

Integrative Ayurvedic Management of Acute Lumbar Disc Prolapse with Neurological Deficit – A Clinical Observation

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Abstract: *Background: Gridhrasi (sciatica) is a common Vata Vyadhi often correlated with lumbar disc herniation. Conventional management provides symptomatic relief but recurrence is frequent. Ayurveda offers a holistic approach emphasizing Vata Shamana, Avarana Nivritti, and Snayu Poshana.*

Objective: To evaluate the effectiveness of an integrative Ayurvedic protocol in managing Vata-Kaphaja Gridhrasi (lumbar disc prolapse) with neurological deficit.

Methods: A 37-year-old female with acute L5–S1 disc prolapse and left lower limb weakness was treated with Rasaraja Rasa, Samirapannaga Rasa, Ekangaveer Rasa, Sahacharadi Kwatha, Eranda Sneha, and Ashwagandha, along with Siravedha, Agnikarma, Patra Pinda Sweda, and Basti Karma.

Results: Significant reduction in radiating pain and stiffness was observed within 10 days, followed by improvement in muscle strength (from 2/5 to 4+/5) and mobility by the end of 30 days.

Conclusion: Integrative Ayurvedic management demonstrated effective pain relief, functional recovery, and neurological improvement, suggesting its potential as a non-surgical alternative in lumbar disc prolapse.

Keywords: Gridhrasi, Lumbar Disc Prolapse, Vata-Kaphaja Vyadhi, Panchakarma

I. INTRODUCTION

Low back pain (LBP) is one of the most common musculoskeletal disorders worldwide, affecting nearly 80% of individuals during their lifetime. Lumbar disc herniation (LDH), resulting from intervertebral disc degeneration or injury, is a major cause of LBP and sciatica. Approximately 95% of lumbar disc herniations occur at the L4–L5 or L5–S1 levels, where the spinal column endures maximum load and mobility stress.^[1]

In Ayurveda, the clinical features of LDH closely resemble *Gridhrasi*, a condition categorized under *Vata Vyadhi*. The term *Gridhrasi* signifies a vulture-like gait due to radiating pain, stiffness, and weakness in the lower limbs. Classical texts describe *Ruk* (pain), *Toda* (pricking), *Stambha* (stiffness), and *Muhuspandana* (tingling) as the cardinal symptoms.^[2] Pathogenesis involves aggravated *Vata dosha*, often associated with *Kapha*, leading to obstruction (*Avarana*) and neuromuscular impairment.

Conventional management of LDH includes analgesics, physiotherapy, and, in severe cases, surgical intervention. However, recurrence and complications are frequent concerns.^[3] Ayurveda offers a holistic, non-surgical alternative emphasizing *Vata Shamana*, *Avarana Nivritti*, and *Marmarakshana* through *Shamana* and *Shodhana* therapies. Panchakarma modalities such as *Abhyanga Swedana*, *Patra Pinda Sweda*, *Kati Basti*, *Siravyadha*, and *Agnikarma* have been reported to relieve pain and restore function effectively.^[4]

This case study presents an integrative Ayurvedic approach in the management of an acute L5–S1 disc prolapse with neurological deficit, demonstrating significant clinical improvement without surgical intervention.



II. MATERIAL AND METHODS

Centre of Study:

Department of Rasashastra & Bhaishajya Kalpana, Shri Saptashrungi Ayurved Mahavidyalaya and Hospital, Nashik.

Study Design:

Single case observational study.

Methodology:

Daily clinical evaluation was carried out throughout the treatment period. Subjective and objective parameters were documented before and after the intervention.

ASSESSMENT CRITERIA

Subjective Criteria

- Radiating pain
- Stiffness in lower back and thigh
- Tingling and burning sensation
- Weakness in lower limb
- Difficulty in walking or standing for long duration

Objective Criteria

- Straight Leg Raise (SLR) Test
- Muscle Power (Medical Research Council grading)
- Range of motion in lumbar region
- MRI findings (before treatment)

CASE DETAILS

Patient Profile:

- **Age/Sex:** 37 years / Female
- **Occupation:** Homemaker
- **First Consultation Date:** 01 July 2025

Chief Complaints (10–12 days duration):

- Severe radiating pain from lower back to left leg (+++)
- Stiffness and heaviness in lumbar region (++)
- Tingling and burning sensation in left leg (+)
- Progressive weakness of left lower limb
- Pain aggravated by standing or walking for >10 minutes

History Of Present Illness

The patient developed sudden, severe pain radiating from the lumbar region to the left foot after performing heavy household work involving lifting a sofa. Within hours, she experienced burning, tingling, and weakness in the left leg, with difficulty walking.

Past History

- No history of diabetes, hypertension, or trauma.
- No prior spinal surgery.



Personal History

- **Diet (Aharaja):** Irregular meals, spicy and fermented food.
- **Lifestyle (Viharaja):** Sedentary, occasional overexertion.
- **Mental (Manasika):** Anxiety and disturbed sleep due to pain.
- **Drug/Family History:** Not significant.

