



Case Study

MANAGEMENT OF ANKYLOSING SPONDYLITIS IN AYURVEDA: A CASE STUDY

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ABSTRACT

Ankylosing spondylitis (AS) is chronic inflammatory disorders of unknown cause that primarily affects the axial skeleton (Predominantly sacroiliac joints and spine) peripheral joints and of extra articular structures may also be involved in an asymmetrical pattern. The disease usually begins in the second or third decade; the male to female prevalence is approximately 3:1. Patients having AS, more than 95% of them are positive HLA-B27. Use of NSAIDS are the first line of management and they effectively relieve the symptoms. Few Ayurvedic medicines found to be effective in the management of AS. Here, a case study of AS managed by Ayurvedic treatment approaches is presented. A patient 21yrs male came to OPD of *Kayachikitsa* i.e., Room No. 9 of GACH, Patna. He complaint of pain in B/L ankle left>right, also B/L knee joint pain as well as low back pain for 6 months. He was diagnosed on the basis of its signs and symptoms of AS with HLAB27 positive. He was managed by Ayurvedic medicines like *Panchatikta Ghruta Gugglu, Ekangveer ras, Tab. Shallaki, Cap. Stresscom, Jrumax oil, Vaishwanar churna, Laxarid* for 7 months and relief in his signs and symptoms.

INTRODUCTION

The only system of holistic health management that existed since the dawn of man's history is the Indian system of Ayurveda. We can call it the mother of all system as it has much evidence. Despite this, Ayurveda has to satisfy in the seat of alternate medicine. Allopathic medicine definitely made the life comfortable for Human being with various research and advancement in treatment modalities. But in certain diseases like auto immune diseases, Allopathic system of medicine has still not succeeded. Ankylosing Spondylitis is one of them. It is a chronic inflammatory disorder of unknown cause that primarily affects the axial skeleton (predominantly sacroiliac joints and spine) peripheral joints and of extra articular structures. The disease usually begins in the second or third decade. The male to female prevalence is approximately 3:1.

AS shows a striking correlation with the histocompatibility antigen HLA-B27. In North American Caucasians, the general prevalence of B27 is 7%, whereas >90% of patients with AS have inherited this antigen. The association with B27 is independent of disease severity [1]. The cardinal features of AS is inflammatory lower back pain radiating to the buttocks or posterior thighs, early morning stiffness and pain in sacroiliac joints. Symptoms are exacerbated by inactivity and relieved by movement. Musculoskeletal symptoms may be prominent at entheses, may be episodic and, if persistent, can present as widespread pain. Fatigue is common. Also, extra articular manifestation may also manifest in a few patients.[2] Modern science follow NSAIDS and conservative treatment for AS, but still, it remains as symptomatic. Hence, in this paper a case of ankylosing spondylitis is managed successfully with Ayurvedic treatment.

CASE REPORT

A patient 21yrs male came to OPD of *Kayachikitsa* i.e., Room No. 9 of GACH, Patna. He complained of pain in spine in the last 2 years back. His investigation of HLAB27 was positive. He was diagnosed on the basis of signs and symptoms of AS. He complaint of pain in B/L ankle left>right, B/L knee joint, low back ache as well as pain in spine. He was

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having stiffness and pain in joint for more than an hour in the morning. The pain relieves on movement. He was also having difficulty in sitting and complaint of chronic constipation (passing less than 3 stool a week) and was taking lactulose for it. He was facing problem in daily activities due to generalized weakness. Since last month he developed uveitis (inflammation in eye) as well as redness in both eyes.

General Examination

Temp. = 98°F

Pulse Rate = 78/min

R.R = 17/min

B.P = 114/70 mm/hg

Musculoskeletal Examination

Gait - Normal

Arms

Inspection

- No asymmetry
- No swelling
- No changes in skin
- No muscle wasting
- No deformity

Palpation

- No tenderness
- No warmth

Legs

Inspection

- No asymmetry
- No bony deformity
- No swelling
- No muscle wasting

Palpation

- No tenderness
- No warmth

Spine Examination

Inspection

- No deformity
- No swelling
- No scar marks

Palpation

- Tenderness at lumbo-sacral region

Range of motion

- Forward bending of lumbar spine is painful, restricted.
- Backward extending of lumbar spine is painful, restricted.
- Schober's Test - positive
- Others joint of upper and lower limb are possible without pain.

Ayurvedic Perspective

Ankylosing Spondylitis cannot be compared with any particular disease condition directly that is described in Ayurvedic *Samhitas*. It can be compared with *Aamvata*.^[3] Indulgence in incompatible foods and habits, lack of physical activity, or doing exercise after taking fatty foods and those who have poor digestive capacity produce *Ama* (improperly digested food) in the body. This *Ama*, acts as *Vata* and moves quickly to the different seats of *Kapha* in the body filling them and the *Dhamanis* (blood vessels) with *Kapha*. Thus the bad end product of digestion associated with *Vata*, *Pitta* and *Kapha*, blocks the tissue pores and passages with thick waxy material. It produces weakness and heaviness of the heart, which becomes the seat of the disease. It also affects simultaneously the joints of the body such as those of waist, neck, shoulder, etc. This is known as *Amavata* producing stiffness of the body.^[4]

Treatment

Ayurvedic texts described *Sodhana* and *Shamana chikitsa* in *Aamvata*. But we started Ayurvedic treatment (*Shamana Chikitsa*) based on symptoms and selected ayurvedic drugs which are follows.

