

## A case study report on Spondylosis (Asthimajjagat Vata)

### Case Report

**Abhijit Dinkarrao Shekhar<sup>1\*</sup>, Mayur Shiralkar<sup>2</sup>**

1. PhD (Scholar) and Assistant Professor, Department of Kayachikitsa,

2. Professor and HOD, Department of Shalakya Tantra,

Dr.D.Y. Patil College of Ayurved and Research Center, Dr.D.Y. Patil Vidyapeeth (Deemed to be University) Pimpri, Pune.

### Abstract

Spondylosis is one of the commonest forms of joint disorder. Mostly it comes under concept of *Vatavyadhi* which mainly occurs due to vitiated *vat dosha* which is due to *dhatukshaya* (1) Basically this disease involves *asthi and majja dhatu*. This disease limits our daily activities such as walking, running, gait up, dressing, cycling, bathing etc. which makes patient disabled or handicapped. It is a *kashtasadhya vatavyadhi* due to intensive pain and restricted movements of joints. Here we discuss a case report of *asthimajjagat vatavyadhi* which is best treated by *ayurvedic* concepts which was described by *acharyas* in *vatvyadhi chikitsa adhyaya*.

**Key Words:** Spondylosis, *Vatavyadhi*, *Asthimajjagata Vata*, *Kashtasadhya*.

### Introduction

Ayurveda is an holistic science of life and also the oldest and greatest surviving medical system in the world. It is based on various true principles. One of the important is *Tridosha siddhanta* under which a number of diseases are described in *samhita granthas*. *Vatavyadhi* is one of the important *vyadhi* which occurs due to *vitiated vata dosha*. (2) Followed by this *pitta and kapha dosha* plays important role in pathogenesis of disease development. Without *vata dosha* *pitta* and *kapha dosha* are helpless. Due to various causative factors in *aahara, vihara vata dosha* gets vitiated which obstructs various channels (*srotasa*) inside the body and results into development of two types diseases, one is *dhatukshayatmaska vatavyadhi* and *margavarodhjanya vatavyadhi*. *Asthi-majjagata vata* is one of them which is due *asthi-majja kshay*. *Nirupasatambhit vata* is the one of causative factor for *dhatukshayatmaka vatavyadhi*. (3) Spondylosis a painful condition of the spine resulting from the degeneration of the intervertebral discs. occurs at different levels i.e. cervical, thoracic and spinal. It become severe when there is compression of nerve roots with subsequent sensory as well as motor disturbances which leads as pain, numbness and paresthesia, tingling and numbness, muscle weakness in the extremities & then radiculopathy. (4) When cervical vertebrae involved it is as called cervical spondylosis & lumbar region vertebrae involved called lumbar spondylosis.

#### \* Corresponding Author:

#### **Abhijit Dinkarrao Shekhar**

PhD (Scholar) & Assistant Professor, Department of Kayachikitsa, Dr.D.Y. Patil College of Ayurved and Research Center, Pimpri, Pune -18 of Dr.D.Y. Patil Vidyapeeth, Pune (Deemed to be University). India  
Email Id: [abhijitshkhar00@gmail.com](mailto:abhijitshkhar00@gmail.com)

### Case report

A 50 years old female house wife, patient presented with complaints of bilateral upper limb & lower limb tingling and numbness sensation, difficult and painful joint movements since two years, loss of appetite since two months and intermittent constipation. She had no history of any major illness like Diabetes Mellitus/Hypertension/ Ischemic Heart Disease/Epilepsy/ Malaria/Typhoid/ Jaundice/ Blood Transfusion/ Drug allergy. In surgical history there is no any major operative in past. In obstetric history she had two children with normal delivery, G1-Male-45 years, G2-Female-40 years, In gynecological history she was menopause. For above complaints she consulted with orthopaedic and started with allopathic medicines Tab Enzoflam One in thrice in a day, Tab Gabapentin one in twice in a day, Cap Sompraz D one in day on empty stomach, Tab Calcium one in day with milk, Tab Alprax 0.25mg SOS, Inj Vit D deep intramuscular once in a week, Inj Meganeuron intramuscular alternate day, Rhumacare oil for daily for massage. After taking this allopathic treatment she relived in pain and other symptoms but when stops the above symptoms gradually worsen so for reliving from above symptoms she consulted in Ayurvedic college. On Examination- her vitals were, Pulse- 78/min, regular, Blood Pressure- 130/68 mm of Hg Temp-98°F, There was no Pallor/ Cyanosis/ Clubbing/ Icterus/ Lymphadenopathy, her JVP was within normal limit. In Systemic Examination-Respiratory System showed clear bilateral air entry, No adventitious sounds, no deformity in chest was found, Cardiovascular system examination showed first sound (S1) and second heart sound (S2) normal, No murmurs were audible, Per abdominal examination found soft, non tender abdomen in all quadrants, bowel sounds were normal. In neurological examination she was well conscious, well oriented, obeys verbal commands, pupils-B/L normal size reacting to light, her planters reflexes in Right & Left extremities shows flexor response.

