

Management of Recurrent Post-Laminectomy Sciatica Presenting as Vata-Kaphaja Gridhrasi through Vaitarana Basti: A Case Report

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Abstract—Background: Recurrent sciatica following lumbar laminectomy and discectomy continues to pose a therapeutic challenge despite advances in spinal surgery. In Ayurveda, the clinical features of radiating low back pain associated with numbness (*Suptata*) and heaviness (*Gaurava*) closely resemble Vata-Kaphaja Gridhrasi. This report describes the management of recurrent post-laminectomy sciatica using a sequential Ayurvedic treatment protocol comprising Deepana–Pachana followed by Vaitarana Basti. **Case Presentation:** A 48-year-old male supervisor presented with severe low back pain radiating to the posterior aspect of the left lower limb for six months. The symptoms were associated with numbness and heaviness of the affected limb, significantly affecting walking and daily activities. He had undergone L4–L5 lumbar laminectomy and discectomy one year earlier, with recurrence of symptoms six months after surgery. The patient was treated with Rasnasaptaka Kashayam for three days as Deepana–Pachana, followed by Vaitarana Basti alone for five consecutive days. **Outcome:** Following treatment, the Visual Analogue Scale (VAS) score reduced from 8/10 to 2/10. Left Straight Leg Raising improved from 40° to 70°, while Bragard's test and Lasegue's sign became negative. Lumbar flexion improved from 40° to 60°, extension from 10° to 25°, and right lateral bending from 15° to 25°. The patient also reported marked reduction in numbness and heaviness of the left lower limb. ESR decreased from 45 mm/hr to 25 mm/hr following treatment. **Conclusion:** This case suggests that a sequential Ayurvedic protocol comprising Deepana–Pachana followed by Vaitarana Basti may be associated with clinically meaningful improvement in recurrent post-laminectomy sciatica presenting as Vata-Kaphaja Gridhrasi. Further well-designed clinical studies are required to evaluate the effectiveness of this therapeutic approach.

Keywords— Gridhrasi; Post-laminectomy Sciatica; Sciatica; Vaitarana Basti; Vata-Kaphaja Gridhrasi.

Abbreviations

VAS – Visual Analogue Scale

SLR – Straight Leg Raising

ROM – Range of Motion

ESR – Erythrocyte Sedimentation Rate

I. INTRODUCTION

Sciatica is a clinical condition characterized by pain radiating along the distribution of the sciatic nerve, commonly resulting from lumbar intervertebral disc prolapse, spinal canal stenosis, or nerve root compression. It is one of the leading causes of disability among the working population, adversely affecting functional mobility and quality of life. Lumbar laminectomy and discectomy are widely performed surgical procedures for patients with persistent neurological deficits or severe pain that fails to respond to conservative management. Although these procedures often provide symptomatic relief, recurrence of symptoms following surgery remains a significant clinical challenge. Persistent or recurrent low back pain with radiculopathy after lumbar spine surgery may occur due to multiple factors, including recurrent disc herniation, epidural fibrosis, residual nerve root inflammation, or altered spinal biomechanics, often necessitating prolonged conservative management.

In Ayurveda, the clinical presentation of radiating pain extending from the lumbar region to the lower limb closely resembles *Gridhrasi*, one of the *Nanatmaja Vata Vyadhis* described in the classical texts. Acharya Charaka describes

Gridhrasi under *Vatavyadhi Chikitsa*, where the disease is characterized by *Ruk* (pain), *Toda* (pricking pain), *Stambha* (stiffness), and *Spandana* (twitching) extending from the *Sphik* (gluteal region) through the *Kati* (lumbar region), *Uru* (thigh), *Janu* (knee), *Jangha* (leg), and *Pada* (foot). Acharyas further explains that the gait of the patient resembles that of a vulture (*Gridhra*), hence the name *Gridhrasi*. The presence of *Tandra* (drowsiness), *Gaurava* (heaviness), and *Arochaka* (loss of appetite) indicates the involvement of *Kapha Dosha*, resulting in *Vata-Kaphaja Gridhrasi*.

From an Ayurvedic perspective, the disease develops due to *Avarana* of *Vata* by *Kapha* together with *Srotorodha* (obstruction of body channels), leading to impaired movement of *Vata* and manifestation of pain, stiffness, numbness (*Suptata*), and restriction of movement. Therefore, treatment should be directed not only towards pacifying aggravated *Vata* but also towards eliminating *Kapha*-induced obstruction and restoring the normal movement of *Vata*.

Among the Panchakarma procedures, *Vaitarana Basti* is a classical formulation specifically indicated in disorders dominated by *Vata* and *Kapha*. Owing to its *Vata-Kapha-hara*, *Shothahara*, and *Srotoshodhana* properties described in Ayurvedic literature, it is considered an important therapeutic

option in the management of *Vata-Kaphaja Gridhrasi*. Prior administration of *Deepana-Pachana* helps digest *Ama*, improve *Agni*, and prepare the body for *Shodhana*, thereby enhancing the effectiveness of *Basti* therapy.

