



Review Article

REVIEW ON CERVICAL SPONDYLOSIS AND IT'S MANAGEMENT THROUGH PANCHAKARMA**Sapna Kumari Vishwas^{1*}, K.K.Sharma², Anil Kumar¹**¹M. D. Scholar, ²Professor & HOD, Dept. of Panchakarma, Uttarakhand Ayurved University, Haridwar.**KEYWORDS:** Spondylosis, Panchkarma, Basti, Nasya, Shodhana, Stambha.**ABSTRACT**

Cervical Spondylosis, osteoarthritis of the cervical spine produces neck pain, radiating to the shoulders or arms with headache (posterior occipital region). At present time it is a common problem, degeneration of cervical vertebrae is mostly seen in elderly people but it's prevalence is increasing in early or middle age also, due to occupational overstress on neck region, traumatic blunt or sharp injury, improper sitting posture, excessive smoking, sedentary lifestyle, false diet pattern and genetic factors. About 50% of people over the age of 50 and 75% of people over the age of 65 have typical radiographic changes of cervical spondylosis. In *Ayurvedic* context the disease cannot be correlated exactly as whole with any single disease or condition, but some features can be correlated nowadays with various conditions described in Ayurveda such as "*Manyastambha*", "*Greeva sandhigata vata*", and *Greeva Stambha* (all are *Vatavyadhi*) in our classical text. In this review the cervical spondylosis and its management has been explain closely to "*Greeva sandhigata vata*". *Ruka* and *Stambha* (pain and stiffness) are the signs and symptoms told in our texts. The modern management, such as NSAID's, muscle relaxants, corticosteroids and even operative procedures are not fulfilling the patients goal of healthy life as all the medicines only give symptomatic relief. Through Ayurveda especially *Panchakarma*, probable management that can be done are *Abhyanga*, *Rukshaswedana*, *Patra pinda swedana*, *Greeva basti*, *Mridu shodhana*, *Basti*, *Nasya Karma* etc. can help in the successful management.

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INTRODUCTION

Cervical spondylosis is a condition, which causes deterioration of the vertebrae, discs, and ligaments in the neck or cervical spine and narrowing of the spine canal by osteophytes, ossification of the posterior longitudinal ligament or a large central disk may compress cervical spinal cord, also known as arthritis of the neck, cervical osteoarthritis, or degenerative osteoarthritis of neck. Age, gender and occupation are the main risk factors.^[1] Morning stiffness is a characteristics feature (which is exaggerated in cold weather), along with tingling and numbness in arms and vertigo is common. In chronic condition, the pain may be worse at night and after neck movement.

Cervical spondylosis is a common condition that is estimated to account for 2% of all hospital admissions and the most frequent cause of spinal cord dysfunction in patients older than 55 years. On

the basis of radiologic findings, 90% of men older than 50 years and 90% of women older than 60 years have evidence of degenerative changes in the cervical spine. Evidence from a 2009 report indicated that cervical spondylosis with myelopathy was the most common primary diagnosis (36%) among elderly. In US, maximum patients admitted to the hospital for surgical treatment of a degenerative cervical spine between 1992 and 2005.^[2] The C5/C6, C6/C7 and C4/C5 vertebral levels and C6, C7 and C5 roots, respectively, are most commonly affected.^[3]

X-rays can reveal spurs on the vertebra in the spine, any thickening of the joints, and reveal if there is any narrowing of the spaces between the intervertebral discs. CT scan of the spine can view and diagnose spinal stenosis. MRI scans are best for visualizing the intervertebral discs and assessing

the extent of disc herniation, also visualize all aspect of the spine.