**Table 1: In Reflexes examination**

Extremity	Biceps Jerk	Triceps Jerk	Supinator Jerk	Knee Jerk	Ankle Jerk
Right	++	++	++	++	++
Left	++	+++	++	+++	++

(++ - Normal, +++ -Exaggerated )

Neck stiffness was present, Babinski sign-negative, while sensory system of joints examination for pain, touch, temperature was within normal limit.

**Ashtavidha pariksha(5)**

- **Nadi-** 78/min, regular (*Vata-Pita Pradhanta*),
- **Druk-** Dina
- **Mala-** Asmayak intermittent hard stool with tendency of straining
- **Akruti-** Krusha,(lean)
- **Mutra-** Samyak approximately 5-6 times/ day, pale yellow in colour
- **Sparsha-Ruksha** (dry)
- **Jivha-** Niram
- **Dushta Strotas parikshan-**
- **Asthivaha Strotas-** *Asthi-sandhi shool* (joint pain), *balakshaya*, *angamarda* (body pain), *daurbalya* (generalized weakness)
- **Majjavaha Strotas-** *Aswapna* (no dreams), *stabdhata*, *asthiruja* (bone pain), *Asthi saushirya* (osteoporosis)
- **Purishvaha strotas** - Asmayak *malapravritti*, *malavshambha* intermittently (constipation)

**Table 2: Local examination of joints**

Joint Name	Right Knee joint	Left Knee joint
Local temperature	Slightly raised	Slightly raised
Swelling	No	No
Crepitation	3	4
Redness(Rubor)	No	No
Fluid	No	No
Angle of flexion	35	30
Angle of extention	140	160
	Right Elbow	Left elbow
Angle of Flexion	Full	Full
Angle of extension	140	150
Palmer grip	Present with normal	Present with normal
Cervical Joint Inspection		
Alignment in sagittal and coronal plane (e.g., kyphotic cervical spine)	No	
Prior surgical scars (e.g., prior ulnar nerve transposition or carpal tunnel surgery)	No	
Muscle atrophy (e.g., palsy will see decrease deltoid and biceps mass)	No	
Palpation		
Local tenderness on the spinal axis	Present	
Asymmetric	No	
ROM (range of Motion)		
Flexion	30	
Extension	40	
Rotation	35	
Lateral bend	35	

**Motor Examination**

Primary motion	Primary muscle	Innervation and nerve root involment
Scapular stabilization	Serratus muscle	Long thoracic nerve (C4)-mild involvement
Shoulder abduction	Deltoid muscle	Axillary nerve-mild involvement
Shoulder internal rotation	Subscapularis muscle	Subscapular nerve-mild involvement
Shoulder external rotation	Infraspinatus muscle	Suprascapular nerve- mild involvement
Elbow flexion (palm up)	Biceps & brachialis muscle	Musculocutaneous nerve- mild involvement
Elbow flexion (thumb up)	Brachioradialis muscle	Radial nerve-Moderate involvement
Wrist extension	Extensor carpi radialis longus muscle	Radial nerve-Moderate involvement
Wrist supination	Supinator muscle	Deep branch Radial nerve-Moderate involvement
Elbow extension	Triceps muscle	Radial nerve-Moderate involvement
Wrist flexion	Flexor carpi radialis & Planter nevre	Median nerve-Moderate involvement
Wrist pronation	Flexor pollicis longus, and Pronator quadratus.	Median nerve-Moderate involvement
DIP Finger	Flexor digitorum profundus	Ulnar nerve & Anterior interosseous nerve - Moderate involvement
Thumb extension	Extensor pollicis longus muscle	Posterior interosseous nerve - Moderate involvement
Finger abduction	Interossei muscle	Deep branch ulnar nerve- Moderate involvement.
Sensory system		
Touch		Within normal Limit
Temperature Pain		
Lumbar Joint		
Flexion		Unable to perform 5-6 degree 20-30 degree
Extension		
Lateral Flexion		
Sensory system		
Touch		Within normal Limit
Temperature		
Pain		

**Xray cervical spine**

Loss of curvature of cervical spine with degenerative changes at C1-C7 vertebra.

