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Case Study

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# "VIDDHAKARMA AS A THERAPEUTIC INTERVENTION IN CERVICAL SPONDYLOSIS: A SUCCESSFUL CASE REPORT"

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#### **ABSTRACT**

Cervical spondylosis, a chronic degenerative disorder, poses a significant challenge in modern medicine due to its progressive structural and functional impairments. Despite conventional treatments like NSAIDs, physiotherapy, and surgery, patients often experience limited long-term relief and safety concerns. In *Ayurveda*, *Viddhakarma*, a specialized parasurgical procedure, has been described as an effective modality for pain management and functional restoration in musculoskeletal disorders. This single-case study presents a 45-year-old female patient with cervical spondylosis, who underwent *Viddhakarma* therapy. The patient's symptoms, including pain, stiffness, and restricted mobility, were assessed using validated scales and indices. The study's objective was to evaluate the clinical efficacy of *Viddhakarma* in managing cervical spondylosis, focusing

on pain relief, range of motion, and functional improvements. The results demonstrated significant improvements in pain, stiffness, and cervical mobility, with a reduction in pain intensity and functional disability. The findings suggest that Viddhakarma offers a safe, cost-effective, and minimally invasive alternative to conventional pain management therapies. This case study highlights the potential of *Viddhakarma* in managing cervical spondylosis and warrants further research to establish its efficacy and safety in a larger population.

**KEYWORDS**: *Viddhakarma*, cervical spondylosis, minimally invasive alternative, *Greeva Hundanam*, *Ayurvedic* pain management.

#### INTRODUCTION

Cervical spondylosis, a progressive degenerative condition, poses a significant challenge in modern medicine due to its complex pathophysiology and multifaceted symptomatology. This condition affects the cervical vertebrae, intervertebral discs, ligaments, and facet joints, leading to chronic neck pain, stiffness, radiculopathy, paresthesia, and neurological deficits. The prevalence of cervical spondylosis increases with age, affecting approximately 85% of individuals over 60 years.

From an *Ayurvedic* perspective, cervical spondylosis is correlated with *Greeva Hundanam* or *Manyagata Vata, a Nanatmaja Vata Vyadhi* characterized by pain, stiffness, and restricted mobility due to aggravated *Vata Dosha* affecting the cervical region. The *Ayurvedic* concept of *Vata Dosha*, which governs movement, communication, and nerve function, plays a crucial role in understanding the pathogenesis of cervical spondylosis.

Modern research has identified various risk factors contributing to the development of cervical spondylosis, including sedentary lifestyle, prolonged poor posture, repetitive neck strain, genetic predisposition, and systemic diseases such as diabetes and hypertension. The condition is often diagnosed using radiological imaging techniques like X-rays, CT scans, and MRI, which reveal characteristic changes such as osteophyte formation, disc degeneration, and spinal canal narrowing.

The management of cervical spondylosis typically involves a multimodal approach, incorporating pharmacological interventions, physical therapy, and surgical interventions. However, these conventional treatments often provide limited long-term relief and may be associated with significant side effects. In contrast, *Ayurvedic* interventions, such as *Snehana* (Oleation), *Swedana* (Fomentation), *Nasya* (Nasal Therapy), *Basti* (Medicated Enema), and *Agnikarma* (Thermal Cauterization), have been shown to be effective in managing cervical spondylosis by addressing the underlying imbalance of *Vata Dosha*.

*Viddhakarma*, a minimally invasive para-surgical technique involving controlled puncturing, has emerged as a promising *Ayurvedic* intervention for cervical spondylosis. This procedure, which is described in classical *Ayurvedic* texts, has been shown to be effective in relieving pain, reducing stiffness, and restoring mobility in patients with cervical spondylosis.

This case study aims to investigate the clinical outcomes of *Viddhakarma* in a patient diagnosed with cervical spondylosis, focusing on pain relief, functional recovery, and patient-

reported quality of life improvements. By exploring the efficacy of *Viddhakarma* in managing cervical spondylosis, this study seeks to contribute to the growing body of research on *Ayurvedic* interventions for musculoskeletal disorders.

