



## Ayurvedic management of Cervico-Lumbar Spondylosis (Khalli) - A Case Report

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Cervical and lumbar spondylosis are degenerative spinal conditions resulting from age-related wear and tear, leading to pain, stiffness, reduced mobility, and neurological complications. The rising prevalence of spondylosis is attributed to aging, sedentary lifestyles, and occupational hazards, posing diagnostic and therapeutic challenges. In Ayurveda, if there is a involvement of both cervical and lumbar spondylosis is correlated to Khalli, a type of Vatavyadhi. This study aims to evaluate the efficacy of Panchakarma therapy in the management of Khalli through a single-case study of a 43-year-old female patient who presented with low back pain radiating to the right leg and pain in the nape radiating to the right hand. She underwent a comprehensive Panchakarma treatment protocol, including Udvartana, Basti, Abhyanga, Pinda Swedana, Upanaha, and Siravyadha. After one month of treatment, the patient showed a significant reduction in pain and improved quality of life. The findings suggest that Panchakarma therapy offers a promising approach in managing Khalli.

**Keywords:** Khalli, lumbar spondylosis, cervical spondylosis, Panchakarma, Basti

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## Introduction

The cervical and lumbar regions of the spine are the most vulnerable to repeated stress, as they play a crucial role in supporting and facilitating everyday movements and activities. The most common pathologies affecting the cervical spine and lumbar spine are cervical spondylosis and lumbar spondylosis. About 13.76% of the population are affected with cervical spondylosis[1] whereas 76.7% of the people are afflicted with lumbar spondylosis[2]. The primary causes of spondylosis include age-related degeneration, trauma, poor posture, and occupational factors. With sedentary lifestyles, poor posture, and prolonged screen time becoming increasingly prevalent, even younger individuals are now experiencing early signs of spondylosis. Clinically, spondylosis manifests as neck or lower back pain, which may radiate to the hands or legs, often accompanied by numbness - a characteristic symptom of cervical and lumbar spondylosis, respectively. While many individuals experience either cervical or lumbar spondylosis separately, some suffer from a more complex condition where both regions are involved simultaneously. This dual involvement can lead to widespread pain, stiffness, nerve compression, and mobility issues, significantly impacting daily life. In *Ayurveda*, cervical spine pathologies are referred to as *Vishwachi*, characterized by symptoms such as *Ruk* (pain), *Thoda* (pricking sensation), *Sthamba* (stiffness), *Karmakshaya* (loss of function), and *Chestapaharana* (restricted movement) of arm.[3]

Lumbar spine conditions are identified as *Gridhrasi*, presenting with *Ruja* (pain), *Toda* (shooting pain), *Spandana* (throbbing sensation), and *Graha* (stiffness or immobility), originating in the *Spik* (gluteal region) and radiating through the *Kati-Prusta* (lower back), *Uru* (thigh), *Janu* (knee), *Janga* (calf), and extending to the *Pada* (foot).[4] When both *Gridhrasi* and *Vishwachi* occur simultaneously, the condition is termed *Khalli*. [5]

## Case Report

A female patient aged 43 years, from a middle socioeconomic background n/k/c/o Hypertension and Type 2 Diabetes Mellitus known case of hypothyroidism for the past 8 years under medication Thyronorm 50 mcg, who was conscious and oriented to time,

Place and person came to Panchakarma OPD of Sri Dharmasthala Manjunatheshwara (SDM) College of Ayurveda and Hospital, Hassan on 02 April 2024 with the chief complaints of pain in nape of neck and lower back associated with heaviness and numbness in right upper and lower limbs.

**Table 1: Timeline**

<b>August 2016</b>	Diagnosed with hypothyroidism; started on Thyronorm 50 mcg.
<b>March 2023</b>	Slipped and fell backward in the washroom while doing daily chores.
<b>After 2 weeks</b>	Developed severe low back pain radiating to the right lower limb, stiffness, and numbness. Pain aggravated with forward bending and relieved by lying down. Additionally, experienced pain in the nape radiating to the right upper limb with numbness.
<b>April 2023</b>	Visited a clinic and received injections and painkillers (details unknown).
<b>MRI on 11/4/23</b>	Degenerative lumbar spondylosis at L-5 and S-1 and degenerative cervical spondylosis at C-3 and C-4 vertebrae.
<b>May 2023 - August 2023</b>	Continued the painkillers whenever there was pain, pain used to subside while taking painkiller and was the same while not taking painkiller
<b>2/4/24</b>	Visited SDMCAH Hassan for further management

**Table 2: Personal History**

Appetite	Reduced
Bowel	Unaltered with normal consistency
Micturition	Unaltered 3-4 times/day
Sleep	Disturbed due to pain

