



## AYURVEDIC UNDERSTANDING AND MANAGEMENT OF ADOLESCENT IDIOPATHIC SCOLIOSIS –CASE STUDY

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<https://doi.org/10.46607/iamj3811022023>

(Published Online: February 2023)

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Article Received: 10/01/2023 - Peer Reviewed: 20/01/2023 - Accepted for Publication: 29/01/2023



### ABSTRACT

Scoliosis is a condition that is defined as a lateral curve to the spine that is greater than 10 degrees with vertebral rotation. It can be classified as congenital, neuromuscular, or idiopathic; approximately 85% of cases are idiopathic. Adolescent idiopathic scoliosis is the most common form. A 16-year-old female patient came to OPD of Sri Jayendra Saraswathi Ayurveda college with a confirmed diagnosis of Adolescent idiopathic kyphoscoliosis. Xray features of scoliosis of the cervical spine with Cobb angle-55 degree. In this case, *rukshana* in the form of *udwartana* externally has been given for correcting *medo dhatu dusti* and *Sthirikaranam*(stabilising) of the body, followed by *snehana* and *brumhana* line of treatment has been adopted. Considerable improvement in symptoms as well as a reduction in cobb angle from 50 to 43 degrees was noted after treatment.

**Keywords:** *Snayugata vata*, Scoliosis, *kubjatva*

### INTRODUCTION

Scoliosis is a condition that is defined as a lateral curve to the spine that is greater than 10 degrees with vertebral rotation. It can be classified as congenital, neuromuscular, or idiopathic; approximately 85% of

cases are idiopathic(1). Idiopathic scoliosis can be further classified by age of onset: infantile (birth to two years), juvenile (three to nine years), and adolescent (10 years and older)(2). Adolescent idiopathic

scoliosis is the most common form(3). Scoliosis usually does not cause problems, but sometimes leads to visible deformity, emotional distress, and respiratory impairment from rib deformity(4). Males and females are about equally likely to have minor scoliosis of approximately 10 degrees, but females are five to 10 times more likely to progress to more severe disease, possibly needing treatment(5). The exact patho-physiologic mechanism for scoliosis is unknown. A genetic factor has been implicated in the development and progression of scoliosis (6). The main treatment option for scoliosis can be summarised by 3O<sup>S</sup>: Observation –f curve<25; Brace-25-45; surgery >45(7). In the ayurvedic view, it can be understood as *kubjatwa*(8) which has been seen as a clinical feature in *snayu gata vata*. In this case, *rukshana* followed by *snehana* and *brumhana* line of treatment has been adopted.

#### Case history

A 16-year-old female patient came to OPD of Sri Jayendra Saraswathi Ayurveda college with a con-

firmed diagnosis of Adolescent idiopathic kyphoscoliosis. The presenting complaint was swelling in the right upper side of the neck with no pain and stiffness. 3 years back this apparently normal female patient noticed a swelling in the right upper side of the neck with no other features of pain and stiffness. Then they consulted a general physician and he advised postural corrections. As they have not felt any betterment they consulted an orthopaedic surgeon in 2021 and MRI and X-ray Cervical spine was taken and diagnosed as Adolescent idiopathic kyphoscoliosis and surgery was advised. As the patient is not willing to go for surgery came to the OPD of Sri Jayendra Saraswathi Ayurveda college for consultation. X-ray feature suggestive of scoliosis of the cervical spine with Cobb angle-55 degree and MRI suggestive of scoliosis of the dorsal spine with convexity to right, scoliosis of the lumbar spine with convexity to left straightening of the cervical spine with loss of lordosis.