The present case report describes the successful management of recurrent post-laminectomy sciatica presenting as *Vata-Kaphaja Gridhrasi* using a sequential Ayurvedic treatment protocol comprising *Rasnasaptaka Kashayam* for *Deepana-Pachana*, followed by *Vaitarana Basti*, and evaluates the clinical outcome using both subjective and objective assessment parameters.

II. PATIENT INFORMATION

A 48-year-old male supervisor presented to the Outpatient Department of Panchakarma, Vishnu Ayurveda College Hospital, with complaints of severe low back pain radiating to the posterior aspect of the left lower limb for six months. The pain was associated with numbness (*Suptata*) and heaviness (*Gaurava*), resulting in difficulty in walking, prolonged standing, and carrying out routine occupational activities. The pain intensity at presentation was 8/10 on the Visual Analogue Scale (VAS).

The patient was 172 cm tall and weighed 78 kg (BMI: 26.4 kg/m²). He had no history of diabetes mellitus, hypertension, or other significant systemic illness. He was a non-smoker and did not use smokeless tobacco but reported occasional alcohol consumption. One year before presentation, the patient had undergone L4-L5 lumbar laminectomy and discectomy for lumbar disc prolapse. Although he experienced initial postoperative relief, similar symptoms gradually recurred six months after surgery. Conservative management with non-steroidal anti-inflammatory drugs (NSAIDs) and muscle relaxants provided only temporary relief before he sought Ayurvedic treatment.

III. CLINICAL FINDINGS

On examination, the patient was conscious, cooperative, and oriented. Tenderness was elicited over the lumbosacral region with painful restriction of lumbar spine movements. The Straight Leg Raising (SLR) test on the left side was positive at 40°. Bragard's test and Lasegue's sign were positive, suggesting sciatic nerve root irritation. Lumbar range of motion revealed forward flexion limited to 40°, extension to 10°, and right lateral bending to 15°, all associated with pain. Left lateral bending was 25° without significant restriction. The patient also reported numbness (*Suptata*) and heaviness (*Gaurava*) involving the left lower limb. Baseline ESR was 45 mm/hr

TIMELINE	CLINICAL EVENT
1 year before presentation	L4-L5 Lumbar Laminectomy and Discectomy
6 months before presentation	Recurrence of low back pain with radiation to left leg
Day 0	Diagnosis of Vata Kaphaja Gridhrasi
Day 1-3	Rasnasapthakam kashayam (Deepana-Pachana)
Day 4-8	Vaitarana Basti
Day 9	Clinical reassessment showing significant improvement

Diagnostic Assessment

The diagnosis was established based on a comprehensive clinical evaluation, detailed history, physical examination, and relevant laboratory investigations. The patient presented with recurrent low back pain radiating to the posterior aspect of the left lower limb following L4-L5 lumbar laminectomy and discectomy. The pain was associated with numbness (*Suptata*) and heaviness (*Gaurava*), with marked limitation of lumbar movements and functional disability. Clinical examination revealed a positive Straight Leg Raising (SLR) test at 40° on the left side, positive Bragard's test, and positive Lasegue's sign, indicating nerve root irritation. Lumbar spine movements were restricted, particularly flexion, extension, and right lateral bending. The baseline ESR was elevated at 45 mm/hr, suggesting an ongoing inflammatory process.

Based on the clinical presentation and previous surgical history, the modern diagnosis was established as recurrent post-laminectomy sciatica. From the Ayurvedic perspective, the characteristic symptoms of radiating pain extending from the lumbar region to the lower limb, together with *Suptata* and *Gaurava*, were consistent with *Vata-Kaphaja Gridhrasi*.

Modern Diagnosis

- Recurrent post-laminectomy sciatica (L4-L5)

Ayurvedic Diagnosis

- Vata-Kaphaja Gridhrasi*

Differential Diagnosis

- Recurrent lumbar intervertebral disc prolapse
- Lumbar canal stenosis
- Piriformis syndrome
- Sacroiliac joint dysfunction

Ayurvedic Diagnostic Reasoning According to Charaka Samhita, *Gridhrasi* is a *Nanatmaja Vata Vyadhi* characterized by radiating pain involving the *Sphik*, *Kati*, *Uru*, *Janu*, *Jangha*, and *Pada*. The additional symptoms of *Gaurava* and *Suptata* indicate Kapha association, thereby supporting the diagnosis of *Vata-Kaphaja Gridhrasi*. The patient's clinical presentation closely corresponded to these classical descriptions.