Treatment is usually conservative in nature; the most commonly used treatments are NSAIDs, physical modalities, and lifestyle modifications. Surgery is advocated for cervical radiculopathy in patients who have intractable pain, progressive symptoms, or weakness that fails to improve with conservative therapy.^[4-6]

In Ayurvedic perspective, *Grivagata sandhivata* is one of the eighty types of *Vatavyadhi*, which is characterized by especially degenerative condition. Pain during the flexion- extension of a joint along with swelling and coarse crepitation on joint movement is the typical clinical features of *Sandhivata*.^[7] It may also be considered as, *Grivastambha*, in which *Stambha* (stiffness) is developed in the neck region. *Acharya Sushrut* has described *Manyastambha* which caused by *Diwaswapna* (sleeping during daytime)^[8], using pillows inappropriately during sleeping and constant gazing in upward direction, leading to the vitiation of *Vata* and *Kapha dosha* such as condition of cervical spondylitis or acute stage of cervical spondylosis.^[9]

Sandhigata Vata is the commonest form of articular disorder, *Vata Dosha* plays main role in this disease. *Acharya* has mentioned that *Nidan Sevana* (etiological factors) aggravates *Vata* and this *Prakupita* (vitiating) *Vata* accumulates in *Strotas* to give rise to various generalized and localised diseases. In case, *Vata Dosha* is vitiating in *Greeva Asthi Sandhi* (cervical joint) it leads to *Greeva Asthi Sandhigata Vata*. *Sandhigata Vata* is a disease involving the vitiating *Vata Dosha* in one or the other form, though the other *Doshas-Pitta* and *Kapha* are also invariably involved being disturbed in varying proportions. The main *Dhatu*s afflicted are *Rasa-Rakta* (blood), *Mamsa* (muscles, tendons, ligaments) and *Asthi* (bone and joints). When these tissues are afflicted by one or more of the above said *Doshas* with predominance of *Vata*, arthritis get manifested. Disturbed metabolism (*Agni Dushti*), circulating endo-toxins (*Ama*), improper food and activities (*Mithya Ahara* and *Vihara*) etc. is also the chief causes. This indicates that most of the arthritis according to Ayurveda has a systemic origin.^[10]

Ayurvedic treatment protocol is primarily focused on normalizing the vitiating *Dosha* by means of *Shodhana* and *Shaman* therapy. The *Panchkarma* treatment *Snehana* and *Swedana* are considered as a general line of treatment for *Vatavikara*, which are *Vatakapha hara* and *Shula Hara* after that *Asthisikshayajanya Chikitsa*, *Nadi Balya Chikitsa* for

neurological manifestations, are planned.^[11] Common *Panchakarma* treatments of cervical spondylosis include *Snehana*, *Swedana* procedures like *Ruksha swedana*, *Patra pinda swedana*, *Greeva basti*, *Greeva pichu*, *Tailadhara* and *Vaman*, *Virechana*, *Nasya*, *Basti* etc.

DISCUSSION

Cervical spondylosis is an age-related wear and tear affecting the spinal disks in neck and worsens with age.^[12] Ayurvedic science has main role in prevention and effective management of cervical spondylosis. *Acharaya Sushruta* says *Nidana Parivarjana* is first line of treatment, but *Acharaya Charaka* has further amplified the scope of *Chikitsa* by saying: *Chikitsa* aims not only the less exposure to the causative factors of the disease, but also at the restoration of *Doshika* equilibrium. In this disease pathogenesis is at cervical region and is mostly associated with changes in cervical vertebral column. There is degeneration of intervertebral disc and lubrication of vertebral column is affected which results in compression, irritation or inflammation in cervical region resulting in pain. Therefore *Panchakarma* treatments give the satisfactory results in cervical spondylosis (*Greeva sandhigatavata*)^[13-15], as explaining.