**General Examination:** Built, nutritional status, hair and nail of the patient are normal, pallor, clubbing, cyanosis, icterus, lymphadenopathy and edema were absent. Blood pressure was 130/80 mm of Hg and pulse rate was 72 beats /minute

### Systemic Examination:

- Respiratory system - NVBS heard
- Cardiovascular system - S1S2 heard, no murmurs
- Gastrointestinal system - NAD
- Central nervous system - Conscious, well oriented to time place and person
- Musculoskeletal examination

### Cervical Spine Examination

**Inspection:** swelling present at nape of neck, no surgical scar.

**Palpation:** temperature - warmth, tenderness at C-5, C-6, C-7 region.

**Range of movements:** flexion - painful (at 50 degrees), extension - painful restricted.

**Table 3: Cervical spine Special tests:**

Test	Right hand	Left hand
Empty can	+ ve	-ve

Spurling test +ve

Lumbar Spine Examination

**Inspection:** No swelling and no surgical scar marks

**Palpation:** Temperature - warmth, tenderness at L-4, L-5 region

**Range of movements:** flexion restricted and painful, extension - restricted and painful

**Table 4: Lumbar spine special test**

Spine Examination	Right Leg	Left Leg
Straight leg raising test	+ ve at 45degrees	- ve
Faber's test	+ ve	- ve

Coin pick test + ve

### **Ashtasthana Pariksha**

*Nadi - Vatakapha*

*Mootra - Prakrutha*

*Mala - Prakrutha*

*Jihwa - Lipta*

*Druk - Prakrutha*

*Shabda - Prakrutha*

*Sparsha - Anushna Sheetha*

*Akruthi - Madhyama*

### **Dashavidha Pariksha**

*Prakruthi - Vatakapha*

*Vikruthi - Vatakapha*

*Sara - Madhyama*

*Samhanana - Madhyama*

*Satva - Avara Satva*

*Satmya - Katu Rasa Pradhana*

*Aharashakti -*

*Abyavarana Shakti - Pravara,*

*Jarana Shakti - Avara*

*Vyayamashakti - Avara*

*Vaya - Madhyama*

*Pramana - Madhyama*

### **Nidana Panchaka**

#### **Nidana**

*Aharaja : Katu Rasa Pradhana Ahara Sevana*

*Viharaja: Divaswapna, Abhighata*

#### **Poorvaroopa - Avyaktha**

**Roopa** - Low back ache radiating to right leg and pain in nape of neck radiating to right hand

**Anupashaya** - Bending forwards and doing activities

**Upashaya** - Lying down

### **Samprapti Ghataka**

*Dosha - Vatakapha*

*Dooshya - Mamsa, Asthi, Snayu, Kandara,*

*Agni - Jataragni*

*Agnidushti - Mandagni*

*Srotas - Asthivaha and Majjavaha*

*Srotodusti - Sanga, Vimargagamana*

*Udbhava Sthana - Pakwashaya*

*Sanchara Sthana - Sarva Shareera*

*Vyaktasthana - Snayu and Kandara of Bahu, Hasta Tala and Anguli and Kati, Uru, Prista, Paada.*

*Adhishtana - Greeva, Kati*

*Rogamarga - Madhyama*

*Sadhyasadhyata - Kricchra Sadhya*

### **Radiological investigation**

#### **Whole spine MRI screening revealed:**

Degenerative lumbar spondylosis at L-5 and S-1 and degenerative cervical spondylosis at C-3 and C-4 vertebrae.

#### **Vyadhi Vinischaya: Khalli**

**Intervention:** Panchakarma Chikitsa was planned and it is listed in the table below.

**Table 5: Panchakarma Upakrama**

Procedure	Drugs used	Duration
Sarvanga Udvartana Followed by Sarvanga Parisheka	Udvartana Choorna Dashamoola Kashaya	D1 - D3
Siravyadha	Right leg was carried under aseptic conditions and 80ml of Vatakapha Dushitha Rakta was obtained	D2

Procedure	Drugs used						Duration
Erandamooladi Kshara Basti	Honey - 100ml						D1 - D6
	Saindava - 12gms						
	Sneha - Sahacharadi Taila 80ml						
	Kalka - Rasna, Shatapuspa, Devadaru - 10gm each						
	Kwatha - Erandamooladi Kwatha - 300ml						
	Avapa-Amritasara - 80ml						
	Anuvasana Basti with Sahacharadi Taila - 80ml						
	D1	D2	D3	D4	D5	D6	
	A	N/A	N/A	N/A	N/A	A	
	Where D refers to day N refers to niruha basti A refers to Anuvasana Basti						
Prushta Basti	Mahanarayana Taila						D4 - D7
Mustadi Yapana Basti	Honey - 80ml						D7 - D12
	Saindava - 6gms						
	Sneha - Sahacharadi Taila - 80ml						
	Kalka - Musta, Guduchi, Shatapushpa - 30gm						
	Kwatha - Mustadi Yapana Ksherapaka - 350ml						
	D7	D8	D9	D10	D11	D12	
	N/A	N/A	N/A	N/A	N/A	A	
Sarvanga Abyanga followed by Patra Pinda Sweda	Mahanarayana Taila						D4 - D7
Sarvanga Abyanga f/b Jambeeera Pinda Sweda	Mahanarayana Taila						D8 - D10
Vatahara Upanaha	Kolakulathadilepa, Rasna, Bala, Devadaru, Yashtimadhu, Dhanyamla, Chinch Swarasa and Nimbu Swarasa Saindava Lavana						D1 - D11
Siravyadha	Right hand was carried under aseptic conditions and 100ml of Vatakapha Dushitha Rakta was obtained						D11