Samprapti (Pathogenesis)

Nidana (Causative Factors)

- Previous lumbar disc pathology
- Lumbar laminectomy and discectomy
- Chronic mechanical stress related to occupation

↓

Dosha

- Vata + Kapha*

↓

Dushya

- Asthi*
- Majja*
- Snayu*

↓

Agni

- Mandagni* with *Ama*

↓ Srotodushti

- Sanga (obstruction)

↓ Vyadhi

- Vata-Kaphaja Gridhrasi

Therapeutic Intervention

The treatment protocol was planned according to the principles of *Samprapti Vighatana*, aiming to remove *Ama*, relieve *Kapha*-induced *Srotorodha*, and restore the normal movement of aggravated *Vata*.

Deepana–Pachana Phase (Days 1–3)

The patient received *Rasnasaptaka Kashayam*, 75 mL twice daily, administered warm 30 minutes before food for three consecutive days. This phase was intended to improve *Agni*, digest *Ama*, and prepare the body for *Shodhana* therapy.

Shodhana Phase (Days 4–8)

Following completion of *Deepana–Pachana*, *Rasnasaptaka Kashayam* was discontinued, and *Vaitarana Basti* was administered once daily for five consecutive days.

Outcome Assessment

The patient's progress was assessed using both subjective and objective parameters.

Subjective Assessment

- Visual Analogue Scale (VAS)
- Pain during walking
- Numbness (*Suptata*)
- Heaviness (*Gaurava*)

Objective Assessment

- Straight Leg Raising (SLR)
- Bragard's Test
- Lasegue's Sign
- Lumbar Range of Motion
- Erythrocyte Sedimentation Rate (ESR)

IV. RESULTS

‘Following completion of the treatment protocol, the patient showed marked improvement in both subjective symptoms and objective clinical findings.

Table I. Composition of Vaitarana Basti

Ingredient	Common Name	Quantity
Saindhava	Rock salt	12 g
Guda	Jaggery	25 g
Amleeka	Tamarind	50g
Tila taila	Sesame oil	50 ml
Gomutra	Cows urine	200 ml
Total		337 ml

Pain intensity, assessed using the Visual Analogue Scale, decreased from 8/10 before treatment to 2/10 after treatment. The patient reported considerable reduction in radiating pain, numbness, and heaviness of the left lower limb, enabling improved walking and performance of daily activities. The Straight Leg Raising angle improved from 40° to 70°, while Bragard's test and Lasegue's sign became negative. Lumbar spine mobility improved in all assessed planes. Flexion increased from 40° to 60°, extension from 10° to 25°, and

right lateral bending from 15° to 25°. Left lateral bending remained 25° without pain. The ESR decreased from 45 mm/hr before treatment to 25 mm/hr after treatment. No adverse events or treatment-related complications were observed during the treatment period.

Table II. Clinical Outcome Measures

Parameter	Before Treatment	After Treatment
VAS	8	2
Left SLR	40°	70°
Bragard's	Positive	Negative
Lasegue's	Positive	Negative
Lumbar Flexion.	40°	60°
Lumbar Extension	10°	25°
Right Lateral Bending	15°	25°
Left Lateral Bending	25°	25°

Table III. Laboratory Investigation

Parameter	Before Treatment	After Treatment
ESR	45 mm/hr	25mm/hr

V. DISCUSSION

Recurrent sciatica following lumbar laminectomy and discectomy remains a significant clinical challenge despite advances in spinal surgery. Persistent or recurrent symptoms may result from recurrent disc herniation, epidural fibrosis, nerve root inflammation, or altered spinal biomechanics, often leading to reduced quality of life and functional impairment. Although revision surgery may be indicated in selected patients, conservative management continues to play an important role in patients without progressive neurological deficits. In the present case, the patient developed recurrent unilateral radicular pain six months after L4–L5 laminectomy and discectomy, accompanied by numbness (*Suptata*) and heaviness (*Gaurava*), which significantly affected his daily activities. According to Ayurveda, the clinical features observed in this patient closely resemble *Vata-Kaphaja Gridhrasi*. Charaka Samhita describes *Gridhrasi* as a *Nanatmaja Vata Vyadhi* characterized by radiating pain extending from the gluteal region to the lower limb. Charaka further explains that the presence of *Gaurava*, *Tandra*, and *Arochaka* signifies *Kapha* association. In the present case, the coexistence of radiating pain with heaviness and numbness supported the diagnosis of *Vata-Kaphaja Gridhrasi*, indicating both aggravated *Vata* and *Kapha*-induced obstruction (*Srotorodha*). The treatment protocol was planned according to the principle of *Samprapti Vighatana*. Initially, *Rasnasaptaka Kashayam* was administered for three days as *Deepana–Pachana*. Classical Ayurvedic texts emphasize that correction of impaired *Agni* and digestion of *Ama* are essential before administering *Shodhana* therapies. *Rasnasaptaka Kashayam* is traditionally indicated in *Vata* disorders associated with pain and stiffness and was selected to improve digestive and metabolic functions while preparing the patient for *Basti* therapy. This sequential approach is consistent with the Ayurvedic concept that appropriate *Purvakarma* enhances the effectiveness of the main therapeutic procedure. After completion of the preparatory phase, *Vaitarana Basti* was administered for five consecutive days. *Vaitarana Basti* is a classical formulation indicated in disorders involving *Vata* and

