

AYURVEDIC MANAGEMENT OF GREEVA SANDHIGATA VATA (CERVICAL SPONDYLOSIS): A SINGLE CASE STUDY

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ABSTRACT

Background: *Greeva Sandhigata Vata* is a degenerative disorder predominantly affecting the cervical spine, characterized by pain (*Shoola*), stiffness (*Stambha*), and restriction of neck movements (*Akunchana-Prasarana Vedana*), leading to functional disability. It closely correlates with cervical spondylosis in contemporary medicine, a condition rising in prevalence due to sedentary lifestyles, prolonged computer use, improper posture, and age-related degeneration. *Ayurveda* attributes this pathogenesis to the aggravation and localization of *Vata Dosha* in the cervical joints (*Greeva Sandhi*). **Case Description** A 41-year-old male presented to the *Panchakarma* Outpatient Department (OPD) with a 1.5-month history of cervical pain and mild restricted neck movements that severely disrupted his daily routine. Clinical examination

revealed cervical tenderness and muscle spasm. The *Samprapti Ghataka* (pathogenesis components) identified *Vata Pradhana* as the primary *Dosha*, *Asthi* and *Majja* as the affected *Dushyas*, and *Mandagni* as the state of digestion. **Methods:** The patient was treated with a combined protocol of *Panchakarma* procedures and *Shamana Chikitsa* (internal medicine) for 10 days

- Panchakarma Procedures: *Greevabasti* and *Patra Pinda Pottali Swedan*, both administered using *Ksheerbala Taila*.

- Shamana Chikitsa: Twice-daily oral administration of *Kaishore Guggulu* (2 tablets with lukewarm water), *Dashamoola Kwatha* (30 ml), and *Ashwagandha Churna* (3 g with lukewarm water).
- Diet & Lifestyle: Consumption of warm, easily digestible food, avoidance of prolonged neck flexion, and performance of cervical isometric exercises.

Results: The 10-day intervention yielded substantial clinical improvement across all assessment parameters

- Cervical Pain: Decreased from Grade 4 (Very Severe) to Grade 1 (Very Mild).
- Restricted Movement: Resolved completely from Grade 1 (Mild Restriction) to Grade 0 (No Restriction).
- Visual Analogue Scale (VAS) Score: Dropped significantly from 90 (Severe Pain) to 15 (Mild Pain).
- Neck Disability Index (NDI) Score: Reduced from 58% (Severe Disability) to 30% (Moderate Disability), with marked improvements in sleep and personal care.

Conclusion: This single case study demonstrates that a comprehensive *Ayurvedic* protocol targeting *Vata* pacification and *Dhatu* nourishment can provide safe, cost-effective, and highly effective symptomatic relief while restoring functional capacity in patients suffering from *Greeva Sandhigata Vata*.

KEYWORDS: *Greeva Sandhigata Vata*, Cervical Spondylosis, *Ayurveda*, *Greevabasti*, *Shamana Chikitsa*, *Panchakarma*.

INTRODUCTION

The Cervical spine constitutes a highly complex and specialized anatomical region of the axial skeleton, playing a vital role in maintaining the multi-axial mobility, structural stability, and weight-bearing capacity of the neck and head. In the contemporary era, mechanical and degenerative disorders of the cervical spine have emerged as a significant global public health concern. Among these, Cervical Spondylosis stands out as the most ubiquitous age-related, chronic, non-inflammatory degenerative disease affecting the cervical vertebrae, intervertebral discs, and associated ligamentous or joint structures.^[1,2]

Epidemiological trends indicate a sharp escalation in the prevalence of this condition, shifting from predominantly geriatric populations to younger, working-age adults. This paradigm shift is heavily driven by modern lifestyle modifications, including

- Prolonged occupational sitting and sedentary routines.
- Extended daily exposure to digital screens and computers (ergonomic misalignment).
- Chronic improper neck postures during sleep or work.
- Repetitive mechanical strain on the paravertebral musculature.^[3,4]

