

THERAPEUTIC ROLE OF *SIRAVEDHANA* IN CHRONIC *GRIDHRASI* (SCIATICA) WITH *SHAMANA CHIKITSA*: A CASE REPORT

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ABSTRACT

Gridhrasi (Sciatica) is a debilitating neuromuscular disorder characterized by radiating pain, stiffness, and restricted mobility of the lower limb. Despite the availability of various treatment modalities, a significant proportion of patients with chronic sciatica fail to achieve satisfactory relief. In Ayurveda, *Gridhrasi* is classified under *Vatavyadhi*, and *Siravedhana* (therapeutic venesection) is described as an important treatment modality for disorders involving *Vata* and *Rakta Dushti*. A 35-year-old female patient had complaints of pain radiating from the lower back to the left lower limb, associated with stiffness, pricking sensation, marked functional limitation, and minimal relief from the prolonged conservative management. Assessment was done using the Visual analogue scale (VAS), Straight leg raising (SLR) test, and gradation of classical symptoms of disease. The patient was treated with *Shamana*

Chikitsa along with *Siravedhana*, as indicated by *Acharya Sushruta*, performed at the indicated anatomical site. *Siravedhana* was performed under aseptic conditions with controlled bloodletting. Following the treatment, the patient showed a significant reduction in

radiating pain, stiffness, and pricking sensation, along with marked improvement in functional mobility. No adverse events were observed during the procedure. Chronic sciatica involves both mechanical and inflammatory mechanisms, including nerve root irritation and cytokine-mediated pain. *Siravedhana* may act by removing vitiated Rakta, reducing local inflammatory mediators, and improving microcirculation, thereby relieving nerve compression and neuropathic pain. The present case highlights the effectiveness of the therapeutic role of *Siravedhana* with the *Shamana chikitsa* in chronic persistent *Gridhrasi* (Sciatica).

KEYWORDS: *Gridhrasi*, Sciatica, *Siravedhana*, *Shamana Aushadhi*, Ayurveda.

INTRODUCTION

Gridhrasi (Sciatica) is a common and debilitating neuromuscular disorder characterised by radiating pain originating from the lower back and extending along the course of the sciatic nerve to the lower limb. It significantly impairs functional mobility and quality of life. Epidemiological data suggest that sciatica affects approximately 10-40% of individuals during their lifetime, with a considerable proportion developing chronic symptoms that are difficult to manage.^[1] Mainly, the main cause of sciatica is mechanical compression of nerve roots, most commonly due to lumbar disc herniation. However, emerging evidence indicates that inflammatory processes play a crucial role in the pathogenesis of sciatic pain.^[2] Pro-inflammatory cytokines and biochemical mediators released from degenerated disc material contribute to nerve root irritation and neuropathic pain, even in the absence of significant mechanical compression on the nerve root.^[3]

Current management strategies for sciatica primarily include pharmacological therapy, physiotherapy, operative procedures, and epidural steroidal injections. Despite these approaches, the outcome remains variable, particularly in chronic cases. Systematic reviews have demonstrated limited and inconsistent efficacy of commonly used medications, emphasizing the need for alternative and integrative therapeutic approaches in chronic persistent cases of sciatica.^[4]

In Ayurveda, *Gridhrasi* is described under the *Vatavyadhi* and is characterized by classical features such as *Ruka* (Pain), *Stambha* (stiffness), *Toda* (Pricking sensation), and *Graha* (restricted movement).^[5] The involvement of *Vata Dosha* is often associated with *Rakta Dusthi*, *Srotoavrodha* (obstruction), in pathology. Among the various treatment modalities,

Siravedhana (Therapeutic Venesection) is described as an important intervention for a disorder that is not cured by *Shamana*, *Snehana*, and *Swedanadi Chikitsa*. It is considered a potent method for removing vitiated blood and restoring the physiological balance in the body.^[6]

Previous clinical studies have reported beneficial effects of *Siravedhana* in *Gridhrasi*, showing improvement in pain, stiffness, pricking sensation, and functional parameters. Considering the chronic and persistent nature of *Sciatica* cases with minimal and limited effectiveness of conventional therapies, there is a need to explore alternative interventions grounded in classical Ayurvedic principles, such as *Siravedhana*. The present case report highlights the therapeutic role of *Siravedhana*, with *Shamana Chikitsa*, in a long-standing case of *Gridhrasi*, thereby providing an integrative perspective on its clinical utility.

CASE REPORT

This is a single-case study conducted after obtaining informed consent from the patient in her own language.

Patient Information

- Age: 35 years
- Gender: Female
- Marital Status: Married
- Residence: New Delhi, India
- Occupation: Housewife

Chief Complaints (*Pradhan Vedana*)

The patient presented with the following complaints:

- Chronic low back pain radiating to the left lower limb for 9 years
- Stiffness and restricted movement of the left lower limb
- Difficulty in walking due to pain
- Heaviness in body (*Gaurava*)
- Pricking sensation (*Toda*)

The symptoms had worsened over the last 20 days before presentation.

