

Volume 9, Issue 9, 831-839.

Case Study

ISSN 2277-7105

MANAGEMENT OF CERVICAL SPONDYLOSIS THROUGH AYURVEDIC INTERVENTION- A CASE STUDY

Ashwini V. Fulzele¹* and Nilesh M. Ingle²

¹Associate Professor, Dept. of Kayachikitsa, DRGACH&RC, Amravati. ²Assistant Professor, Dept. of Kaumarbhritya, VAM, Amravati.

Article Received on 24 June 2020,

Revised on 14 July 2020, Accepted on 04 August 2020 DOI: 10.20959/wjpr20209-18291

*Corresponding Author Dr. Ashwini V. Fulzele Associate Professor, Dept. of Kaychiktsa, DRGACH&RC, Amravati.

ABSTRACT

Cervical spondylosis is chronic degenerative condition of cervical spine where Degeneration of cervical intervertebral disc and the secondary degeneration of cervical intervertebral joints takes place. It leads to injury of spinal cord, nerve roots and vertebral artery and shows corresponding symptoms and signs. It is becoming so worsen in todays era. Though degeneration of cervical vertebrae's mostly common in elderly people but due to increased incidence of desk work or online laptop work it has its increasing prevalence in middle age also. Cervical spondylosis is a common condition that is estimated to account for 2% of all hospital admissions. In 1992, A study showed

that spondylotic changes are most common in those older than 40 years. Eventually, more than 70% of men and women are affected. In this present case study, diagnosed case of cervical spondylosis has been administered *ayurvedic* intervention. Chief complaints of the patients were pain at cervical region with radiation to upper limb, stiffness & intermittent vertigo. MRI - cervical spine showed degenerative changes with osteophytic changes at C4-C5-C6 with nerve compression. Effect of *Griva Basti & Nasya* followed by *Tiktaksheer Basti* & oral medication of *Panchamrut lauh guggulu*, *Rasnasaptak kwaath* has been evaluated in this case. Different parameters have been assessed before & after treatment plan intervention. Highly significant improvement was seen in subjective parameters like pain at neck region, radiating pain, stiffness & vertigo are discussed here.

KEYWORDS: Cervical spondylosis, *Grivabasti, Tiktaksheerbasti, Nasya, Panchamrut loh guggulu, Rasnasaptak kwaath.*

INTRODUCTION

Over use of laptop, computer work, sedentary lifestyle, continuous sitting, lack of exercise are some of unpleasant component of current lifestyle changes. Existing consequences of lifestyle leads to numerous lifestyle induced disorders like metabolic disorders such as obesity, diabetes mellitus, many musculoskeletal diseases, degerative disorders etc. Study showed that neck, and LBP were the most common disorders of the cervical and lumbar spines. Neck pain (60.5%) was more common among patients < 30 years than in older patients. Spinal disorders that lead to referrals to physical therapy, particularly disorders affecting the lumbar and cervical spines, are common.^[1] Cervical spondylosis is a disorder of age-related wear & tear affecting the disc and vertebrae of cervical spine. The incidence of cervical spondylosis increases with aging, the distinctive characteristics of this study have indicated that the incidence of cervical spondylosis increases with aging before age 50 years, and decreases after age of 50 years, especially in the elderly after 60 years.^[2]

Literature review of disease

In *Ayurvedic* perspective^[3] cervical spondylosis (*Manyasthambha*) is one among the eighty types of vaatvyadhi which is characterised by stiffness (stambh) in neck region. In Ayurvedic context, the disease cannot be correlated exactly as whole with any single disease or condition, but some features of the cervical spondylosis can be correlated now a with various conditions described in Ayurveda days such as Griva Hundana,^[4] Manyastambha,^[5] Sandhi Gata Vata,^[6] and Asthigata Vata.^[7] Any degenerative type of pathological conditions in the body can be considered under the broad umbrella of 'vata vyadhi'. Sandhigata Vata is mentioned under vata vyadhi. Acharya Charaka has mentioned that Nidana Sevana aggravates Vata dosha and this Vata gets vitiated in Griva asthi and Sandhi leads to Grivaasthi Sandhi Gata Vata. Acharya Charaka has described Sandhigata vata as a Sandhigata vata in Vata Vyadhi Chikitsa^{[8].} He has mentioned three cardinal features Shotha, Vata purna druti sparsa, Prasaraneakunchaneyo pravritisca vedana that is pain during the flexion -extension of a joint with swelling & course crepitations on joint movement is the typical clinical features of Sandhivata. Aacharya sushrut^[9] has described Manyasthambh which is caused by diwaswapna using inapproapriate pillow during sleeping & constant gazing in upward direction leading to vitiation of vata & kapha dosha which may stimulate cervical sponylitis which is acute stage of cervical spondylosis.