Kapha, particularly those associated with *Srotorodha*. The formulation contains ingredients possessing *Vata-Kapha-hara*, *Lekhana*, *Shothahara*, and *Srotoshodhana* properties as described in Ayurvedic literature. From an Ayurvedic perspective, these properties help remove obstruction, facilitate the normal movement of *Vata*, and relieve pain, stiffness, and functional restriction. Although the precise biomedical mechanisms require further investigation, the observed clinical improvement in this patient may be related to the combined effects of the sequential *Deepana-Pachana* and *Basti* therapy. The patient demonstrated clinically meaningful improvement in both subjective and objective outcome measures. Pain intensity, assessed using the Visual Analogue Scale, reduced from 8/10 to 2/10. The Straight Leg Raising angle improved from 40° to 70°, while Bragard's test and Lasegue's sign became negative following treatment. Lumbar range of motion improved substantially, and the patient reported marked reduction in numbness and heaviness of the affected limb, resulting in improved gait and daily functioning. The ESR also decreased from 45 mm/hr to 25 mm/hr, coinciding with the observed clinical improvement. The findings of the present case are consistent with previously published reports describing the beneficial role of *Vaitarana Basti* in the management of *Gridhrasi*. Earlier case reports and clinical studies have documented improvements in pain intensity, functional mobility, and Straight Leg Raising following *Vaitarana Basti* therapy. The present case adds to the available literature by demonstrating favourable short-term outcomes in a patient with recurrent post-laminectomy sciatica, a relatively less frequently reported clinical scenario in Ayurvedic literature.

The principal strength of this case report lies in the comprehensive assessment using both subjective and objective outcome measures, including the Visual Analogue Scale, Straight Leg Raising test, lumbar range of motion, ESR, and serial clinical photographs. However, the report has certain limitations. Pre- and post-treatment MRI findings were unavailable for comparison, long-term follow-up could not be documented at the time of manuscript preparation, and conclusions cannot be generalized because this is a single case report. Well-designed prospective studies with larger sample sizes are required to further evaluate the effectiveness and safety of this therapeutic approach.

VI. CONCLUSION

This case report demonstrates that a sequential Ayurvedic treatment protocol comprising *Deepana-Pachana* with *Rasnasaptaka Kashayam* followed by *Vaitarana Basti* was associated with marked short-term clinical improvement in a patient with recurrent post-laminectomy sciatica presenting as *Vata-Kaphaja Gridhrasi*. Clinically meaningful improvements were observed in pain intensity, functional mobility, Straight Leg Raising angle, lumbar range of motion, and associated symptoms such as *Suptata* (numbness) and *Gaurava* (heaviness). These improvements were accompanied by a reduction in ESR during the treatment period. Although the findings are encouraging, they are derived from a single case and should be interpreted with caution. Further well-designed

clinical studies with larger sample sizes and long-term follow-up are required to establish the effectiveness and safety of this therapeutic approach.

Patient Perspective

"After completing the treatment, I experienced significant relief from the pain radiating to my left leg. Walking became much easier, and the numbness and heaviness in my leg reduced considerably. I was able to perform my daily activities with greater comfort and was satisfied with the treatment I received."

Informed Consent

Written informed consent was obtained from the patient for publication of this case report and the accompanying clinical photographs. Every effort has been made to maintain patient confidentiality, and all identifying information has been removed or anonymized.

Ethical Considerations

This case report describes routine clinical care provided in accordance with standard institutional practice. Written informed consent for publication was obtained from the patient. No experimental intervention was undertaken.

Conflict of Interest

The authors declare that there are no conflicts of interest related to this publication.

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Author Contributions

Sreedev A. S.: Conceptualization, patient management, data collection, literature review, manuscript drafting, preparation of tables and figures, and manuscript revision.

Kirathamoorthy P. P.: Clinical supervision, diagnostic validation, critical review of the manuscript, and final approval.

Jeejo Chandran O.: Clinical guidance, interpretation of findings, manuscript review, and final approval.

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Clinical Message

A sequential treatment approach employing *Deepana-Pachana* followed by *Vaitarana Basti*, selected according to Ayurvedic principles, was associated with substantial short-term improvement in this patient with recurrent post-laminectomy sciatica presenting as *Vata-Kaphaja Gridhrasi*. Careful patient selection and objective outcome assessment remain essential, and larger clinical studies are needed to further evaluate this approach.

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