History of Present Illness (*Vyadhi Vruttant*)

The patient had been experiencing symptoms for the past nine years, with a gradual onset. Initially, she developed mild low back pain associated with stiffness and occasional difficulty in movement. Over time, the pain increased in intensity and began radiating to the left lower limb, following a typical pattern.

In the last 20 days, there was a marked aggravation of symptoms, including increased pain, stiffness, and difficulty in walking, which significantly affected her daily activities. There was no history of trauma. The patient had previously undergone conservative treatments but reported only temporary or inadequate relief.

History of Past illness (*Purva Vyadhi Vruttant*)

- No history of hypertension, diabetes mellitus, or thyroid disorders
- No significant past surgical history

Surgical History (*Shalyakarma Vruttant*)

Not any

Family History (*Kula Vyadhi Vruttant*)

Not any

Menstrual History

- Menarche: At the age of 13 years
- Menses: Regular, 28-30days / 4-5 days, moderate flow, painless
- Dysmenorrhea: Absent

Obstetric History

- Obstetric history: G1P1L1
- Type of delivery: FTNVD
- Obstetric Complications: Nil

Personal History (*Vyaktigat Vruttant*)

- Diet: Mixed, with predominance of *Katu* and *Ruksha Ahara*
- Appetite: Reduced
- Bowel habits: Mild constipation (once daily)
- Micturition: Normal

- Lifestyle: Sedentary with occasional physical strain

General Examination

- Gait: Limping
- Pulse: 72/min
- Blood Pressure: 130/70 mmHg
- Respiratory Rate: 18/min
- Temperature: Afebrile
- Height: 4 feet 9 inches
- Weight: 58 kg

Systemic Examination

- Respiratory System: Normal vesicular breath sounds
- Cardiovascular System: S1, S2 normal
- Central Nervous System: Conscious and oriented
- Abdomen: Soft and non-tender

Musculoskeletal Examination

- Tenderness present over the lumbosacral region
- Restricted range of motion in the left lower limb

Neurological Examination

- **Straight Leg Raising (SLR) Test**
 - Left side: Positive at 50°
 - Right side: Normal
- **Bragard Test**
 - Left side: Positive at 50 °
 - Right side: Negative

Table 1: Clinical Examination Findings Before Treatment.

Parameter	Observation
Gait	Limping
Local Tenderness	Present over the lumbosacral region (L3, L4, L5, S1)
Muscle stiffness	Present
SLR Test (Left)	Positive at 50 °
SLR Test (Right)	Fully free
Bragard Test (Left)	Positive at 50 °
Bragard Test (Right)	Fully free

Laboratory Investigations

- Haemoglobin: 11.9 gm%
- Blood Sugar: F-96, PP-119
- Bleeding Time: 2 min 10 sec
- Clotting Time: 5 min 10 sec
- Platelet Count: 2.6 lakh/mm³
- HIV, HBsAg, HCV: Negative
- ESR: 5 mm/hr

(All parameters were within acceptable limits for the procedure.)

Diagnosis

Ayurvedic Diagnosis: *Vata-Kaphaja Gridhrasi*

The diagnosis was based on classical features such as radiating pain (*Ruk*), stiffness (*Stambha*), restricted movement (*Graha*), and associated symptoms like *Gaurava* and *Tandra*, indicating involvement of *Vata* with *Kapha*.

स्फिकपूर्वा कटीपृष्ठोरुजानुजन्घापदं क्रमात् ।

गृध्रसी स्तम्भरुक्तोदेगृन्हाती स्पन्दते मुहुः ।

वातादवातकफात् तन्द्रागौरवरोचाकाविता । (च. चि. 28/56)

Modern Diagnosis: Clinically diagnosed left-sided sciatica (lumbar radiculopathy)

The condition was clinically diagnosed as left-sided sciatica based on radiating low back pain, positive Straight Leg Raising (SLR) and Bragard tests, and functional limitation suggestive of nerve root irritation.

The diagnosis of sciatica was made clinically based on characteristic radiating pain, positive SLR and Bragard tests, and functional limitation. In the absence of radiological imaging, clinical evaluation and standard examination were used to establish the diagnosis. Differential diagnoses such as mechanical low back pain and peripheral neuropathy were considered and excluded.^[7]

Therapeutic Intervention

Considering the chronicity of the disease, functional limitation, and inadequate response to previous conservative management, an integrative *Ayurvedic* treatment approach was

planned. The management included *Siravedhana* as a *Shodhana* procedure along with *Shamana Aushadhi* and local external therapy.

Aacharya Charaka gave the *Chikitsasutra* for *Gridhrasi*^[8]

अन्तराकंडरागुल्फं सिरा बस्तिअग्निकर्म च | गृध्रसीषु प्रयुज्जित

Suggest *Siravedha*, *Basti karma*, *Agnikarma* as a treatment modality for *Gridhrasi*.

Siravedhana Procedure

Siravedhana was performed as per classical guidelines under strict aseptic precautions.

