

EFFECTIVE CERVICAL SPONDYLOSIS PAIN MANAGEMENT BY 'CVRT'- AN  
EVIDENCE-BASED AYURVEDIC TREATMENT PROTOCOL: A CASE STUDY

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**ABSTRACT**

Cervical spondylosis (CS) is a prevalent degenerative condition of the cervical spine, affecting a significant portion of the global population. This case study presents the successful management of CS using a novel Ayurvedic treatment protocol 'CVRT' (Cell Vitality Restoration Treatment). A 66-year-old female patient with a three-year history of progressive neck pain and stiffness, along with multiple comorbidities, was treated using the CVRT protocol. The customized treatment plan included *Shodhana Chikitsa* (purification therapy) with *Swedana* (sudation) using Tenroot mix *Patra Pottali* and *Dhara Sweda* with Premena Oil, followed by *Shamana Chikitsa* (pacification therapy) with proprietary Ayurvedic formulations, including Tab. Tenroot, Tab. Trichosanthus, and Tab. Tinospora. The patient's pain score, assessed using a 0-4 scale, reduced from 20 at the initial visit to 2 at the end of the one-month treatment period. Significant improvements were observed in pain, stiffness, and physical function, with no adverse events reported. The CVRT protocol's success in this case highlights the potential of Ayurvedic interventions in managing CS, focusing on symptomatic relief, joint mobility, and overall musculoskeletal health.

**KEYWORDS:** Pain Management; Ayurvedic Treatment; CVRT (Cell Vitality Restoration Treatment); Vata Dosha; Neck Pain.

**INTRODUCTION**

'Pain in the neck region' is one of the most frequently reported symptoms in clinical practice. Among its variety of causes, cervical spondylosis (CS) stands as one of the commonest one.

CS is a major social and public health concern, affecting over 85% of older adults worldwide. Moreover, its prevalence is sharply on rise among young adults too, largely as a result of multiple social and occupational factors.<sup>[1]</sup>

CS is a common degenerative condition affecting the cervical spine, characterized by the gradual deterioration of intervertebral discs and osteophytes formation. These changes further lead to narrowing of spinal canal and, even, nerve root compression. As a result, neurological

symptoms such as pain, numbness, weakness, and impaired motor function of upper extremities are observed.<sup>[2]</sup> Such functional impairment may significantly impact patients' lives by limiting their ability to perform daily activities, maintain employment, and engage in social relationships. As a result, it can lead to a substantial economic burden, not only due to increased medical and rehabilitation costs but also because of lost productivity, caregiver expenses, and reduced quality of life. The long-term consequences can further strain healthcare systems and social support networks, underscoring the urgent need for effective interventions and preventive strategies.

The general line of treatment for CS includes conservative therapy such as lifestyle modification, pain coping strategies (E.g., non-steroidal anti-inflammatory

drugs-NSAIDs), strengthening exercises (E.g., physiotherapy), etc. In cases of progressive neurological complications, surgical decompression might be required.<sup>[3]</sup> The conservative treatments such as NSAIDs often have limited success. Their continuous and excessive use can have detrimental effects too.<sup>[4]</sup> They provide partial symptomatic relief rather than offering a complete cure. In fact, many patients continue to experience chronic discomfort and functional limitations despite a prolonged treatment. This highlights the need for more effective therapeutic approaches, especially from holistic health science, such as Ayurveda.

From Ayurveda's perspective, cervical spondylosis is primarily considered resultant of *Vata Dosha* imbalance. The improper diet and stressful lifestyle, leads to vitiation of *Vata Dosha*. These factors along with age-related gradual degeneration of *Asthi Dhatu* and *Mamsa Dhatu* aggravate the situation. When such etiopathology occurs in the cervical region, it gives rise to '*Manyagata Vata*,' which can be correlated with CS. <sup>[5]</sup> Ayurveda states that, *Vata Dosha* is responsible for all movement and activities in the body. When vitiated, *Vata Dosha* leads to disruptions in bodily functions, thereby causing restricted and painful movements, along with numbness and tingling in upper limbs.

The treatment protocol for vitiated *Vata Dosha* is comprehensive with variety of internal medicines and external therapeutic measures. Based on the Ayurveda principles and the chief physician's evidence-based practice of over 24 years, we have designed a specialized approach- CVRT (Cell Vitality Restoration Treatment) protocol. The CVRT protocol combines multiple therapeutic modalities of specially formulated medicines, presenting Ayurveda in a contemporaneous way. Here,

we present a case of CS that was successfully treated with CVRT.

### CASE REPORT

In October, 2024, a 66-year-old female presented with neck pain radiating to the left upper limb along with stiffness. These symptoms had been progressively worsening over the past three years, significantly affecting her quality of life and daily functioning. Her medical history included chronic kidney disease, hypertension, diabetes mellitus, hypothyroidism, and dyslipidemia. Her family history showed that both her brother and sister were also diagnosed with diabetes and hypertension. The cervical pain and stiffness considerably limited her ability to perform routine household tasks, causing emotional distress as a homemaker.