As the pathogenesis advances, the progressive dehydration of the nucleus pulposus and subsequent narrowing of the intervertebral space trigger osteophytic marginal proliferation, micro-instability, and ligamentous hypertrophy. Clinically, this manifests as localized or radiating neck pain (*cervical radiculopathy*), persistent stiffness (*stambha*), severely restricted range of motion, and occasional neurological deficits resulting from nerve root or spinal cord compression (*cervical myelopathy*)⁵. While modern conventional medical science addresses this condition using non-steroidal anti-inflammatory drugs (NSAIDs), muscle relaxants, physical therapy, or invasive surgical decompression, these modalities frequently present limitations, including adverse gastrointestinal effects, temporary symptomatic relief, and substantial financial burdens.^[6]

In the classical paradigms of *Ayurveda*, the clinical profile and progressive symptomatology of cervical spondylosis demonstrate a profound resemblance to *Greeva Sandhigata Vata*. Classified under the broad umbrella of *Vatavyadhi* (neuromuscular and degenerative disorders),^[7,8] *Greeva Sandhigata Vata* is fundamentally characterized as a structural and functional joint disability localized within the cervical joints (*Greeva Sandhi*).

According to *Ayurvedic* etiology, the condition is triggered by a synergistic interplay of

1. *Aharaja & Viharaja* Factors: Chronic consumption of *Vata*-provoking foods (dry, cold, light, or insufficient nutrition) alongside lifestyle errors such as excessive physical exertion, trauma, and improper ergonomic posturing.
2. *Vardhakya* (Aging): Biological aging naturally induces a dominant *Vata* state and triggers *Dhatu Kshaya* (the systemic depletion of bodily tissues).^[9]

The fundamental pathogenesis (*Samprapti*) initiates when vitiated *Vata Dosha* localizes (*Sthana Samshraya*) within the vulnerable channels of the cervical joints (*Greeva Sandhi*). This morbid localization leads to the depletion of *Sleshaka Kapha*—the physiological

principle responsible for joint lubrication, shock absorption, and structural cohesion. Concurrently, it causes qualitative and quantitative deterioration (*Kshaya*) in the *Asthi* (bone) and *Majja* (marrow) *Dhatu*s. This cascade manifests as the classical triad of symptoms.

- *Shoola*: Intense, localized, or radiating pain.
- *Stambha*: Pronounced rigidity and morning stiffness.
- *Akunchana-Prasarana Vedana*: Acute discomfort and pain triggered specifically during movements like flexion, extension, and rotation.^[10]

Ayurvedic therapeutics offer a highly structured, non-invasive alternative centered around *Samprapti Vighatana* (breaking the pathogenic pathway). This is achieved through a bio-cleansing and rejuvenating combination of *Panchakarma* (specialized external detoxification and bio-regulatory procedures) and *Shamana Chikitsa* (targeted internal palliative/herbal medicines) designed to pacify the aggravated *Vata*, clear localized bio-channel obstructions (*Srotodushti*), and nourish the depleted tissue substrates (*Dhatu Poshana*).^[11]

The present case study highlights the clinical efficacy of a comprehensive, 10-day Ayurvedic treatment protocol in successfully alleviating symptoms, reversing functional disability, and significantly improving the overall quality of life of a 41-year-old male patient diagnosed with *Greeva Sandhigata Vata*.

CASE PRESENTATION

A 41 year-old Male attended the OPD of *Panchkarma* with complaints of Pain in Cervical Region along with mild restricted movements since 1.5 months. These complaints resulted in difficulty performance of daily routine activities.

History of Present Illness

The patient was apparently healthy before 1.5 months. Gradually, Cervical pain developed and increased in severity. Symptoms were aggravated by prolonged sitting, neck movements, and work-related activities and relieved temporarily by rest.

Past History

- No history of major systemic illness.
- No history of trauma.
- No history of Surgical Intervention.