***Snehana Karma*:** *Snehana* means oleation therapy, which produces *Snigdhatva* or oiliness in the body. According to its route of administration *Snehana* classified in *Abhayantara Snehana* (internal oleation) like *Pana*, *Basti*, *Nasya*, *Bhojana* etc. and *Bahaya Snehana* (external oleation) may include *Abhyanga*, *Pichu*, *Sneha Parisheka* etc., both are plays an important role in the management of *Dhatu Kshayaja Vikara*. When *Sneha* administered internally it reaches to *Srotamsi* and acts as a solvent to remove the obstruction by dissolving *Dosha* in it, resulting in the removal of *Srotorodha*, which is one of the important steps in the *Samprapti Vighatana* of disease. And after proper *Snehana* all cells of the body becomes completely saturated with fats. Then the fat material comes out of the cell to extra-cellular fluid by osmosis process. So due to the aqueous properties of *Sneha* and liquefied *Mala* brought from the tissues, the levels of fatty acids etc. increases in the blood resulting in the high plasma volume. To keep up the equilibrium of the normal plasma level, the extra amount of liquid reaches to the *Koshtha* for excretion. Later on, this increased amount of the body fluid is evacuated through other therapies, like *Vaman*, *Virechana* etc. When *Sneha* administered externally, drugs undergoes *Pachana* by *Bhrajaka Pitta* and the *Virya* of drugs are absorbed through *Romakupya* & *Dhamani* and circulated all over the body and do

nourishment of *Dhatu* and thus *Dosha Samana*. Thus *Snehana* helps in nourishing the *Dhatu*s and increasing the *Agni-bala* and helps in increasing the strength of the body. *Snehana* also helps in relieving the pain and stiffness by pacifying the vitiated *Vatadosha*.^[16-18]

Swedana Karma: Has the main role in treating cervical spondylosis. *Swedana* which has *Tikshana* and *Ushna* property has its main action like *Stambaghana*, *Gauravaghna*, *Sitaghna*, which are quite opposite to the symptoms of this disease. *Swedana Karma* is indicated in *Vataja* and *Vata Kaphaja* disorders; in *Vataja* disease *Snigdha Swedana* is adopted and in *Vata Kaphaja* disease, to break *Kaphavarana Ruksha Swedana* is to be adopted in case of symptoms like heaviness and swelling in the neck region.^[19,20]

Snigdha swedana like *Shastika Shali Pinda Swedana*, *Jambira Pinda Swedana*, *Greeva Basti*, *Greeva Pichu*, and *Taila Dhara* are commonly used in practice as treatment of cervical spondylosis.

Ruksha Swedana like *Ruksha Churna Pinda Swedana*, *Baluka Swedana*, *Nadi Swedana*, *Tusa Pinda Swedana* etc. is ideal treatment to break *Kaphavarana*.

Greeva Basti: is pain relieving oil pooling treatment conducted for neck pain, in which both the properties of *Snehana* and *Swedana* are incorporated. In this procedure medicated warm oils are poured and pooled for a fixed duration of time (30-45 minutes) in a compartment or a cabin constructed over the neck or nape of the neck area using wet flour of black gram, covering the cervical region. As *Vata Dosha* is *Shita* (cold), *Ruksha* (dry) in nature and *Swedana* being *Ushna* and with prior oleation, unctuous in nature, alleviates *Vata*. *Swedana* increases sweat and throws out waste products along with sweat. Thus it decreases *Kleda* in the body resulting in the reduction of *Gaurava* (heaviness) and *Stambha* (stiffness) which are common symptoms of *Vatavyadhis*. Generally used oils are *Mahanarayana Tailam*, *Panchaguna tailam*, *Dhanawantara tailam*, *Sahacharadi tailam*, *Mahamasha tailam*, *Ksheerabalatailam* etc.^[21-24]