A previous MRI scan demonstrated anterolisthesis of C4 and retrolisthesis of C5 vertebrae, along with multilevel spondylosis, and mild spinal canal stenosis. Following the diagnosis of CS, the patient explored multiple conventional treatment options, but had minimal improvement in her condition.

To assess the extent of her condition, we performed a physical examination, including the Pain Score to quantify pain intensity, and Manual Muscle Testing (MMT) to evaluate neck muscle strength by applying resistance during motion across her available range of movement (ROM). At the initial visit, her pain score was 20; with limited muscle strength and restricted range of motion. Apart from this, her vital parameters and systemic examination was within normal limits.

Based on the requirements of her condition, the CVRT protocol was customized for her as mentioned in table 1.

**Table 1: Customized CVRT Protocol.**

Shodhana Chikitsa			
Treatment	Medication Details		Duration
Swedana	Tenroot mix Patra Pottali		16 days
Dhara Sweda	Premena Oil		
Shamana Chikitsa			
Medicine	Dose	Time of Administration	Duration of Administration
Tab. Tenroot	1 Tablet	Once daily after lunch	30 days
Tab. Trichosanthus	2 Tablets	After breakfast	
	2 Tablets	After dinner	
Tab. Tinospora	2 Tablets	After breakfast	
	2 Tablets	After dinner	

### TREATMENT OUTCOMES

With the course of treatment, the patient noted a steady improvement, marked by a gradual reduction in cervical pain. The protocol was continued for one month till patient reported notable improvement in pain and other symptoms. At the end of treatment, her pain score reduced to '2', reflecting substantial pain relief. During the treatment period, the patient tolerated the protocol

well, reporting no untoward effects and demonstrating excellent compliance.

The improvement in pain score is presented in Table 2.

Table 2: Improvement in Pain Score after commencement of therapy.

Activity	Follow-up dates		
A. Pain (0–4 scale per item)	26/10/2024	22/11/2024	27/11/2024
Activity			
Walking on flat surface	0	0	0
Stair climbing	2	0	0
Night pain (nocturnal)	0	0	0
Pain at rest	0	0	0
Weight-bearing pain	0	0	0
Subtotal (Pain)	2	0	0
B. Stiffness (0–4 scale per item)			
Morning stiffness	1	1	0
Stiffness later in the day	0	0	0
Subtotal (Stiffness)	1	1	0
C. Physical Function (0–4 scale per item)			
Descending stairs	0	0	0
Ascending stairs	2	0	0
Rising from sitting	0	0	0
Standing	0	0	0
Bending to floor	3	0	1
Going shopping	2	0	0
Getting in/out of bath	2	0	0
Light domestic duties	3	2	1
Subtotal (Function)	12	2	2

**TIMELINE**

The figure 1 represents timeline of events in this case study.

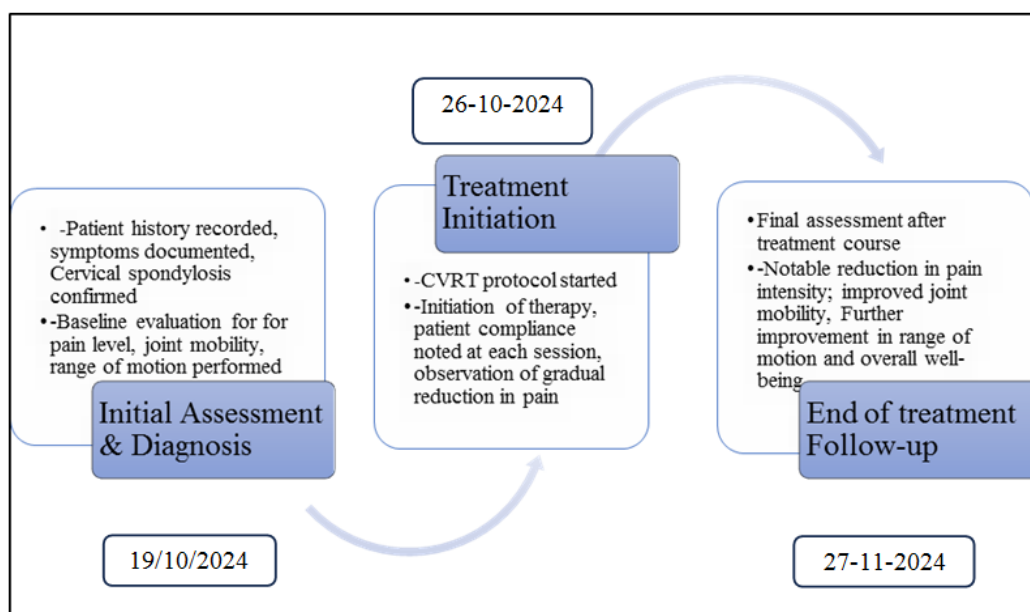


Figure 1: Timeline of The Case.