Personal History

- Appetite: Good
- Bowel: Clear and Regular
- Micturition: Normal
- Sleep: Sound
- Diet: Vegetarian

CLINICAL FINDINGS**General Examination**

- Pulse: 78 /min
- Blood Pressure: 120/70 mmHg
- Temperature: Afebrile
- Respiratory Rate: 18 breaths/min

Local Examination

- Cervical Tenderness: Present
- Muscle spasm: Present
- Cervical stiffness: Absent
- Restriction of neck movements: Present

AYURVEDIC ASSESSMENT**Ashtavidha Pariksha**

- *Nadi: Prakrut*
- *Mala: Nirama*
- *Mutra: Anavila* (Clear/Transparent)
- *Jihva: Nirama*
- *Shabda: Spashta*
- *Sparsha: Samoshanasheeta*
- *Drik: Prakrut*
- *Akruti: Samanya*

Samprapti Ghataka

- *Dosha: Vata Pradhana*
- *Dushya: Asthi, Majja*
- *Agni: Mandagni*

- *Srotas: Asthivaha, Majjavaha*
- *Srotodushti: Sanga*
- *Udbhava Sthana: Pakwashaya*
- *Vyakta Sthana: Greeva Sandhi*
- *Roga Marga: Madhyama*

THERAPEUTIC INTERVENTION

Panchakarma Procedures

1. *Greevabasti* with *Ksheerbala Taila* for 10 days.
2. *Patra Pinda Pottali Swedan* with *Ksheerbala Taila* for 10 days.

Table 1: Shamana Chikitsa (Internal Medicines).

S.No	Drug	Dose	Frequency	Anupana	Duration	Rationale
1.	<i>Kaishore Guggulu</i>	2 Tab	BD	Lukewarm water	10 days	<i>Vedanasthapana</i>
2.	<i>Dashamoola Kwatha</i>	30 ml	BD	-----	10 days	<i>Vatahara</i>
3.	<i>Ashwagandha Churna</i>	3 gm	BD	Lukewarm water	10 days	<i>Rasayana</i>

Pathya

- Warm and easily digestible food.
- Avoid prolonged neck flexion.
- Cervical Isometric Exercises.

Assessment Parameter

1. Cervical Pain

Table 2: Grading of Cervical Pain.

Grade	Observation
0	No Pain
1	Very Mild Pain
2	Moderate Pain
3	Fairly Severe Pain
4	Very Severe Pain
5	Worst Imaginable Pain

2. Restricted Cervical Movement

Table 3: Grading of Restricted Cervical Movement.

Grade	Observation
0	No Restriction
1	Mild Restriction
2	Moderate Restriction
3	Severe Restriction

3. VAS Score^[12]

The Visual Analogue Scale (VAS) is a 10-cm line, oriented vertically or horizontally, with one end representing “no pain” and the other end representing “pain as bad as it can be.” The patient is asked to mark a place on the line corresponding to the current pain intensity.

Table 4: Grading of VAS Score.^[13]

Distance on the scale (in mm)	Severity of pain
0 To 4	No Pain
5 To 44	Mild Pain
45 To 74	Moderate Pain
75 To 100	Severe Pain.

4. Neck Disability Index (NDI) Score^[14]

Neck Disability Index (NDI) is an important assessment tool used to evaluate functional disability and the impact of neck pain on daily activities.

Table 5: Grading of NDI Score.

Section 1: Pain Intensity	
0	I have no pain at the moment
1	The pain is very mild at the moment
2	The pain is moderate at the moment
3	The pain is fairly severe at the moment
4	The pain is very severe at the moment
5	The pain is the worst imaginable at the moment
Section 2: Personal Care (Washing, Dressing, etc.)	
0	I can look after myself normally without causing extra pain
1	I can look after myself normally but it causes extra pain
2	It is painful to look after myself and I am slow and careful
3	I need some help but can manage most of my personal care
4	I need help every day in most aspects of self care
5	I do not get dressed, I wash with difficulty and stay in
Section 3: Lifting	
0	I can lift heavy weights without extra pain
1	I can lift heavy weights but it gives extra pain
2	Pain prevents me lifting heavy weights off the