Treatment Given

1. *Panchatikta Ghruta Gugglu* = 500mg BD
Ekanvir ras = 125mg BD
2. *Tab. Shallaki* = 400mg BD
Cap. Stresscom = 500mg BD
3. *Jrumax oil* = L/A
4. *Vaishwanar churna* = 3 gm
Laxarid = 125mg. (at night)

Follow up and Outcomes

A very good response is noted in signs and symptoms: stiffness, pain, inflammation, and spinal mobility were reduced. The patient physically became strong enough to perform daily chores.

DISCUSSION

A patient 21 yrs. male came to OPD of *Kayachikitsa* i.e., Room No. 9 of GACH, Patna. He was diagnosed with Ankylosing Spondylitis on the basis of its signs and symptoms in association with HLAB27. In Ayurveda it is compared with *Aamvata* on the basis of its symptoms. He was treated with medicines like: *Panchatikta Ghruta Gugglu*, *Ekanvir ras*, *Tab. Shallaki*, *Cap. Stresscom*, *Jruamax oil*, *Vaishwanar churna*, *Laxarid* for 7 months. He has improvement in sitting, which was difficult earlier, and stiffness in the morning also reduced to 10-15mins. Inflammation in eyes is decreased to its minimal. Now the Schober's test is negative i.e., spine mobility improved.

***Panchatikta Ghruta Gugglu* contains:** *Bhallatak* (*Semicarpus Anacardium*), *Nimba* (*Azadirachta indica*), *Guduchi* (*Tinospora cordifolia*) etc.^[5] *Bhallatak* (*Semicarpus Anacardium*) has anti-inflammatory^[6]

effect as well as artherogenic^[7] and antioxidant activity^[8]. *Nimb* (*Azadirachta indica*) has chemical composition of Nimbin, Nimbidin possesses significant dose dependant anti-inflammatory activity^[9]. *Guduchi* (*Tinospora cordifolia*) having Berberin and tinosporin mainly acts as antioxidant and immune-potentiating thus cell layers during disease pathology are improved by this drug^[10]. *Vasa* (*Adhatoda vasica*) the Vascicinone has antioxidant as well as anti-inflammatory^[11]. *Patol* (*Trichosanthes dioica*) has anti-oxidant^[12]. *Guggul* (*Commiphora mukul*) has *Katu*, *Tikta*, *Kashay*, *Madhur rasa*, *Ushna veerya* & *Katu Vipak*. It stimulates body activity to build up immune system^[13].

Ekangvir ras contains- *Shuddha Parada* (Herbal purified Mercury), *Shuddha Gandhaka* (Herbal purified Sulphur), *Nagara* (Ginger Rhizome- *Zingiber officinalis*), *Maricha* (Black pepper- *Piper nigrum*), *Pippali* (Long pepper fruit- *Piper longum*) etc. Drugs used for decoction prepared from *Triphala* (*Haritaki* - *Terminalia chebula*), (*Vibhitaki*- *Terminalia bellirica*), (*Amalaki* – *Emblica*) and *Nirgundi* - *Vitex negundo*.

The properties of ingredients of *Ekangveer Ras* are helpful in restoring the *Gati* (motor activities) and *Gandhana* (sensation). Symptoms of aggravated *Vata* in *Vatavahasrotas* and *Nadi* such as *Cheshtanasha* (loss of activities), *Sandhishaitilya* (loosens of the joints) and *Sagnynahani* (loss of sensation) would be subsided. Phytochemicals of *Bhavana Dravyas* are also affecting the action of *Ekangveer Ras*, as *Bhavana Dravya* enhances the properties of main ingredient. *Dhatura* anti-cholinergic effect^[14] and *Kuchla* acts as analgesic. *Amalaki*, *Pippali*, *Shigru*, *Maricha* the ability to minimize nerve damage due to its anti-inflammatory action. Piperine helps to improve the outcome of patients by reducing inflammatory features at the site of the damage. *Shallaki* acts as anti-inflammatory^[15].

Jrumax Oil Ingredients: *Mahanarayan Taila*, *Mahamash Taila*, *Mahavishagarbha Taila*, *Deodaru Taila* (turpentine oil), *Nilgiri Taila* (eucalyptus oil) etc. It is *Vata* balancing herbal oil formula used in Ayurvedic medicine for centuries. It is a rich combination of anti-arthritis Ayurvedic herbs, produce no irritation on skin and arrest further progress of chronic arthritic changes of joint in pain and stiffness.

Vaishvanara Churna contains *Saindhavalavana* (rock salt), *Ajwain* (*Carum Copticum*), *Sunthi* (*Zingiber officinalis*), *Ajamoda* (*Apium leptophyllum*), and *Haritaki* (*Terminalia chebula*). *Vaishvanara Churna* is used as a laxative, *Shotaprasamana* (anti-inflammatory)^[16]. Fruits of *Ajwain* are traditionally used as anti-inflammatory, laxative, diuretic, antispasmodic, antinociceptive^[17]. *Haritaki* is commonly known as *Terminalia chebula*. *Terminalia chebula* is used in traditional medicines to treat constipation, kidney, and urinary disorders. It can also

be used as a homeostatic, anti-tussive, diuretic, and ionotropic remedy.

Laxarid contents are *Trivrit*, *Yashtimadhu*. *Yashtimadhu* act as anti-oxidant and helps in immunomodulation^[18].

CONCLUSION

From above discussion it is concluded that Ayurvedic medicines show promising result in the management of Ankylosing Spondylitis, especially improvement in signs and symptoms.

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