#### Follow-up medicines

1. Mahanarayana Thaila E/A
2. Nuro XT 1-0-1 A/F with luke warm water
3. Rasna Saptaka Kashaya 15-0-15ml B/F with Luke warm water
4. Ksheerabala 101 drops 10-0-10drops with milk B/F for the period of 30 days

**Table 6: Assessment parameters before and after treatment**

Assessment parameters Subjective and objective parameters	Before treatment	After treatment	During follow up after 1 month
Shareera Gurutha	++	Absent	Absent
Reduced appetite	+	Absent	-
Pain in nape of neck	+++	reduced to 80%	reduced 80%
Pain in low back	+++	reduced to 80%	reduced 80%
SLR Right leg	45 degrees	80 degrees	80degrees
Faber's right leg	Positive	Negative	Negative
Empty can test	Positive	Negative	Negative
Spurling test	Positive	Negative	negative

## Discussion

In the initial stage of treatment there was *Kapha* and *Ama* predominance hence *Rookshana* was carried out initially with *Udvartana* and *Parisheka*. *Sarvanga Udvartana* is *Kapha-Vatahara* helps in relieving *Amatva* and attaining *Srotovishodana*. *Parisheka* acts as *Shramahara*, *Vatahara*, *Bhagnasandhanakrit*.<sup>[6]</sup> As *Basti* is said to be *Ardhachikitsa* and it is indicated in *Asti Majjagata Vata*, *Erandamooladi Basti* which is having *Deepana* (digestive stimulant) and *Lekhana* (scraping) *Gunas*, making it effective in pacifying *Kapha* and alleviating symptoms such as heaviness and stiffness. It is composed of 34 drugs, predominantly with *Ushna Veerya* (hot potency) *Dravya*. It is particularly beneficial for pain and stiffness in the *Jangha* (thigh), *Uru* (hip), *Paada* (feet), and *Pristha* (back) regions, as well as in managing *Kapha-Avruta* (*Kapha*-dominated) conditions.<sup>[7]</sup> *Erandamooladi Kshara Basti* was administered as there was *Kaphanubandha* in *Trika Pradesha* including *Kati* and *Greeva*.

Later on, *Mustadi Yapana Basti* was planned after assuring condition free from *Kapha-Avarana*. *Mustadi Yapana Basti* is effective in addressing conditions such as *Katishoola* (backache), pain in thighs and calves, headaches, and *Vatarakta* (various rheumatic disorders). Its *Rasayana* property supports rejuvenation, while its ability to address *Vata Vyadhi* involves breaking pathogenesis by purifying channels (removing *Margavarodha*) and nourishing tissues (*Brihmana* property) to counter *Dhatukshaya*.<sup>[8]</sup> *Patra Pottali Sweda* relieves pain, stiffness and swelling associated with arthritis and other painful conditions, pacifies morbidity of *Vata*, *Pitta* and *Kapha* in they affected joints, muscles and soft tissues.<sup>[9]</sup> *Patra Pinda Swedana* may help in increasing blood circulation to affected area, gets rid of *Dosha* imbalances, strengthens muscles in area, helps release of toxins and reduces inflammation also helps to tone muscles and improve working of tissues within body. *Jambira Pinda Sweda Potali* are *Vata-Kaphashamaka*, *Shoolaghana* (analgesic), and *Shothahara* (anti-inflammatory). *Sahacharadi Taila* is having *Teekshna* and *Ushna* qualities, Helpful in mitigating *Vata* and *Kapha*.<sup>[10]</sup> *Mahanarayana Taila* is composed of 33 *Dravyas* which are having *Vata Kaphahara Guna* and *Vedanasthapaka* in action.<sup>[11]</sup> *Rasna Saptak Kashaya*, used for *Jangha*, *Uru*, *Pristha*, *Trika* and *Prashashula*<sup>[12]</sup> as *Trika* is affected in *Khalli* hence *Rasna Saptaka Kashaya* was used. *Nuro xt* has *Ekangaveera Rasa* as main ingredient which is having *Brimhana* and *Rasayana* properties helps in mitigating *Vata Dosha*. *Ksheerabala* 101 *Avarti Taila* is *Vata-Pitta Samana* It is having properties like *Rasayana*, *Brimhana*, helps in degenerative conditions of spine.