	floor, but I can manage if they are conveniently placed, for example on a table
3	Pain prevents me from lifting heavy weights but I can manage light to medium weights if they are conveniently positioned
4	I can only lift very light weights
5	I cannot lift or carry anything
Section 4: Reading	
0.	I can read as much as I want to with no pain in my neck
1.	I can read as much as I want to with slight pain in my neck
2.	I can read as much as I want with moderate pain in my neck
3.	I can't read as much as I want because of moderate pain in my neck
4.	I can hardly read at all because of severe pain in my neck
5.	I cannot read at all
Section 5: Headaches	
0.	I have no headaches at all
1.	I have slight headaches, which come infrequently
2.	I have moderate headaches, which come infrequently
3.	I have moderate headaches, which come frequently
4.	I have severe headaches, which come frequently
5.	I have headaches almost all the time
Section 6: Concentration	
0.	I can concentrate fully when I want to with no difficulty
1.	I can concentrate fully when I want to with slight difficulty
2.	I have a fair degree of difficulty in concentrating when I want to
3.	I have a lot of difficulty in concentrating when I want to
4.	I have a great deal of difficulty in concentrating when I want to
5.	I cannot concentrate at all
Section 7 : Work	
0.	I can do as much work as I want to
1.	I can only do my usual work, but no more
2.	I can do most of my usual work, but no more
3.	I cannot do my usual work
4.	I can hardly do any work at all
5.	I can't do any work at all
Section 8 : Driving	
0	I can drive my car without any neck pain.
1	I can drive my car as long as I want with slight pain in my neck .
2	I can drive my car as long as I want with moderate pain in my neck.
3	I can't drive my car as long as I want because of moderate pain in my neck .
4	I can hardly drive at all because of severe pain in my neck .
5	I can't drive my car at all.
Section 9: Sleeping	
0.	I have no trouble sleeping
1.	My sleep is slightly disturbed (less than 1 hr sleepless)
2.	My sleep is mildly disturbed (1-2 hrs sleepless)

3.	My sleep is moderately disturbed (2-3 hrs sleepless)
4.	My sleep is greatly disturbed (3-5 hrs sleepless)
5.	My sleep is completely disturbed (5-7 hrs sleep)
Section 10: Recreation	
0.	I am able to engage in all my recreation activities with no neck pain at all
1.	I am able to engage in all my recreation activities, with some pain in my neck
2.	I am able to engage in most, but not all of my usual recreation activities because of pain in my neck
3.	I am able to engage in a few of my usual recreation activities because of pain in my neck
4.	I can hardly do any recreation activities because of pain in my neck
5.	I can't do any recreation activities at all

Score: /50

Transform to percentage score $\times 100 = \% \text{points}$ Scoring: For each section the total possible score is 5: If the first statement is marked the section score = 0, If the last statement is marked it = 5.

If all ten sections are completed the score is calculated as follows: Example: 16 (total scored) 50 (total possible score) $\times 100 = 32\%$

If one section is missed or not applicable the score is calculated: 16 (total scored) 45 (total possible score) $\times 100 = 35.5\%$

Table 6: Interpretation of NDI Score.

NDI Score	Percentage	Degree Of Disability
0-4	(0-8%)	No Disability,
5-14	(10 – 28%)	Mild Disability,
15-24	(30-48%)	Moderate Disability,
25-34	(50- 64%)	Severe Disability,
35-50	(70-100%)	Complete Disability

OBSERVATIONS AND RESULTS

Table 7: Assessment of Neck Disability Index.

SECTION	SCORE BEFORE TREATMENT	SCORE AFTER TREATMENT
01. Pain Intensity	04	02
02. Personal Care	03	01
03. Lifting	04	03
04. Reading	03	02

05.Headaches	01	00
06.Concentration	01	00
07.Work	03	02
08.Driving	03	02
09.Sleeping	05	02
10.Recreation	02	01
	TOTAL SCORE- 29 (58%)	TOTAL SCORE- 15 (30%)

Table 8: Observation in different Parameter.

Assessment Parameter	BT	AT
Cervical Pain	Grade 4	Grade 1
Restricted Movement	Grade 1	Grade 0
VAS Score	90	15
NDI Score	58%	30%

The patient reported substantial reduction in neck pain .Cervical movements improved considerably, and daily activities could be performed without significant discomfort.