Patra Pinda Swedana: is highly effective in the management of painful conditions caused mainly by *Vata Dosha*, usually in degenerative diseases. In this procedure leaves of medicinal plants along with other conventional drugs are roasted in a pan with oil and a bolus is prepared by tying in the cloth and heated up to a tolerable temperature, leaves generally used are- *Eranda* (*Ricinus communis*), *Nirgundi* (*Vitexnegundo*), *Arka* (*Calotropis gigantean*), *Chincha* (tamarind), *Dhatu* (*Dhatu*

metal), *Shigru* (Moringa leaves) etc. the time duration of the treatment 30-45minutes. *Patra Pinda Swedana* may help in increasing blood circulation to the affected area, gets rid of *Dosha* imbalances, strengthens the muscles in the area, helps the release of toxins and reduces inflammation also helps to tone muscles and improve the working of tissues within the body.^[25,26]

Vamana Karma: is a procedure in which *Doshas* (waste products or toxins) are eliminated through upper channels i.e. mouth. Specially the *Kapha* and *Pitta dosha* brought to *Amashaya* (stomach and duodenum) from all over the body by the specific preoperative procedures and then eliminated by inducing the emesis. *Vamana* is classified as: *Mridu Vaman* (mild *Vamana*) and *Tikshana Vamana* (strong *Vamana*). For the *Shodhana* in cervical spondylosis *Mridu Vamana* is use. It is a cleansing process that improves appetite, regulates bowel habits and improves sleep patterns.^[27-30]

Virechana Karma: Eliminating of *Doshas* from the body, through anal route is called *Virechana* (therapeutic purgation). It is less stressful procedure; which has less possibility of complications and could be done easily. *Virechana* is considered as the best treatment for morbid and increased *Pitta Dosha*. In cervical spondylosis *Mridu Virechana* is use for *Shodhana*. The drugs, which are *Manda* in *Virya*, when combined with opposite *Virya* or given in low dose, given to *Ruksha* patient and causing less purgation is known as *Mridu Virechana*. In cervical spondylosis *Mridu Virechana* should be done with *Draksha*, milk, warm water, castor oil etc.^[31]

Nasya Karma: is considered as the best procedure for disease of head and neck, in which the medicine is instilled into the nose, the gateway of head could be effective, economical and affordable treatment modality to treat cervical spondylosis. The cause for stiffness is dehydration of intervertebral discs. *Nasya* with a nourishing drug can induce some nourishment to tissues by impregnating *Kapha Bhavasand* may reduce degeneration. *Brimhana Nasya* alleviates vitiated *Vata* which is responsible for stiffness and movement restriction. This may be the reason for improvement of range of movements.^[32,33]

Basti: Administration of medicine through rectal (*Gudamarga*), urethral (*Mutramarga*) and vaginal (*Yonimarga*) route is known as *Basti*. On the basis of medicine used, it can be divided into *Sneha* and *Niruha* subtypes. *Niruha Basti* is homogenous emulsion mixture of Honey, *Saindhava*, *Sneha Dravya*, *Kalka*, and decoction of crude drugs and

Prakshepa Dravya. In *Sneha Basti* medicated oils are used. *Basti* is mentioned in vitiation all the *Vata*, *Pitta*, *Kapha*, *Rakta Doshika* disorder but it is specially indicated for *Vatika* diseases. *Vayu* is the lord, it is only responsible for all the functions of the body and also therefore for the production of diseases. *Basti* is the best therapy to control the *Vata* and thus controls the *Pitta* and *Kapha* also. The given *Basti* enters the *Pakvasaya*, which is the main seat of *Vata Dosha* and destroys *Vata Dosha*, which is the originator of all diseases. By subside the *Vata*, all diseases located in the other parts of the body also become pacified. *Virya* of *Basti* drugs reaches all over the body through the *Srotas* and *Basti* drugs quickly comes out with *Mala*, their *Virya* acts all over the body by the action of *Apana* and the other *Vayu*. This action takes place just like as sun draws moisture from the earth. So *Basti* is the most effective treatment in cervical spondylosis.^[34-36]

CONCLUSION

Cervical spondylosis is one of the commonest degenerative neurological condition by which the major population has been affected. The *Panchakarma* involving all the three aspect of Preventive, Nutritive and Curative treatment is all in one treatment methodology. Cervical Spondylosis can best managed in relieving signs and symptoms and providing the best comfort by judiciously adopting various *Panchakarma* procedures at regular intervals based on *Avastha* of the disease and patient. *Panchakarma* have been proved useful for Cervical Spondylosis in alleviating symptoms and to reduce severe disability.