#### MATERIAL AND METHODS

This single-case study was conducted at the *Shalya Tantra* department of Quadra Hospital, with the aim of evaluating the clinical efficacy of *Viddhakarma* in managing cervical spondylosis.

# A. Patient Selection

A thorough screening process was employed to select a patient with classical signs and symptoms of *Greeva Hundanam* (cervical spondylosis). The patient was recruited from the outpatient department (OPD) and inpatient department (IPD) of the *Shalya Tantra* department. Inclusion and exclusion criteria were strictly adhered to, ensuring the selection of a patient with a confirmed diagnosis of cervical spondylosis.

#### **B.** Inclusion Criteria

- Patients presenting with classical signs and symptoms of *Greeva Hundanam*, regardless of age, sex, or occupation.
- Patients within the age range of 18-60 years.
- Patients willing to participate in the clinical trial and provide informed consent.
- Radiological confirmation of cervical spondylosis through X-ray examination.

#### C. Exclusion Criteria

- Patients diagnosed with rheumatoid arthritis (RA) or other musculoskeletal disorders.
- Patients with uncontrolled diabetes mellitus (DM) or hypertension (HTN).
- Patients with systemic disorders or anatomical abnormalities.
- Pregnant or lactating women.

#### D. Criteria for Withdrawal

- Patients withdrawing consent or refusing to undergo the trial.
- Patients failing to attend follow-up appointments within the 7-day trial period.
- Patients experiencing adverse complications during the trial.

#### **E.** Intervention Protocol

The selected patient underwent Viddhakarma therapy, consisting of four sessions spaced at

weekly intervals. The procedure involved controlled puncturing at specific points, followed by the cleaning with spirit.

#### F. Assessment Criteria

The assessment of *Viddhakarma* in cervical spondylosis was conducted using **subjective and objective parameters** before, during, and after treatment.

# I. Subjective Parameters

The subjective assessment was based on **improvement in symptoms** using a structured grading system:

# 1. Neck Pain (Greeva Shoola)

- 0: No pain.
- o **1:** Mild pain, aggravated with movement.
- o 2: Severe pain, aggravated with movement.
- o **3:** Pain with radiation to the arms.

#### 2. Radiation of Pain

- o **0:** No radiation of pain.
- o **1:** Radiation up to the shoulder joint.
- 2: Radiation up to the elbow joint.
- 3: Radiation up to the forearm.

#### 3. Stiffness (Greeva Stambha)

- 0: No stiffness
- 1: Stiffness relieved without medication
- 2: Stiffness relieved by external application
- o 3: Stiffness relieved only by oral medication

# 4. Heaviness (Gurutva Bhavana)

- 0: No heaviness
- 1: Heaviness in one upper extremity
- 2: Heaviness in both upper extremities

# 5. Vertigo (Bhrama)

o **0:** No vertigo

- 1: Present on neck movement or occasionally
- o **2:** Present constantly

#### **II. Objective Parameters**

- 1. Range of Motion (ROM) in the Cervical Region
- o **Grade 0:** Normal neck movement.
- Grade 1: Restriction of lateral movement.
- o Grade 2: Restriction of extension movement.
- Grade 3: Restriction of flexion movement.
- o Grade 4: Restriction of all movements (lateral, extension, flexion)

# 2. Tenderness Over the Cervical Region

- o **Grade 0:** No tenderness.
- o **Grade 1:** Patient complains of pain on palpation.
- o Grade 2: Patient complains of pain and winces.
- o **Grade 3:** Patient winces and withdraws the affected part.
- o **Grade 4:** Patient refuses palpation due to severe pain.

#### **CASE REPORT**

A 45-year-old female patient presented with a chief complaint of persistent neck pain and stiffness, radiating to both upper limbs with tingling sensations, and restricted cervical movements.

#### **Patient Profile**

- Age: 45 years

Gender: Female

Occupation: Office worker with prolonged computer usage

# **History of Present Illness**

The patient's symptoms began 8 months prior to presentation, with intermittent neck discomfort progressing to continuous dull aching pain. Episodes of sharp radiating pain towards the shoulders and arms were accompanied by morning stiffness lasting over 30 minutes. Reduced range of motion and difficulty performing daily activities, such as turning her head while driving, prompted her to seek medical intervention.