X-ray:5/5/2021: Before treatment; cobb angle 55degree



X-ray 9/12/2021 After treatment with cobb angle reduced to 43degree

## EXAMINATION

### General examination

Bowel: Hard stools once/day

Appetite: Irregular

Micturition: Normal

Sleep: Sound

### Musculoskeletal system

Gait: Not affected

Arms: Normal

Legs: Normal

Spine: Kyphoscoliosis

### Treatments given:

#### Internal medication:

*Vaiswanara choornam* 1 tspn with buttermilk before lunch

*Chitrakadi vati* 1-0-1 A/f 1 week

Menstrual history: Menarche: 14 years, 4/30 Regular cycle

#### Examination findings

Adams forward bending test: Positive

Cobb angle: 55 degrees

**MRI findings:** MRI is suggestive of scoliosis of the dorsal spine with convexity to the right, scoliosis of the lumbar spine with convexity to the left straightening of the cervical spine with loss of lordosis.

**X-ray findings:** Thoracic scoliosis convex to right, thoracic kyphosis with Cobb angle-55 degrees, and lumbar scoliosis convex to left.

*Maharasnadi kashaya* 15ml-0-15ml with lukewarm water before food

*Maha masha tailam* 10 drops with kashaya

*Dasamoolaristam* 15ml+

*Balaristam* 15ml after food

*ti* with *eranda Mooladi kashaya vasti* followed by *matravasti* with *maha masha tailam* for 8 days.

*Marsha nasyam* with *Mahamasha tailam* 10 drops each nostril for 7 days.

#### External treatment:

*Sarvanga udwartanam* with *kolakulathadi choornam* for 7 days, *Abhyangam* with *Mahamasha tailam* followed by *dasamoola kashaya dhara* 7 days, *yogavas-*

### Discharge medicines

*Maharasnadi kashaya* 15ml-0-15ml with lukewarm water before food

*Maha masha tailam* 10 drops with kashaya

*Dasamoolaristam* 15ml+

*Balaristam* 15ml after food

*Pratimarsha nasyam* with *Dhanwantaram* 101- 2 drops advised daily.

### The outcome of the treatment

**During discharge:** Swelling reduced.

**During follow-up:** Cobb angle reduced considerably from 55 degrees before treatment to 43 degrees after treatment.

## DISCUSSION

This case can be understood as *Snayugata vata* in Ayurveda, as *Snayugata vata* leads to *kubjatva* which can be incorporated with adolescent idiopathic Kypho scoliosis.

*Snayu* originated from *medas* as per Sushrutacharya. So, in this present case, *Medodusti* has been observed.

To correct agnimandya at the kosta level as well as *medo dhatu* level *Vaiswanara choorna* and *Chitrakadi vati* has been given which is having the property of

*amapachana* and *Agni deepana*. For correction of vitiation of *medas* as well as giving *Sthiratva* (stability) of body *udwarthana* has been selected and *kolakulathadi choorna* is having *vata samana* also as *vata dosha* vitiation happened in *snayu* can be rectified. After *udwartana*, *sneha sweda* with *maha masha tailam* and *dashamoola kashaya dhara* have been done respectively for making the body more flexible. *Yogavasti* with *eranda Mooladi* as *kashayam* and *maha masha tailam* as *Sneham* which is having the property of *vatahara*, *Apana vata anulomana*, *sarva vata hara* as *vata* vitiation was noted in the present case along with *Apana Vata vaigunya*.

*Marsha nasyam* with *maha masha tailam* was chosen, as *nasyam* is having action in *skandha greeva* and *Vaksas*, *Mahamasha tailam* is having the property of *Kubjatwahara* so *maha masha tailam* was selected for *nasyam*. *Maharasnadi kashaya* is *vata kapha hara* as well as *Kubjatwa haram*. *Balaristam* and *Dasamoolaristam* is having the property of *Vataharam* and *balyam*. The patient got considerable relief from Ayurvedic management and is under follow-up and is following *Pathyahara* in the form of light and easily digestible food and *vihara* in the form of mild exercises.

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**Source of Support: Nil**

**Conflict of Interest: None Declared**

How to cite this URL: Soumya.E.A: Ayurvedic Understanding and Management of Adolescent Idiopathic Scoliosis –Case Study. *International Ayurvedic Medical Journal* {online} 2023 {cited February 2023} Available from: [http://www.iamj.in/posts/images/upload/444\\_447.pdf](http://www.iamj.in/posts/images/upload/444_447.pdf)