DISCUSSION

Greeva Sandhigata Vata is a *Vatavyadhi* characterized by the localization of aggravated *Vata Dosh*a in the cervical joints, resulting in pain (*Shoola*), restriction of movement (*Akunchana–Prasarana Vedana*), and functional disability. In the present case, the patient exhibited classical features of *Greeva Sandhigata Vata*, including severe cervical pain, tenderness, muscle spasm, and restriction of neck movements. *Ayurvedic* assessment revealed *Vata* predominance with involvement of *Asthi* and *Majja* Dhatu and *Srotorodha* in *Asthivaha* and *Majjavaha* Srotas.^[15,16]

The treatment protocol was designed to pacify aggravated *Vata*, relieve local stiffness and pain, improve circulation, and nourish the affected Dhatu. *Greevabasti* with *Ksheerbala Taila* provided localized *Snehana* and *Mridu Swedana* effects. The sustained retention of warm medicated oil over the cervical region helps alleviate pain, reduces muscle spasm, improves local blood circulation, and enhances cervical mobility. *Ksheerbala Taila*, owing to its *Vatahara* and *Brimhana* properties, contributes to the nourishment of depleted tissues and supports restoration of joint function.^[17,18]

Patra Pinda Pottali Swedana further aided in relieving stiffness, reducing muscular tension, and improving the range of cervical movements through its *Ushna* and *Swedana* effects. The combined local therapies helped break the pathogenesis at the site of manifestation by reducing *Vata* aggravation and improving tissue flexibility.^[19]

The internal medications complemented the external therapies. *Kaishore Guggulu* possesses anti-inflammatory and *Vata-Kapha* pacifying properties, which may help reduce pain and local inflammatory changes. *Dashamoola Kwatha* is well known for its *Vatahara*, *Shothahara*, and *Vedanasthapana* actions, thereby contributing to pain relief and improved mobility. *Ashwagandha Churna* acts as a *Rasayana* and *Balya* drug, supporting *Dhatu* nourishment, enhancing musculoskeletal strength, and counteracting degenerative changes.^[20,21,22]

The clinical outcomes observed after 10 days of treatment were encouraging. Cervical pain reduced from Grade 4 to Grade 1, restricted movement improved from Grade 1 to Grade 0, and the VAS score decreased markedly from 90 to 15, indicating substantial pain relief. Similarly, the Neck Disability Index score improved from 58% (severe disability) to 30% (moderate disability), reflecting better functional capacity and enhanced performance of daily activities. Improvement in sleep, personal care, work-related activities, and recreation further suggests a positive impact on the patient's quality of life.

The favorable outcome observed in this case indicates that a combined approach of *Panchakarma* procedures and *Shamana Chikitsa* can effectively manage the symptoms of *Greeva Sandhigata Vata* by addressing both the underlying *Dosha* imbalance and the associated functional impairment. However, as this is a single case study, larger clinical studies are required to establish the efficacy and reproducibility of these findings.

CONCLUSION

The present case study demonstrates that *Ayurvedic* management comprising *Greevabasti*, *Patra Pinda Pottali Swedana* and appropriate internal medications can effectively reduce pain and restriction of neck movements in *Greeva Sandhigata Vata*. The treatment was safe, economical, and improved the patient's quality of life. Further clinical studies with larger sample sizes are required to validate these findings.

PATIENT PERSPECTIVE

Before treatment, I experienced persistent neck pain and difficulty in performing routine daily activities because of restricted neck movements. The pain increased during work and prolonged sitting, affecting my comfort and productivity. After undergoing the *Ayurvedic* treatment, I noticed a significant reduction in pain and improvement in neck mobility. My sleep quality improved, and I was able to perform daily activities with much greater ease. I

found the treatment comfortable, affordable, and free from any adverse effects, and I was satisfied with the overall outcome.

PATIENT CONSENT

Written informed consent was obtained from the patient for publication of clinical details and photographs. Efforts have been made to maintain confidentiality and anonymity.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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Nil.

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