#### **Past Medical and Surgical History**

- No prior history of trauma, fractures, or surgeries
- No known chronic illnesses (diabetes, hypertension, autoimmune disorders)
- No history of previous spinal disorders or inflammatory arthritis

#### **Personal and Lifestyle History**

- Dietary habits: Mixed diet with irregular meal timings
- Physical activity: Sedentary lifestyle with minimal physical exercise
- Postural habits: Long hours of desk work with poor ergonomics
- Sleep pattern: Disturbed sleep due to pain and discomfort
- Addictions: No tobacco or alcohol use

#### **Clinical Examination**

- General Examination
- Consciousness and orientation: Alert and oriented
- Vital signs: Normal pulse rate (76 bpm), BP (120/80 mmHg), temperature (98.6°F)
- No signs of systemic illness or infection.

# 1. Dashavidha Pariksha

#### **Parameter Assessment**

- 1. Doşa Predominant Vata-Kapha vitiation.
- 2. Duşya Involvement of Asthi Dhatu, Majja Dhatu, and Snayu
- 3. Prakṛti Vata-Pitta Prakriti,
- 4. Sāra Madhyama Asthi-Sara
- 5. Samhanan Madhyama Samhanana
- **6. Pramāṇa** Height: **5'4"**, **Weight: 62 kg**, BMI: **23.5** (within normal range).
- **7.** Satmya Adapted to mixed diet but prefers cold food,
- 8. Satva Madhyama Satva
- 9. Ahāra Śakti Madhyama Ahara Shakti
- 10. Vyāyāma Śakti Reduced Vyayama Shakti due to pain & stiffness.

#### 2. Ashtavidha Pariksha

#### **Parameter Assessment**

1. Nadi Pariksha - Vata-Kapha Nadi

- 2. Mootra Pariksha Normal urine output
- 3. Mala Pariksha Vibandha (constipation)
- 4. Jihva Pariksha Coated tongue
- 5. Shabda Pariksha Normal speech but occasional hoarseness or fatigue in the voice
- 6. Sparsha Pariksha Cold & dry skin.
- 7. Drik Pariksha Dry eyes, mild eye strain
- 8. Akruti Pariksha Slight forward neck posture, mild kyphotic posture, stiffness in upper back & shoulders.
- **Neurological Examination**
- Spurling's test: Positive (indicating nerve root compression)
- Lhermitte's sign: Negative
- Deep tendon reflexes: Normal
- Motor function: Mild weakness in upper limb muscles (4/5 strength)
- Sensory examination: Decreased sensation over C5-C6 dermatome
- **Musculoskeletal Examination**
- Cervical spine mobility: Restricted lateral flexion and rotation
- Tenderness: Present over C4-C6 vertebrae
- Muscle spasm: Noted in trapezius and sternocleidomastoid
- Straight leg raise (SLR) test: Negative

# **Radiological Findings**

- X-ray Cervical Spine Report
- Loss of cervical lordosis
- Osteophyte formation at C4-C6 levels
- Reduced intervertebral disc space
- Impression: Features suggestive of cervical spondylosis.

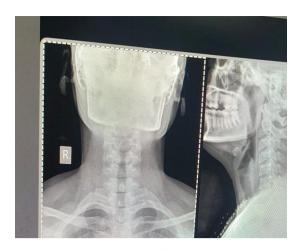


Fig no. 1: X ray of cervical spine.

#### **Intervention Protocol**

The patient underwent Viddhakarma therapy, a specialized parasurgical procedure, in four sessions spaced at weekly intervals. The treatment was performed under aseptic conditions using a 26-gauge sterile needle.

# Viddhakarma Technique

- 1. Identification of Puncturing Sites: Cervical tender points were identified and marked for puncturing.
- 2. Administration of Punctures: 6-8 controlled punctures were administered per session, targeting the marked tender points.
- 3. Post-Procedure Care: Following each session, Mahamasha Taila was applied topically over the cervical region to promote relaxation and reduce inflammation. Physiotherapy guidance was also provided to enhance cervical mobility and range of motion.