REFERENCE

1. Raman Kaushik et al.: Management of cervical spondylosis through Ayurveda: A case study. Int. J. Res. Ayurveda Pharm.2017;89 supp (12):179-18/10.7897/2277-4343.082109.
2. Hassan Ahmad, Hassan Al Satoury: Cervical spondylosis; 2018, Available from: <https://emedicine.medscape.com>
3. Dr.Priyanka A. Keram and Dr. Sheetal G. Lodha; A case report- effect of Kalabasti karma with sthanik Snehana swedana in the management of Manyagatavata (cervical spondylosis), 2017;6(3)1148-1158.
4. Sandeep S Rana, Tarakad S Ramachandran: Diagnosis and Management of cervical spondylosis; 2017, Available from: <https://emedicine.medscape.com/article/1144952-overview#a6>.
5. Harrison's Principles of Internal Medicine, Kasper, Fauci, Hauser, Longo, Jameson, Loscalzo, Vol-I, 19th Edition, pg.no.117, 122,163.
6. Manual of Practical Medicine, R Alagappan, 5th Edition, pg.no.721-722
7. Agnivesh, Charak Samhita; Pandit Kashinath Shastry & Dr. Gorakhnath Chaturvedi, vollI, Reprint 2013; Chaukhamba Bharati Academy, Varanasi; Ch.Chi.28/37
8. Sushruta Samhita; Dr. Ambika Dutt Shastri, VL-I, Edition 2007, ChaukhambaSanskritasansthan, Varanasi; Su.Ni.1/28
9. Dr. Raghuram Y.S,Sandhigata vata; Available from: <https://drraghuramys.wordpress.com>
10. Sree Subramania Hospital-Panchakarma treatment for Cervical spondylosis; 2017.
11. Pankaj Kumar Shukla et al: Conceptual study of Nasya Karma in the management of Sandhigata Vata (Cervical Spoodnylosis);2016, 4(02), 23205091; Available from: www.iamj.in
12. <https://www.mayoclinic.org/diseases-conditions/cervical-spondylosis/symptoms-causes/syc-20370787>
13. Yogesh Kumar Pandey, Shalini, and Ajay Kumar Sharma: effect of Grivavasti in management of Grivavasti sandhi gatavata (cervical spondylosis; 2013, 33(1):71-75.
14. Kajaria Divya Tripathi J.S., Tiwari S.K. Utilization of Panchakarma in health care: Preventive, nutritive and curative treatment of disease. J Pharm Sci Innov.2013; 2(5):1-5; 2277-4572,
15. Dr.Mukund Dive, Dr.Suresh Katare, Dr. Madhusudan Gupta; Management of Manyastambha (cervical spondylosis) Through a Traditional system of medicine; 5(02), 2017, 71-76.
16. Sangeeta Sharma, Nirmal Bhusal, Gopesh Mangal, Gunjan Garg. Cervical Spondylosis and its Panchkarma Management -A Conceptual Study. International Ayurvedic Medical Journal. November, 2017. pp. 4157- 4160.
17. Principles and Practice of Panchakarma, A Comprehensive Book for U.G., P.G., Researchers & Practitioners: Dr. Vasant C. Patil, Chaukhambha Publications, New Delhi; 2017, pg.no.181-185.
18. Shreya D M, Kiran M. Gouud, Vinaykumar K.N., Swathi Deshpande. A conceptual study on Panchakarma Approach in the Management of Ankylosing Spondylitis. International Journal of Ayurveda and Pharma Research.2017; 5(8):87-90.
19. Soumya Jacob, Anandaraman P.V, Parameswaran Namboothiri, Prathibha C.K. Concept Analysis: Swedana in Manyastambha. AAMJ. Vol. 2.Issue 3. May-June 2016,710-715.