Cercival spondylosis is usually an age related conditions that affects the joints in the neck. With age, the vertebrae (the component bones of the spine) gradually form bone spurs, and their shock absorbing disks slowly shrink. These changes can alter the alignment and stability of the spine. Narrowing of spinal canal by oteophytes compresses the cervical spinal cord which can cause weakness, numbness, and neck pain radiating to upper arm, shoulder with headache.^[10] Cervical Spondylotic Myelopathy (CSM) is the most common progressive, non-traumatic disorder of the spinal cord in adults.^[11,12] CSM is thought to be the most common cause of cervical spinal cord dysfunction in people aged over 55 years.^[13] Some studies conclude that variations in canal–body ratio, canal diameter, vertebral body diameter of the cervical spondylosis. Age, gender and occupation are the only risk factors for having cervical spondylosis.^[14] Some studies conclude that CSM is the most common degenerative spinal cord lesion mostly affecting people in the fifth and sixth decades of life.^[15] It is one of the most common degenerative, neurological condition by which the major population has been affected.^[16]

MATERIAL AND METHODS

- Clinically diagnosed case of Cervical Spondylosis
- Masha powder
- Sahachar tail
- Cotton swab
- Anu tail
- Tikta ksheer & Panchtikta ghrit
- Basti yantra, rubber catheter, plastic hand gloves,

Case summery

A 45 years old female, IT faculty by profession has visited Dr. Rajendra Gode Ayurved College, Hospital & Research centre on 16th December, 2019 with chief complaints of pain & stiffness over the neck region since last 5-6 months, Neck pain radiates to bilateral upper limb but more severity on right upper arm. She was also having tingling numbness of right arm especially after waking up or having pressure load on right arm. On-off history of vertigo which especially has its onset on getting up from bed. She had consulted to orthopaedic for the same problem 4-5 months back & received treatment for that for about 2 months regularly. She was advised analgesics, muscle relaxants & anti-inflammatory which initially

for one month she has received regularly later on occasion when needed with increased severity of the symptoms. X-ray of cervical spine revealed anterior and posterior osteophytes at the level of C4-C5, C5-C6, and decreased intervertebral disc space. MRI of Cervical Spine revealed posterior disc bulging at C3-C4, C4-C5, with nerve compression & she was diagnosed as case of Cervical Spondylosis with radiculopathy. She had also consulted physiotherapist & undergone physiotherapy session for about 15 days & got mild relief in symptoms. No history of Hypertension, Diabetes Mellitus, Hypothyroidism. On examination, patient is having tenderness over the neck at C3-C4-C5. Neck pain is increasing with forward & backward movement of cervical spine, whereas neck extension give rise to vertigo.

On general examination, general condition was fair, pulse rate & blood pressure within normal limits, patient showed loss of appetite, bowel movement was not clear with hard stools & on off constipation history. Thorough Systemic examination done which shows no any deformity in RS, CVS, CNS. In Asthauvid Parikshan Nadi was vaatpiitaj, Jivha showed *Alpasaamta. Saar, Samhanana , Satwa* was *Madhyam, Jaranshakti & abhyavaran shakti* slightly reduced than normal.

Investigations

All the routine hematological, biochemical investigations such as complete blood count, blood sugar level, Thyroid profile, liver function test, renal function test, and urine investigations were carried out in the patients to rule out any possible associated disorder, but they were found within normal limits.