**DISCUSSION**

In less than a month's duration, the patient experienced rapid and marked improvement in CS pain and other symptoms with the CVRT protocol regime. The improvement was evident from her notably reduced pain score, as well as improved muscle strength and movement range on physical examination. The absence of any adverse events, combined with the patient's consistent compliance throughout the treatment, further

underscored the safety and effectiveness of this unique therapeutic approach.

CS is a common degenerative condition of the cervical spine, especially seen in the older age due to age-related wear and tear of the intervertebral discs, vertebrae, and surrounding ligaments. Factors like prolonged household work, poor posture, and a sedentary lifestyle can contribute to or worsen the condition. Conventionally,

the management of musculoskeletal conditions often involves a combination of conservative therapies. Such as NSAIDs, exercises etc. This approach generally provided symptomatic relief, which is often temporary and does not necessarily address the underlying pathology.

Pain and functional debility resulting from CS are major barriers to maintaining a good quality of life. Thus, we focused on the indicators of clinical improvement rather than radiological assessments. Some previous studies have even reported conflict between clinical and radiological assessment in such patients.<sup>[6]</sup> Thus, we focused on pain score improvement as principal assessment criteria.

In light of this, we have successfully used a unique treatment protocol- CVRT. The concept of cell vitality restoration for musculoskeletal pain focuses not just on reducing pain and preventing cartilage degeneration. It also has potential to enhance metabolism, promote toxin removal, and cleansing body channels to protect vital organs. This, in turn, helps restore new blood supply, creating natural bypasses and improving microcirculation to the affected joint, in this case the cervical vertebrae. Thus, CVRT aims to provide sustainable pain relief, joint strength, and prevent progression of the disease condition.

The protocol started with *Patra Pottali Sweda*. *Patra Pottali Sweda* is a specialized Ayurvedic sudation technique for treating musculoskeletal diseases. A bolus of medicinal leaves, such as *Eranda*, *Arka*, *Nirgundi*, etc. are used in this. These leaves are known for their potent anti-inflammatory, analgesic, and anti-degenerative effects.<sup>[7,8,9]</sup> These medicated leaves improve the therapy's effectiveness by alleviating symptoms including pain, stiffness, and inflammation and increasing overall joint and muscle health. Tenroot powder, an enriched formulation prepared from classical Dashamoola was also used for this.

Ingredients from this formulation, viz., *Oroxylum indicum*, *Desmodium gangeticum*, *Premna integrifolia*, *Gmelina arborea*, *Aegle Marmelos*, *Tribulus terrestris*, *Solanum xanthocarpum*, *Premna Integrifolia*, etc. have been found to be possessing anti-inflammatory and analgesic activities, as evaluated in experimental setup.<sup>[10]</sup>

Localized *Dhara Sweda* treatment was done for a comprehensive pain relief and sustaining the joint health.<sup>[11]</sup> Premena oil, our proprietary formulation especially prepared with goodness of classically acclaimed Dhanwantara Taila was used for this. Previous studies have reported that, the ingredients of this oil possess bioactive compounds, such as Glycidyl palmitoleate, Oleic acid, 1-Decyne, 3-Tridecene, and Hexadecanoic acid derivatives. These actives are known for their anti-inflammatory and analgesic properties.<sup>[12]</sup>

This *Chikitsa* protocol was done for 16 days. Due to this, progressive improvement in symptoms of pain and stiffness were observed.

To sustain the positive outcomes of this external treatment, *Shamana Chikitsa* in form of a customized regimen of internal medications was included in CVRT protocol. Research investigating *Tinospora cordifolia* (*Guduchi*) has revealed its promising role in promoting osteoblast proliferation, differentiation, and mineralization.<sup>[13]</sup> The patient was prescribed our specially prepared formulations, viz., Tab. Tenroot and Tab. Trichosanthes, as part of the treatment regimen. These proprietary formulations are designed to provide symptomatic relief, improve joint mobility, reduce inflammation, and support overall musculoskeletal health. The overall action potential strongly suggests their role in Might help in strengthening the vertebral disc too. All the internal medications were in compressed tablet form to increase patient compliance and remove hassle of ingesting traditional *Churna*.

## CONCLUSION

The unique CVRT protocol employed in the present case of cervical spondylosis resulted in substantial and sustained pain relief. There was notable improvement in the joint mobility as well as range of motion of the affected joints. Furthermore, the patient reported no adverse events and demonstrated full compliance with the prescribed treatment regimen. This study emphasizes the thoughtful design and judicious use of both classical and proprietary Ayurvedic medications to provide comprehensive pain management. Based on the success observed in this single case, we plan to apply the CVRT protocol to a larger group of patients to further validate its effectiveness.

## PATIENT PERSPECTIVE

"I was suffering from continuous neck pain and stiffness because of cervical spondylosis since many years. Everyday activities became increasingly difficult, and I often felt limited in my movements. After starting the treatment, I noticed a continuous reduction in pain and an improvement in the ability to move my neck and shoulders. The therapies and medicines in the CVRT protocol were easy to follow. Over time, I regained confidence in my ability to move freely without discomfort."

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