20. Unnikrishnan Vidhya, K.Nishteswar. Evidence based medicine of lifestyle disease w.s.r.to Panchakarma. J Biol Sci Opin 2015 3(3): 153-156.
21. Nirmal B, Kumar BS, Management of cervical spondylosis with Dashmoola oil Manya vasti and internal medicines-a case study, Int.J Health Sci Res, 2016; 6(9): 524-528.
22. Dr. Raghuram Y.S., Greeva Basti-Health Benefits procedure, Treatment Duration; Available from: <https://easyayurveda.com/2016/01/03/greeva-basti-benefits-method/>
23. Remya et. al. Role of Greevabasti in Manyastambha (cervical spondylosis) AAMJ 2015; I: 36I-3.
24. Wadwa Ritu, Role of Nasya and Manya basti in the management of cervical spondylosis with special reference to Greevastambha: case report; 2015, 3/6.
25. Nirmal Bhusal Et al: Review on Patra Pinda Sweda: A peculiar Ayurveda Bolus Fomentation, International Ayurvedic Medical Journal (online) 2017, Available from: <http://www.iamj.in/posts/images/upload/1760-1764.pdf>.
26. Rupesh Wadher: Clinical evaluation of TiktaKshira Basti and Patrapinda Sveda in cervical spondylosis (Asthigatavata). J Ayurveda Integr Med Sci 2017; 3:27-33.
27. Agnivesh, Charak Samhita; Pandit Kashinath Shastry & Dr. Gorakhnath Chaturvedi, volII, Reprint 2013; Chaukhamba Bharati Academy, Varanasi; Ch.Kalpa.1/5.
28. Dr.Vipin Kumar, Dr.Sonu, Dr.Shweta dewan: Explorartion of Vamana Karma in the management of skin diseases vis a vis Psoriasis an analytical outlook,2017,3(1),147-151.
29. Ujjaliya Nsemani, Nitin, Remadevi R(2012), A Review on Pharmacodynamics of Vamana Karma and Vamanopaga Dasemani, Global J Res. Med. Plants & Indigen.Med,1(11),644-649.
30. Bharti Gupta et al., Physiological and biochemical change with Vamana procedure, 2015, 33(3), 117.197.233.193.
31. Sudarshan Hande, Rahul Palshetkar, Ashish Mhatre, Amit Mujumdar, Kavita Hande: Review of Virechana Karma in classical texts of Ayurveda. J Ayurveda Integr Med Sci 2016;4: 105-117.
32. Agnivesh, Charak Samhita; Pandit Kashinath Shastry and Dr. Gorakhnath Chaturvedi, vollI, Reprint 2013; Chaukhamba Bharati Academy, Varanasi; Ch.Si.9/88.
33. Azeem Ahmad, S. Seena, K. Ravisankaran, Singh Sarika. The Effect of Karpasasthyadi Taila Nasya, Physiotherapy and A Combination of Both in Cervical Spondylosis. International Journal of Ayurveda and Pharma Research. 2015; 3(3):23-30.
34. Agnivesh, Charak Samhita; Pandit Kashinath Shastry and Dr. Gorakhnath Chaturvedi, vol-II, Reprint 2013; Chaukhamba Bharati Academy, Varanasi; Ch.Si.1/31.
35. Gyanendra D.Shukla, Shweta Pandey, Anup. B.Thakar: Pharmacodynamic understanding of Basti: A contemporary approach; 2012; 3(4): 893-896,
36. Subina S, Prathibha C. K, P. V Ananda Raman, Prasanth D. Understanding the Mode of Action of Bastikarma (Medicated Enema). AAMJ.Vol. 1. Issue 4. July – Aug 2015; 267-274.

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