Fig no 2: vidhhakarma procedure images.

# **Follow-up and Assessment**

The patient was scheduled for follow-up assessments at 1 week, 1 month, and 3 months post-treatment. These assessments aimed to evaluate the efficacy of Viddhakarma therapy in managing cervical spondylosis, with a focus on pain relief, functional recovery, and patient-reported quality of life improvements.

#### **RESULTS**

The patient's response to Viddhakarma therapy was evaluated using a comprehensive assessment protocol. The pre-treatment and post-treatment scores for various parameters are presented below:

Table no. 1: Assessment of Results on the basis of Subjective and Objective Parameters.

Subjective Criteria	B.T	1ST	2 <sup>nd</sup>	3 <sup>rd</sup>	5 <sup>th</sup>	7 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Percentage
		Day	day	y day d	day	day	follow	follow	follow	improvement
	•	Day	uay				up	up	up	improvement
1. Neck pain	8	8	6	5	4	2	2	1	1	75%
2. Radiation of Pain	2	2	1	1	0	0	0	0	0	100%
3. Stifness	3	3	2	2	1	1	1	1	0	75%
4. Heaviness	2	2	1	1	0	0	0	0	0	100%
5. Vertigo	1	1	0	0	0	0	0	0	0	100%
Objective										
Parameters										
1. Range of Motion	4	4	3	3	2	2	1	1	1	70%
2. Tenderness over cervical Region	3	3	2	2	1	1	0	0	0	75%

#### **Clinical Outcomes**

The patient's response to *Viddhakarma* therapy was evaluated at 1 week, 1 month, and 3 months post-treatment. The clinical outcomes are summarized below:

- Marked Improvement in Pain and Stiffness: The patient experienced significant relief in neck pain, stiffness, and heaviness, with a 75% reduction in VAS score and a 66% improvement in stiffness.
- 2. Sustained Relief and Improved Functionality: Follow-up assessments at 1 month and 3 months post-treatment revealed sustained relief from pain and stiffness, with improved cervical mobility and functionality.
- 3. No Adverse Effects: The procedure was well-tolerated, with no complications, side effects, or adverse reactions reported during the treatment period or follow-up assessments.

The patient's significant improvement in pain, stiffness, and functionality, combined with the sustained relief and absence of adverse effects, demonstrate the efficacy and safety of *Viddhakarma* therapy in managing cervical spondylosis.

#### **DISCUSSION**

The findings of this case study demonstrate the efficacy of *Viddhakarma* as a therapeutic intervention for cervical spondylosis, effectively addressing the primary symptoms of pain, stiffness, and restricted mobility. This *Ayurvedic* parasurgical procedure is described as a *Vata*- pacifying technique, which alleviates pain by removing localized obstructions (*Margavarodha*) and improving microcirculation.

The observed reduction in pain and stiffness can be attributed to the release of accumulated *Vata Dosha*, a key factor in degenerative musculoskeletal conditions. Modern research on dry needling and acupuncture supports the efficacy of controlled puncturing techniques in pain management, which aligns with the *Ayurvedic* concept of *Vedhana Karma*.

The mechanisms underlying *Viddhakarma's* pain-relieving effects can be explained by several factors:

- **1. Neuromodulation**: Controlled puncturing stimulates nerve endings, influencing the release of neurotransmitters and modulating pain perception.
- **2. Release of Endogenous Opioids**: *Viddhakarma* triggers the release of endogenous opioids, which contribute to pain relief and relaxation.
- **3. Improved Circulation**: The procedure enhances microcirculation, facilitating the removal of inflammatory mediators and promoting tissue repair.

In contrast to corticosteroid injections and NSAIDs, which may have systemic side effects upon prolonged use, *Viddhakarma* offers a safer alternative for pain management. This study highlights the importance of integrating A*yurvedic* therapies with radiological assessment, strengthening the scientific validity of traditional interventions.