Assessment parameters

- Neck Pain
- Neck stiffness
- Pain Radiation to arm
- Vertigo

Sr. no.	Parameters	Grading	Observations	
1	Neck Pain	0	Absent	
		1	Mild & intermittent pain	
1		2	Moderate & bearable Pain	
		3	Severe & Unbearable Pain	
2	Neck stiffness	0	Absent	
		1	Mild Stiffness	
		2	Moderate Stiffness with partially restricted movement	
		3	Severe Stiffness with restricted movement	
3	Pain radiating to arm	0	Absent	
		1	Mild intermittent pain over arm	
		2	Moderate pain with occasional tingling sensation	
		3	Severe pain radiating from neck with tingling sensation	
4	Vertigo	0	Absent	
		1	Occasional	
		2	1-3 times in a week	
		3	>3 times in a week	

Table 1: Grading of parameters.

After thorough examination, a diagnosis of Grivagat Vaata vis-a-vis cervical spondylosis has

been established & patient was advised following treatment plan:

Shaman - Therapy								
Procedure	Medication - Dose	Duration						
Deepan-Paachan	Sunth churna 1gm + Kirattikta churn 1gm + Musta churn 500mg		BD for 3days					
Shaman therapy	Pachaamruta Lauh Guggulu 500mg + Godanti Bhasma 500mg + Sameerpannag Ras 60mg		BD for 21 days					
Anupaan dravya	Rasnasaptak kwaath 20ml		BD with shaman medicines					
Panchkarma procedure								
Grivaa Basti	aa Basti Sahachar Tail 100-150ml		5 days daily - 2 session with interval of 3 days					
Nasya	Anu tail	5 days daily - 2 session with interval of 3 days						
Tiktaksheer-Basti	Panchtikta Sidhdha ksheer 100ml with Panchtikta Ghrit 30-40ml							

Griva basti

Griva Basti is distinctively used as external *Ayurvedic Panchkarma* procedure used to pacify the aggravated *Doshas* in cervical spine/ neck region. Patient is asked to lie down with prone position on the table & then we have used Dough of *Masha* to make circular dam wall over tender & painful region of cervical spine. The border of circular rim are sealed properly & then tolerable hot *Sahachar* oil was poured in *Dhaara* form over the tender areas & kept as it is till the tolerable warm temperature of oil is maintained .Then as temperature decreased we drained off the oil & again procedure is repeated for about 20-30 minute. In between precaution should be taken for leakage of oil & temperature of oil inside the *Basti*.

Nasya

Nasya is one of the chief purification procedures i.e. among all Panchakarm procedures. Nasya is exclusively indicated in Urdhwajatrugat Vikar by different Aacharvas.^[17] (Cha is stated such as Gaurava Siddhisthaan). It that symptoms (Heaviness). *Supti* (Numbness), *Stambha* (Stiffness), and *Shirashula* (Headache) should be treated with Shirovirechana type of Nasya Karma with appropriate drug to demolish the pathology.^[18] Aachrava Charak mentioned therapy of Nasya in management of *Manyasthambha*.^[19] Cardinal symptoms that is pain & stiffness are due *Vata* & *kapha dosha* predominantly. As per treatment protocol mentioned in Samhitas Shodhan therapy should followed by Shaman therapy. Nasya was carried out 10min after Griva Basti completion.

Purvakarma: Nasya was carried out 10min after *Griva Basti* completion. A gentle massage over the forehead, cheeks, & sides of nose (region of frontal & maxillary sinuses) is done for 10 minutes by using sesame oil, followed by *Nadi Swedan*. Then 4-4 drops of *Anu tail nasya* was instilled in each nostril which is then followed by warm water gargling.

Tiktaksheer basti

Acharya Charaka has said that in the diseases related to *Asthi*, We should give *Basti* using *Tikta rasatmaka aushadhi dravya* along with *ghrit* (Ghee) and *Ksheer* (milk).^[20] As the *Acharya Dalhana* has said *Asthidhara kala* is *Purishdhara kala*.^[21] *Purishdhara kala* is nothing but *Pakvashaya* (large intestine). "*Pakvashaya*" is very important *Sthan* (Site) of Vat *Dosha*. Here there is *Nirmiti* (Origin) of *vata Dosha* and *Asthi dhatu*. *Karyakshetra* of *basti* is *Pakvashaya*. *Tiktaksheer basti dravya* was prepared by *Ksheerapaak vidhi*. About 10-15 gm of *Panchtikta Bharad* was soaked in 400ml of water & boiled till it remains 1/4 th of water, then 100ml of *Godugdh* was added to it & boiled till 100ml of milk remained. Then 40-50ml of *Panchtikta Ghrit* was added & *basti* was administered.