General Examination

Parameter	Observation
Pulse	76/min
BP	118/82 mmHg
Temperature	Afebrile
Weight	64 kg
Bowel/Bladder	Normal
Skin	Dry, rough

Ashtavidha Pariksha

Parameter	Observation
Nadi	Vata-Kaphaja
Mala	Ruksha, Alpa
Mutra	Prakrit
Jivha	Saama
Sparsha	Sheeta
Drika	Prakrit
Shabda	Prakrit
Akruti	Madhyama

Diagnosis

Ayurvedic Diagnosis: *Vata-Kaphaja Gridhrasi (Vega Avastha)*

Modern Correlation: Lumbar Disc Herniation (L5–S1) with radiculopathy and mild neurological deficit.

MRI Findings:

Diffuse posterior bulge of L5–S1 disc with postero-central component and inferior migration; severe spinal canal stenosis (4 mm diameter) compressing bilateral S1 nerve roots.

Treatment Plan

Management aimed at *Vata Shamana*, *Avarana Nivritti*, and *Snayu Poshan* through combined internal and external therapies.

Internal Medications

Medicine	Dose	Duration	Anupana	Purpose
Samirapannaga Rasa	125 mg TID	15 days	Warm water	Vata pacification
Rasaraja Rasa	125 mg BD	1 month	Milk	Nerve nourishment
Ekanagaveer Rasa	250 mg TID	15 days	Warm water	Pain and stiffness relief
Sahacharadi Kwatha	100 ml BD	1 month	Before meals	Anti-inflammatory
Eranda Sneha	10 ml HS	1 month	Warm milk	Vata anulomana
Ashwagandha Churna	250 mg BD	1 month	Milk	Strengthening & rejuvenation



Panchakarma Interventions

Day	Procedure	Description
Day 1	<i>Kati-Pada Nirgundi Patra Pinda Sweda</i>	Relieves stiffness and pain
Day 2	<i>Siravyadha</i> at left ankle (180 ml bloodletting)	Reduces <i>Raktavrita Vata</i>
Day 3–5	<i>Agnikarma</i> along sciatic path	Reduces <i>Ugra Shoola</i>
Day 6–15	<i>Dashamula Niruha Basti</i> + <i>Sahacharadi Taila Anuvasana Basti</i>	Pacifies <i>Vata</i> , improves mobility
Day 16–20	<i>Dhanyamla Dhara</i> and <i>Valuka Sweda</i>	Anti-inflammatory and strengthening

Pathya–Apathya

Pathya (Recommended)	Apathya (To Avoid)
Light, easily digestible food (moong dal, yusha, khichdi)	Spicy, oily, fermented foods
Warm water and milk	Curd, tamarind, excess pulses
Mild stretching and rest	Prolonged sitting or bending
Regular <i>Abhyanga</i> with <i>Mahanarayana Taila</i>	Daytime sleep, mental stress

Pranayama: *Anuloma–Viloma* and *Bhramari* (15 min daily)

III. RESULTS

After 15 days of treatment:

- Radiating pain and stiffness reduced by 80%.
- Tingling and burning sensations disappeared.
- Muscle power improved from 2/5 to 4+/5 in the left lower limb.
- Straight Leg Raise improved from 30° to 80°.
- Walking ability restored (>1 hour without discomfort).

Parameter	Before Treatment	After Treatment
Pain (VAS)	9/10	1/10
SLR Test	Left 30°, Right 70°	Left 80°, Right 80°
Muscle Power	Left 2/5	4+/5
Tingling/Burning	Present	Absent
Walking Tolerance	<10 min	>60 min

IV. DISCUSSION

The present case illustrates how a protocol-based Ayurvedic approach can provide significant relief and functional recovery in *Vata-Kaphaja Gridhrasi* (lumbar disc prolapse with neurological deficit). The treatment combined internal *Vatahara* and *Rasayana* formulations with external *Panchakarma* procedures aimed at reducing inflammation, restoring *Vata* balance, and strengthening the *Snayu–Mamsa* structures of the lower back.

Clinically, the gradual reduction in pain, stiffness, and radiating symptoms over 30 days indicates effective *Vata Shamana* and *Avarana Nivritti*. Improvement in muscle strength and walking capacity further reflects restoration of nerve function and tissue nourishment.

Role of Internal Medications

Rasaraja Rasa and *Ekgaveer Rasa* acted as key *Rasayana* and *Vatahara* formulations. Their *Balya* and *Bruhmana* properties supported nerve and muscle nourishment, aligning with the patient's improved lower limb power. *Samirapannaga Rasa*, with its *Shothahara* and *Vedanasthapana* actions, reduced inflammation and pain early in the treatment course.^[5]



Sahacharadi Kwatha, rich in anti-inflammatory and analgesic herbs like *Sahachara*, *Suradaru*, and *Sunthi*, improved flexibility and reduced *Stambha* (stiffness). *Eranda Sneha* supported *Vata Anulomana* and prevented recurrence by maintaining *Snigdhatata* of the channels^[6], while *Ashwagandha* promoted regeneration and strength through its *Rasayana* effect. Together, these medicines provided systemic correction of *Vata dosha* and improved neuromuscular coordination.