## Conclusion

*Khalli* is one among the *Vatavyadhi* which is having both *Gridrasi* and *Vishwachi Lakshana* and the treatment modality of *Vatavyadhi* includes *Snehana*, *Swedana*, *Basti* and *Raktamokshana*. In the modern parameters it can be equated to spondylosis of spine which is characterized by degeneration that makes a person difficult to perform daily activities. This case study showed that *Panchakarma* chikitsa is effective in the management of *Khalli*. It has provided significant improvements in subjective and objective parameters indicating that the patient has improved in presenting the features and significant improvement found in the patient's quality of life.

The patient is doing well with her daily activities to date. However, some randomized clinical trials with large sample sizes are validated to confirm results as it is a single case report.

## References

1. Lv Y, Tian W, Chen D, Liu Y, Wang L, Duan F. The prevalence and associated factors of symptomatic cervical spondylosis in Chinese adults: a community-based cross-sectional study. *BMC Musculoskelet Disord*. 2018 Sep 11;19(1):325. doi:10.1186/s12891-018-2234-0. PMID: 30205836; PMCID: PMC6134586 [Crossref][PubMed][Google Scholar]
2. Tsujimoto R, Abe Y, Arima K, Nishimura T, Tomita M, Yonekura A, Miyamoto T, Matsubayashi S, Tanaka N, Aoyagi K, Osaki M. Prevalence of lumbar spondylosis and its association with low back pain among community-dwelling Japanese women. *BMC Musculoskelet Disord*. 2016 Dec 1;17(1):493. doi:10.1186/s12891-016-1343-x. PMID: 27905911; PMCID: PMC5133758 [Crossref][PubMed][Google Scholar]
3. Patil VC, Rajarajeshwari, Sushrutha. *Sushruta Samhita*. 1st ed. Vol. 2. *Varanasi: Chaukhamba Publications; Nidana Sthana, Ch. 1. p. 15* [Crossref][PubMed][Google Scholar]
4. Yadavji Trikamaji Acharya V, Agnivesha. *Charaka Samhita with Ayurveda Dipika commentary by Chakrapani. Chikitsa Sthana, Ch. 28, Ver. 56. New Delhi: Chaukhamba Publications; 2018. p. 619* [Crossref][PubMed][Google Scholar]
5. Takral KK. *Sushruta Samhita with Gayadasa and Dalhana commentary. 2nd ed. Vol. 1. Varanasi: Chaukhamba Publications; Nidana Sthana, Ch. 1. p. 603* [Crossref][PubMed][Google Scholar]
6. Patil VC, Rajarajeshwari, Sushrutha. *Sushruta Samhita*. 1st ed. Vol. 2. *Varanasi: Chaukhamba Publications; Chikitsa Sthana, Ch. 24. p. 479* [Crossref][PubMed][Google Scholar]
7. Shukla V, Tripathi R. *Charaka Samhita with Vaidyamanorama commentary. Siddhi Sthana, Basti Sutriya Siddhi Adhyaya. Varanasi: Chaukhamba Surbharti Prakashan; 2003. p. 905* [Crossref][PubMed][Google Scholar]

8. Pandey G, editor. Charaka Samhita of Agnivesha. Siddhi Sthana, Uttarvastisidhi Adhyaya, Ch. 12, Ver. 15. Varanasi: Chaukhamba Sanskrit Sansthan; 2006. p. 1096 [Crossref][PubMed][Google Scholar]

9. Bhusal N, et al. Review on Patra Pinda Sweda: A peculiar Ayurveda bolus fomentation. Int Ayurvedic Med J [Internet]. 2017 May [cited 2017 May]. Available from: [journal link if available] [Crossref][PubMed][Google Scholar]

10. Agnivesha. Charaka Samhita. Edited by Panday K, Chaturvedi G. Bastisutriya Adhyayan, Siddhi Sthana, Ver. 3/38-42. Varanasi: Chaukhamba Sanskrit Series Office; 2013. p. 999 [Crossref][PubMed][Google Scholar]

11. Yogaratnakara with Vidyotani Hindi commentary by Vaidya Lakshmipati Shastri, edited by Bhishagratna Brahma Shankar Shastri. Vatavyadhi Nidana, Shloka 1-11. Varanasi: Chaukhamba Sanskrit Sansthana; 1997. p. 533-4 [Crossref][PubMed][Google Scholar]

12. Bhaisajya Ratnavali by Kaviraj Govind Das Sen, edited with Siddhiprada Hindi commentary by Mishra SN. Reprint ed. Varanasi: Chaukhamba Orientalia; 2009. . [Crossref][PubMed][Google Scholar]

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