### Xray lumbar spine

Loss of curvatures of lumbar vertebrae with lordosis and degenerative changes. Osteoporosis of lumbar vertebrae.

### MRI Spine-

Loss of cervical lordosis. Diffuse bulging is seen at level of C3-C4 intervertebral disc resulting into cervical cord compression with posterior thickening of longitudinal ligament. There is deformity notes at dorsal spine where convexity present at right side. At the level of D3-D6 ligamentum flavum hypertrophy is noted. Lumbar lordosis is noted with bulging and desiccation at L1-L4 levels.

### Laboratory Investigations

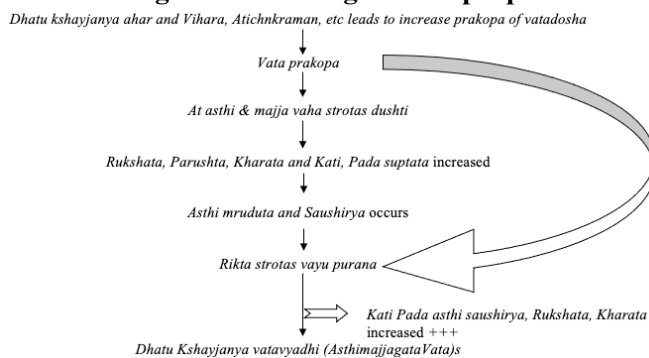
HMG- Hb- 12.4, WBC-4305, PLT-164000, ESR-28 BSL-F-80, PP-110, Rheumatic factor (RA)- Negative Sr. calcium -12, Urine Examination – WNL, ASO titre-Negative, Uric acid level-5.0, ECG – Sinus Rhythm.

With all above investigations Diagnosis (*Vyadhi nidan*) was made as Cervical and Lumbar Spondylosis with degenerative changes while in point view of *ayurved* diagnosis was made as *Asthimajjagata vata*.

### Nidan panchak

- Hetu (causes)**-Considering point of *sannikrishta hetus* (causes) there is excess lifting of things, *ruksha ahar* (dry food), excess *chankraman, ativyayam*, Various bad postural habits in sitting, similarly in *viprkrushta hetus- vardhaknya* (old age) is primarily considered.
- Purvaroop**-Started with tingling and numbness in all extremities
- Roop (symptoms)**-generalized weakness, difficult in gait, joints of all extremities become stiff, pain
- Samprapti (pathogenesis)**

**Figure 1: Showing the samprapti**



### e) Treatment and outcome (Chikitsa)

As per *Samprapti* of *dhatukshayanya vatavadhi* i.e. *asthimajjagat vata* (spondylosis) is due to *asthi saushirya* (osteoporosis). Which is due to *sarakta majja kshay* due to *vitiated vata*! So as per etiopathogenesis (*samprapti*) the *asthivaha strotas & vat vrudhi* are important factors so in the plan of treatment, So treatment plan is divided in two parts 1) *Shodhan chikitsa* 2) *Shaman chikitsa* for 3 weeks

### Shodhan Chikitsa

- *Snehan* – *Bala ashwagandha taila* + *Mahamash tail*
- *Swedan- Pinda sweda* with *shalishastikTandul*
- *Basti- Anuwasan* and *Niruha basti Vyatyasat A/N/A/ N/A/N/A* followed by
- *Panchatiktak kshirabasti-total 230ml*

### Shaman Chikitsa

- *Mahayograj guggulu*(5) 250mg 2 thrice in day ds before food, *Ashwagandha ghanavati* 250mg 2 tablets thrice in day before food,
- *Vatahar yog 3gm+Eranda sneha 10ml nisha kala*(at night),
- *Shatavaryadi ghrita 30 ml on empty stomach*,
- *Baladi kshirapaka 30 ml twice in day before food*

*Lepa-dashang lepa* in day time.