Sr. no.	Parameters	Before treatment	After session 10Day	After 21Days
1	Neck pain	3	2	0
2	Neck stiffness	2	1	0
3	Pain in arms	3	2	0
4	Vertigo	2	1	1

DISCUSSION

Cervical Spondylosis is degenerative disease of cervical spine which ultimately *Manyasthambh* & we considered it under broad heading that is *Vaatvyadhi*. In this entity patients specially come across main symptoms are pain & stiffness, which never likely to be without *Vaatdusthi* & *Kaphadusthi*. *Acharya Charaka* has used the term, "*Nastah Pracchardana*^{[22],}" for *Nasya*, which denotes *Shodhana* done by *Nasya*. It is the best method to eliminate and alleviate the vitiated *Doshas* of *Urdhvanga*.^[23] *Taila* has been mentioned for *Nasya* Karma in *Kapha-Vata Dosha Pradhana* condition.^[24] The best treatment modality for any kind of disorder is *Shodhana* therapy followed by *Shamana* Therapy⁻ Also *Manyasthambh* disease have its site at *Urdhwajatrugat adhisthaan*. Cosidering this, *Nasya* is the prime treatment explained by *Aacharya Vagbhat* to manage diseases of *Urdhwajatrugat vikar*. Also while explaining *Nasya* benifits *Charak* has mentioned *Manyasthambha* in benefits of *Nasya*.

Griva basti help to pacify the *Vaatdusthi & Kaphadusthi*, as here we poured Medicated hot oil on the site of disease which ultimately help against *sheet guna* of *Vaat* which along with *Kapha* causes stiffeness. Also *Manyasthambh* is *Asthigat Vikar* where *Aacharya* has mentioned in *chikitsa* sutra to go for *Tiktaksheer Basti*^[25] & gross use of *Tikta* Ghee . Here we have used *Panchamrut Guggulu* which works at the level of *Asthimajjagat vikar* & *Rasnasaptak kwaath* help to relieves pain along with regular evacuation of bowel which ultimately helps to regularize the *Apaanvikruti*. A combination of *Panchamrut lauh Guggulu* with *Rasnasaptak kwaath* as *Anupaan* has *Vaat-kapha* alleviating, anti-inflammatory & analgesic property. In this study, patient got mild relief after first session of *Grivabasti* & *Nasya* instillation, But patient got highly significant results after second session where we used *Tiktaksheer Basti* along with Shaman therapy.

CONCLUSION

It is concluded that combination of *ayurvedic* formulations along with *panchkarma* therapies like *Nasya*, *Griva basti* & *Tiktaksheer Basti* works very good in this case. It has been proved that the role of *Panchamruta Guggulu* along with *Rasnasaptak kwaath* is significant in the management of cervical spondylosis or osteoarthritis of cervical spine.