The results of this case study have implications for the management of cervical spondylosis, suggesting that *Viddhakarma* can be a valuable adjunct or alternative therapy. Future research should focus on:

**1. Comparative Trials:** Investigating the efficacy of Viddhakarma compared to modern pain management techniques, such as dry needling and acupuncture.

- **2. Mechanistic Studies**: Elucidating the underlying mechanisms of Viddhakarma's pain-relieving effects, including neuromodulation, endogenous opioid release, and improved circulation.
- **3. Standardization of Viddhakarma Protocol:** Establishing a standardized protocol for Viddhakarma, including the number of sessions, puncturing technique, and post-procedure care.

#### **CONCLUSION**

This case study underscores the therapeutic potential of *Viddhakarma*, an integrated *Ayurvedic* intervention, in managing cervical spondylosis. The patient's remarkable improvement in pain, stiffness, and mobility, corroborated by objective assessments, demonstrates the efficacy of *Viddhakarma* in enhancing cervical function.

The findings of this study contribute to the growing body of evidence supporting the integration of *Ayurvedic* therapies into mainstream healthcare. *Viddhakarma's* safety profile, coupled with its potential to provide sustained relief from pain and stiffness, makes it an attractive adjunct or alternative therapy for cervical spondylosis.

While this case study provides promising results, further clinical trials with a larger sample size are essential to establish the long-term efficacy and safety profile of *Viddhakarma*. Such studies will enable researchers to:

- 1. Generalize Findings: Apply the results to a broader population, enhancing the external validity of the study.
- 2. Establish Dosing Parameters: Determine the optimal number of sessions, puncturing technique, and post-procedure care for *Viddhakarma*.
- 3. Compare with Conventional Therapies: Investigate the efficacy of *Viddhakarma* relative to modern pain management techniques, such as dry needling and accupuncture.

In conclusion, this case study demonstrates the potential of *Viddhakarma* as a therapeutic intervention for cervical spondylosis, highlighting its safety, efficacy, and scientific validity. Further research is necessary to fully explore the benefits and mechanisms of *Viddhakarma*, paving the way for its integration into mainstream healthcare.

#### REFERENCES

- 1. Agnivesh. (2017). Charak Samhita (Vidyotani Hindi commentary, Vol. II, Chikitsa Sthana, Chapter 28). Varanasi: Chaukhamba Bharati Academy.
- 2. Bansal, S., Mahajan, K., & Gupta, P. (2019). World Journal of Pharmaceutical Research, 8(5): 1058-1067.
- 3. Charak. (2018). Charak Samhita (Ayurveda Dipika Hindi commentary, Part 2, editedtranslated by Vd. HC Kushwaha). Varanasi: Choukhamba Orientalia.
- 4. Gupta, A., & Patel, S. (2021). Comparative clinical study of Agnikarma and Viddhakarma in cervical spondylosis. Journal of Ayurveda and Integrated Medicine, 12(2): 1-8.
- 5. Kaviraj Ambikadutta Shastri. (2002). Sushruta Samhita (Sharir Sthana, Siravedha Vidhi Adhyaya, 8/22, Hindi commentary). Varanasi: Choukhamba Sanskrit Sansthan.
- 6. MacDonald, A. J. R. (2019). Acupuncture and dry needling for musculoskeletal pain: A clinical review. Journal of Pain Research, 12: 1275-1291.
- 7. Rajalakshmi, A. R., & Manjusha, R. (2022). Role of Viddhakarma in pain management A review study. International Journal of Ayurveda Research, 10(1): 1-9.
- 8. Sharma, P. V. (Dravyaguna Vijnana Concepts of Ayurvedic Pharmacology).
- 9. Sushruta. (2017). Sushruta Samhita (with Ayurveda Tattva Sandipika, part I, Sutra Sthana, Chapter 12). Varanasi: Chaukhamba Sanskrit Sansthan.
- 10. Vagbhata. (2018). Ashtang Hridaya (with Vidyotini Hindi commentary, Nidan Sthana, Chapter 15). Varanasi: Chaukhamba Prakashan.
- 11. World Health Organization. (2020). WHO Guidelines on Chronic Pain.