### Pathya

- Avoid casutive factors
- *Aharaj- Snigdha, madhur rasatmak, guru anna sevan, mug dal, ghrita, dugdh, luke warm water,*
- *Viharaj- Excess travelling, No lifting of heavy weight, divaswap, proper sleep in night.*

**Table 3: Treatment result**

Observation	At First day	1st wk	2nd wk	3rd wk
<b>SLR Test</b>				
Right Leg	40	60	80	80
Left Leg	50	70	80	80
Both limbs	30	35	40	60
<b>Knee joint</b>				
Right	Right	Left	Right	Left
Angle of flexion.	40	40	40	30
Angle of Extion.	160	160	160	160
<b>Elbow joint</b>				
Right	Right	Left	Right	Left
Angle of flexion.	full	full	full	full
Angle of Extension.	150	150	150	150
Walk	Painful and restricted to walk	Able walk, Joints Movements slightly improved with decreasing pain	Stand with support Walk improved Pain decreased significantly	Walk with help of walker
<b>Cervical Joints/Lumbar Joints</b>				
Tingling and Numbness	+++	++	+	+
Pain	++++	++	+	+
Stiffness	++++	+++	++	+
Movements	Painless improvement			

(+++)= Severe pain, (++)=Moderate pain, (+)=Mild pain

### Discussion

Number of patients suffering from *asthimajjagatavata* is quite high because of today's life style. In *ayurveda asthimajjagatavata* is described under

heading of *vatavyadhi* and any type of pain cannot be present without presence of *vatadosha*. In present case scenario the action of drugs is as follows

- **Bala Ashwagandha Tail (7)** - One of favorite herbo mineral combination of oil which is used as external massage application which helps in pacifying for vitiated *vata dosha lakshans*, The base for this oil is blend which helps promote muscle strength and support to develop muscle tone. The combination of herbs helps is nourishing for the muscles and tissues of bones i.e.osteoporosis. While bala herbs helps to support energy and the nervous system, also calms the nerves and pacifies *vata dosha* which helps in reducing the *dhatukshayajnya lakshans of vatavyadhi*.
- **Mahamash Taila (8)** - It is a very powerful oil used for various neurological condition including peripheral nervous system. Masha means black gram the important ingredient of this oil. his oil is helpful in reducing pain of multiple joints which is due to vitiated *vata dosha* in this oil the herbs are basically prepared in sesame oil with *kwath* i.e. decoction then the solid waste thrown out and remaining oil contains only oil base as well water base phytoactive principles of the herbs. After application of this oil over the skin and joint helps in reducing the symptoms if *sandhishoola, graha(stiffness)*, which is due to vitiated *vata dosha* can easily pacifies and strengthen the tissues and muscle.
- **Pinda Sweda with shalishastik tandul** - It is one of the famous type of *swedan* for *vatavyadhi*. *chikitsa*. In *pinda sweda* it contains *Shali* (i.e.rice) which is boiled. It is used in the form of *pinda* and packed in piece of cloth. Then herbomineral preparation of decoction is prepared with milk then *swedan* was given over all body which helps in reducing the vitiated *vata dosha gunas* like *rukhsa,laghu, chala sheeta guna* and improves the muscle strength as well as reduces pain of lumbar as cervical region joints. It also increases the tone muscles and nutrition of muscles related with joints.
- **Basti** - *Basti* or enema is one of the best treatment in *Vatavyadhi*(1). In *Asthi majjagata vata* diseases *chikitsa* here we used *anuvasan basti* with *Dashamoola taila* in 60ml and *niruha basti* 960ml in alternate days for 11 days which acts as *vatanuloman karma* from intestine relieves constipation and helps in *apan vayu* for its proper *adhogati and karma* and then started with *Panchatiktak basti* 260ml which for 10 days. *Panchatiktak basti* contains *kantakari, nimb, patol, guduchi, vasa* herbs which are all of *tikta,katu rasa(taste) dravyas*, and *ushna veerya* (potency) & after preparation of this decoction with milk it forms *kshirpak with addition of ghruta* after giving enema for in intestine it pacifies the *vatadosha lakshanas* and do *vatashaman karma*. The *tikta guna of drvyas* acts as *pachan karma* and as well as *dhatvagni vardhan karma* which increases *asthi dhatvagni* and helps in generation of good forms of *asthi dhatu* and that stops *asthi kshay(osteoporosis)*. Also the *sneha* that means milk and *ghrita* also do *vatashaman karma*

due to its intellectual properties and do *bruhan karma* of *asthi dhatu*.