REFERENCES

- Prevalence of spinal disorders & their relationship with age & gender, Ali M Alshami, Saudi Medical journal, 2015; 36(6): 725–730.
- Chuanling Wang, et al, The incidence of cervical spondylosis decreases with aging in the elderly, and increases with aging in the young and adult population: a hospital-based clinical analysis, Published online, 2016; 12. doi: 10.2147/CIA.S93118.
- 3. Yadavaji Trikamji, Agniveshkrita Charak samhita, Sutrasthaan, chapter Maharoga Adhyaay, Verse no. 11, Chaukhambha Prakashan, Varanasi, 2011; 20.
- 4. Charak samhita, Bramhanand Triphati editor Vatavyadhi chikitsa, Charak Chikitsasthaan Varanasi Chaukhamba Orientalia, 2011; 28: 617.
- 5. Sushrut Samhita, Anantram sharma, Sushrut nidan sthaan, reprint Chaukhambha Surbharti prakashan, 2000; 1(67): 452.
- Charak samhita, Bramhanand Triphati editor Vatavyadhi chikitsa, Charak Chikitsasthaan Varanasi Chaukhamba Orientalia, 2011; 28: 618.
- Charak samhita, Bramhanand Triphati editor Vatavyadhi chikitsa, Charak Chikitsasthaan Varanasi Chaukhamba Orientalia, 2011; 28: 617.
- 8. Yadavaji Trikamji, Agniveshkrita Charak samhita, Chikitsasthaan chapter Vatvyaadhi chikitsa, Chaukhambha Prakashan, Varanasi, 2011; 28.
- 9. Ambikadutt shastri Sushrut samhita Nidan sthan chapter vaatvyadhi nidan, Varanasi, Chaukhambha Sanskrit Sansthaan, 2007; 1.
- Kasper, Fauci et al. Harrison's Principle of Internal Medicine, McGraw Hill, 2015; 19: 122.
- 11. Witiw CD, Fehlings MG. Degenerative cervical myelopathy. CMAJ, 2017; 189: E116.
- 12. Young WF et. Cervical spondylotic myelopathy: A common cause of spinal cord dysfunction in older persons. Am Fam Physician, 2000; 62: 1064-70, 1073.
- 13. Fehlings MG, Skaf G. A review of the pathophysiology of cervical spondylotic myelopathy with insights for potential novel mechanisms drawn from traumatic spinal cord injury. Spine, 1998; 23: 2730-7.
- 14. Sudhir singh et al. Risk factors in cervical spondylosis, journal of clinical orthopaedics & trauma; December, 2014; 54: 221-226.
- 15. Gomatam Raghavan Vijay kumar et al.Symposium Cervical Spondylo Myelopathy, 2019; 2(1): 5-12.
- Sainani GS, editor. API Textbook of Medicine. An Chandrasekaran Rheumatology. Osteoarthritis, 2012; 9,2,4,24: 1819-20.

- 17. Asthanga Hrdayam, of Shrimadvagbhat, By Brahmananda Triphathi, Asthang Hrudya sutrasthaan, ANasyavidhi adhyaya, 20: 245.
- 18. Dwivedi RN editor, TRiphati, Commentator, Chakradutta of Chakrapanidutta, Nasyadhikar, Chapter Chaukhambha Sanskrit Bhavan, Varanasi, 2014; 457: 74.
- 19. Charak Samhita, edited with Charak chandrika hindi commentry, Brahmanand Triphathi, Charaka sutrasthaan chapter Matrashitiya adhyay, 2000; 5: 127.
- 20. Charak Samhita, edited with Charak chandrika hindi commentry, Brahmanand Triphathi, Charaka sutrasthaan Vividhashitpeeteeyam adhyay Shlok, 28: 27.
- 21. Sushruta, SUSHRUT SAMHITA, with commentaries Nibandhasangraha Commentary of Sri Dalhanacharya & Nyayachandrika Panjika of Sri Gayadasacharya on nidansthana Edited By Vaidya. Jadavaji Trikamaji Acharya & Narayan Ram Acharya, Choukhamba Sanskrit Pratishthan, Reprint: Kalpasthana, Sarpadashta vish vidnyaniya, Shlok, 2014; 574: 40.
- 22. Acharya JT, editor. Dirghamjivitiya adhyaya. Charaka Samhita of Charaka, Sutra Sthana.Reprint Varanasi: Chaukhambha Orientalia; 2011; 1(85): 21.
- 23. Paradakara HS, editor. Ashtang Hridaya of Vagbhatta, Sutra Sthana, Nasyavidhimadhyaya. Reprint Varanasi: Chaukhamba Sanskrit Sansthana, 2014; 20(1): 287.
- 24. Acharya JT, editor. Dhumnasyakavalagrah chikitsa. Sushruta Samhita of Sushruta, Chikitsa Sthana. Varanasi: Chaukhambha Orientalia; 2014; 40: 56- 559.
- 25. Brahmanand Triphati, with Chrak chandrika, Charaka Samhita of Charaka, Sutra Sthana.Ch. Varanasi: Chaukhambha Orientalia, 2011; 28(30): 550.