Series, Varanasi, India, Sutra sthana 23/26 – ScienceOpen. (2004). <https://www.scienceopen.com/document?vid=92736359-5bed-4e2f-81ad-229dc09d8126>
- 9) Bhaisajya Ratnavali भैषज्यरत्नावली. (n.d.). https://chaukhamba.co.in/index.php?route=product/product&product_id=4392
- 10) Bijita Majumder, & Sukalyan Ray. (2022, June 10). Clinical evaluation of Raktadusti in Hypothyroidism w.s.r. to Vidhishonitiya Adhyaya of Charaka Samhita. *Journal of Ayurveda and Integrated Medical Sciences*, 2307588_521390_692_698