- **Mahayogaraja guggulu (9)** - It is a very famous classical medicine used in relieving symptoms of various *vyadhi* (diseases) caused by vitiated *vata dosha*, specifically those which are associated with severe depletion of body tissues that is called *ad dhatu kshaya* and due to its *balya* properties that means strength promoting and *rasayana* effects (rejuvenating).
- **Vatahar yoga with erand sneha** - *Vatahar yoga* is best *yoga* which contains *rasna eranda, amrita, ashwagandha, balamula, punarnava, gokshu, shatavari shunthi*. This combination of herbomineral preparation with *errand sneha* acts as *snhayukta virechana*. (purgation) which do *vatanuloman and purish shodhan karma* and helps in pacifying the vitiated *vata dosha*.
- **Shatavaryadi ghruta** - It contains *shatavari, jivaniya gana,bala,rasna* etc. which acts as good quality of *balya* as well as *brihan* and *vata shamak* which helps in *samprati vighantan*.
- **Baladi kshirpaka** - *Bala,rasna,eranda ashvagandha, guduchi,shatavari, masha,devdaras* are used in the preparation of *kshirpaka* which help us in the maintenance of *mansa & asthi dhatu*. so They pacifies *vata vrudhi & do bruhan karma of asthi dhatu*.

In this way after using this regimen as per suggested by *acharya*, in third week we found excellent result in decreasing symptoms of Spondylosis (*asthmajjagata vata*.) Patient got excellent result in their joint problems along with improvements.

## Conclusion

*Ayurveda* treatment in the form of *shodhana shaman*, and internal medicines is a good alternative option in the management of such painful condition.

## References

1. Agnivesa, Charaka Samhita, 4th ed. Varanasi: Chaukhambha Sanskrit Sansthan; 1994. (Kasi Sanskrit series 228), Chikitsa 28/16-20
2. Yadavji Trikamji Acharya, Charaksahita by Agnivesa revised by Charak & Dhruhabala with Ayurved adipeeka commentary of Chakrapanidatta (2007 reprint edition) Varanasi, Chaukhamba Prakashan.
3. Pandit Hari Sadashiv Shastri Paradakar, Astang ahrday of Vagbhata with the Commentaries, Sarvangasundara of Arundatta and Ayurved arasayan of Hemadri (2007 Reprint Edition) Varanasi, Chaukhamba Surbharati Prakashan)
4. Ralston, Stuart H., Ian D. Penman, Mark W. J. Strachan, and Richard Hobson, eds. 2018. Davidson's Principles and Practice of Medicine. 23rd ed. Edition: 23, City of publication: London, England Editor(s): Stuart H.

- Ralston, Ian D. Penman, M. Year of publication: 2018
5. Tekade Anand<sup>1\*</sup>, Watkar Deepali<sup>2</sup>, Daulatkar Kavita<sup>3</sup>, Dive Mukund<sup>4\*</sup> REVIEW OF ASHTAVIDHA PARIKSHA W.S.R. TO NADI PARIKSHA, International Journal of Ayurveda and Pharma Research, ISSN: 2322 - 0902 (P) ISSN: 2322 - 0910 (O), <http://ijapr.in>
  6. Chunekar K.C, Bhavaprakasha Nighantu of Shri Bhavmishra, Varanasi, Chaukhamba Bharti Academy, 2006-Reprint Edi
  7. <https://www.banyanbotanicals.com/info/blog-the-banyan-insight/details/ashwagandha-bala-oil/>
  8. Vaidya LC, editor, (8th ed). Bhaishajya Ratnavali of Govindadas, Aamavata Adhikar. New Delhi: Motilal Banarasidas, 2002; 389.
  9. Murthy KR, Sharangadhara samhita Madhyama khanda Varanasi. Chaukhamba orientalia –edition reprint 7/56-69P.
  10. <https://www.ayurvedinfo.com/2012/06/11/balawagandhadi-thailam-benefits-how-to-use-ingredients-side-effects/>

\*\*\*\*\*