Role of Panchakarma Therapies

Swedana procedures like *Patra Pinda Sweda*, *Valuka Sweda*, and *Dhanyamla Dhara* were employed to relieve local stiffness and heaviness. Their combined *Ushna* and *Ruksha* properties helped remove *Ama* and improve local circulation, reducing *Gaurava* and *Stambha* effectively.

Siravedha offered immediate symptomatic relief by clearing *Avarana* of *Pitta* and *Kapha*, allowing proper *Vata gati*. This aligns with the observed rapid pain reduction post-procedure. However, mild symptom recurrence after a few days corresponds to the classical note that *Siravedha* benefits more in *Avaranajanya* types than pure *Vataja* *Gridhrasi*.^[7]

Agnikarma provided local pain relief and improved microcirculation through controlled thermal stimulation. Its *Ushna*, *Tikshna*, and *Sukshma* qualities counteracted *Sheeta* and *Ruksha* properties of *Vata-Kapha*, explaining the sustained reduction in radiating pain and stiffness.^[7]

Niruha Basti played a central role in systemic *Vata Shamana*. The formulation containing *Madhu*, *Saindhava*, *Sneha*, *Kalka*, and *Kwatha* acted synergistically to clear *Srotas*, pacify *Vata*, and promote tissue repair. Its use following *Siravedha* and *Agnikarma* consolidated earlier gains and ensured long-term symptom control.

Modern pharmacological studies also suggest that rectal administration enhances drug absorption and systemic circulation, which may explain the rapid improvement seen in motor function and pain tolerance.

Integrative Effect

The sequence of therapies—local *Swedana* for stiffness, *Siravedha* and *Agnikarma* for pain modulation, and *Basti* for systemic correction—worked synergistically. Internal *Rasayana* drugs complemented these effects by nourishing the *Majja Dhatu* and preventing recurrence.

Overall, the therapeutic combination addressed both the mechanical and neurogenic aspects of disc herniation. Reduction in radiating pain, improvement in range of motion, and restoration of strength were consistent with the classical Ayurvedic mechanisms of *Vata pacification* and *Shayu poshana*.

This case demonstrates that an integrative Ayurvedic regimen can successfully manage acute lumbar disc prolapse with neurological deficit by combining classical *Vatahara*, *Rasayana*, and *Panchakarma* therapies. The clinical improvements observed align with the ayurvedic understanding of *Vata-Kaphaja Gridhrasi*, validating the role of Ayurveda in non-surgical management of spinal disorders.

IV. CONCLUSION

Ayurvedic management based on *Vata Shamana* and *Rasayana* principles showed remarkable improvement in pain, stiffness, and neurological function in this case of *Vata-Kaphaja Gridhrasi*. The integrative use of internal medicines and Panchakarma therapies proved effective as a safe, non-surgical alternative for lumbar disc prolapse.

REFERENCES

- [1]. Al Qaraghi MI, De Jesus O. Lumbar Disc Herniation. [Updated 2023 Aug 23]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK560878/>
- [2]. Sharma PV, editor. Nidanasthana; Vatavyadhi Nidana Adhyaya. Sushruta, Sushruta Samhita. Chapter 1, Verse 74. Varanasi, India: Chaukhambha Visvabharati; 2005. p. 15.
- [3]. Kreiner DS, Hwang SW, Easa JE, Resnick DK, Baisden JL, Bess S, Cho CH, DePalma MJ, Dougherty P, Fernand R, Ghiselli G, Hanna AS, Lamer T, Lisi AJ, Mazanec DJ, Meagher RJ, Nucci RC, Patel RD, Sembrano JN, Sharma AK, Summers JT, Taleghani CK, Tontz WL, Toton JF., North American Spine Society.



An evidence-based clinical guideline for the diagnosis and treatment of lumbar disc herniation with radiculopathy. *Spine J.* 2014 Jan;14(1):180-91.

- [4]. Shashidhar SH, AS Prashanth. Ayurvedic management of Gridhrasi with special reference to Sciatica: A Case Study. *J Ayurveda Integr Med Sci* 2023;07:193-198. <http://dx.doi.org/10.21760/jaims.8.7.37>
- [5]. Mashru M. Pharmaceutical Standardization of Sameera Pannaga Rasa and its Effect on Tamaka Shwasa (Bronchial Asthma) MD dissertation. 2011 Jamnagar Department of RS&BK, I.P.G.T.&R.A., Gujarat Ayurved University
- [6]. Gopal S, Ittiachen L. Analysis of quality parameters and preservative concentrations in *Sahacharadi Kwatha*: A comparative study of three commercial brands. *J Ayurveda Integr Med.* 2024;15(4):101029. doi:10.1016/j.jaim.2024.101029.
- [7]. Vaneet Kumar J, Dudhamal TS, Gupta SK, Mahanta V. A comparative clinical study of Siravedha and Agnikarma in management of Gridhrasi (sciatica). *Ayu.* 2014;35(3):270-276. doi:10.4103/0974-8520.153743

