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Review Article

REVIEW ON CERVICAL SPONDYLOSIS AND IT`S MANAGEMENT THROUGH PANCHAKARMA Sapna Kumari Vishwas^{1*}, K.K.Sharma², Anil Kumar¹

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KEYWORDS: Spondylosis,	ABSTRACT
Panchkarma, Basti, Nasya, Shodhana, Stambha.	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 <i>Ayurvedic</i> 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
*Address for correspondence Dr Sapna Kumari Vishwas M. D. Scholar, Dept. of Panchakarma, Rishikul Campus, Uttarakhand Ayurved University, Haridwar. Email: sapnakumarivishwas@gmail.com Mob: 9024090488	<i>Vatavyadhi</i>) in our classical text. In this review the cervical spondylosis and its management has been explain closely to " <i>Greeva sandhigata vata</i> ". <i>Ruka</i> and <i>Stambha</i> (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 <i>Panchakarma</i> , probable management that can be done are <i>Abhyanga</i> , <i>Rukshaswedana</i> , <i>Patra pinda swedana</i> , <i>Greeva basti</i> , <i>Mridu shodhana</i> , <i>Basti</i> , <i>Nasya Karma</i> etc. can help in the successful management.

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 Avurvedic perspective. Grivagata sandhivata is one of the eighty types of Vatavvadhi, 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 bv *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 (vitiated) Vata accumulates in Strotas to give rise to various generalized and localised diseases. In case, Vata Dosha is vitiated in Greeva Asthi Sandhi (cervical joint) it leads to Greeva Asthi Sandhigata Vata. Sandhigata Vata is a disease involving the vitiated 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 *Dhatus* 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 Avurveda has a systemic origin.^[10]

Ayurvedic treatment protocol is primarily focused on normalizing the vitiated *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 *Asthikshayajanya 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] Avurvedic science has main role in prevention and effective management of cervical spondylosis. Acharaya Sushruta says Nidana Parivarjana is first line of treatment, but Acharava 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 *Snigdhata* or oiliness in the body. According to its route of administration Snehana classified in Abhavantara 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 Virva of drugs are absorbed through Romakupa & Dhamani and circulated all over the body and do nourishment of *Dhatu* and thus *Dosha Samana*. Thus *Snehana* helps in nourishing the *Dhatus* 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 Vatavvadhis. Generally used oils are Mahanaravana 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), *Dhatura (Dhatura*

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 Bhavas*and 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 Dravva. 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. *Virva* 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.

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