- **Site:** 4 *angula* above the knee joint (*Janu Sandhi Uparyaya Adho Va Chaturangula*)^[9]
- **Number of sittings:** 3
- **Interval:** 7 days between each sitting
- **Approximate bloodletting:** 30–40 ml per sitting

Pre-procedure (*Poorva Karma*)

- Detailed clinical assessment and laboratory investigations were carried out to ensure suitability for the procedure
- Informed written consent was obtained
- The procedure site was identified and marked
- The area was cleaned and prepared under aseptic conditions

Procedure (*Pradhana Karma*)

- The patient was positioned comfortably
- After proper sterilization, *Siravedhana* was performed at the selected site
- Controlled bloodletting was carried out, and approximately 30–40 ml of blood was allowed to flow
- The patient was monitored throughout the procedure for any discomfort, dizziness, or excessive bleeding

Post-procedure (*Pashchat Karma*)

- Local pressure dressing was applied to achieve haemostasis
- The patient was advised to rest for the day
- Instructions were given to avoid strenuous activity
- The patient was observed for any immediate or delayed complications

Shamana Aushadhi (Internal Medication)

The following medications were administered throughout the treatment period:

- a) **Trayodashanga Guggulu:** 500 mg twice daily after meals
- b) **Dashmularishta:** 10 ml twice daily after meals with an equal quantity of water
- c) **Chitrakadi Vati:** 500 mg twice daily before meals

External Therapy

Panchguna Taila was applied locally over the lumbosacral region with gentle massage

Safety and Monitoring

All necessary precautions were taken before, during, and after the procedure. Laboratory parameters, including haemoglobin, bleeding time, clotting time, and platelet count, were within normal limits before intervention. The patient was monitored during each sitting for any signs of excessive bleeding, syncope, or discomfort. No adverse events or complications such as infection, prolonged bleeding, or vasovagal episodes were observed throughout the treatment period.

Table 1: Siravedhana Treatment Schedule.

Sitting No.	Interval	Site of Siravedhana	Approx. Blood let out
1st	Day 7th after all investigations	4 Angula above the knee joint	30-40ml
2nd	14 th day	4 Angula above the knee joint	30-40ml
3rd	21 st day	4 Angula above the knee joint	30-40ml
Follow-up 1	28 th day	-	-
Follow-up 2	35 th day	-	-

Assessment Criteria

The clinical outcome was assessed using both subjective and objective parameters, based on classical *Ayurvedic* descriptions of *Gridhrasi* as well as standard clinical evaluation methods. The severity of symptoms was graded using a structured scoring system to allow objective comparison before and after treatment.

Subjective Parameters

The following symptoms were assessed based on classical descriptions of *Gridhrasi*:

1. VAS Scale (From 0-10)

0- No pain

1- Mild Pain (1-3)

2– Moderate Pain (4-6)

3- Severe Pain (7-10)

2. Stambha (Stiffness)

0 – No stiffness

1 – Mild stiffness

2 – Moderate stiffness

3 – Severe stiffness

3. Ruk (Pain)

0 – No pain

1 – Pain present but no limping

2 – Pain with limping, without support

3 – Pain requiring support for walking

4 – Unable to walk due to pain

4. Toda (Pricking Sensation)

0 – Absent

1 – Mild

2 – Moderate

3 – Severe

5. Gaurava (Heaviness)

0 – Absent

1 – Mild

2 – Moderate

3 – Severe

Objective Parameters

1. Straight Leg Raising (SLR) Test

0 – Negative ($\geq 90^\circ$)

1 – 60° – 90°

2 – 30° – 60°

3 – $<30^\circ$

2. Bragard Sign

0 – Negative

1 – Positive

3. Gait

0 – Normal

1 – Mild difficulty

2 – Limping gait

3 – Severe impairment

Basis of Assessment

The subjective parameters were selected based on classical *Ayurvedic* symptomatology of *Gridhrasi*, including *Ruk*, *Stambha*, *Toda*, and *Gaurava*, as described in *Ayurvedic* texts.

Objective parameters such as the SLR test and Bragard sign were included as they are widely accepted clinical tools for assessing nerve root irritation and functional limitation in sciatica.

OBSERVATION AND RESULTS

The patient was assessed at baseline (before treatment) and after each sitting of *Siravedhana* using predefined subjective and objective parameters. Progressive improvement was observed in both symptom severity and functional status over the course of treatment.

Table 2: Assessment criteria.

Parameter	Before Treatment	After 1st Sitting	After 2nd Sitting	After 3rd Sitting
VAS	2	1	1	0
Stambha	3	2	1	0
Ruka	2	2	1	0
Toda	3	2	1	1
Gaurava	3	2	1	0
SLR	2	2	1	0
Bragard test	1	1	1	0

Table 3: Clinical Examination Findings After.

Parameter	Observation
Gait	Almost normal
Local Tenderness	Significantly reduced
Muscle Stiffness	Reduced
SLR Test (Left)	Negative
SLR Test (Right)	Negative

Treatment.

Clinical Observations

The patient initially presented with severe stiffness, pain in the lower back radiating to the left leg, pricking sensation, heaviness, and marked functional limitation. Following the first sitting of *Siravedhana*, a mild reduction in stiffness and pricking sensation was observed. After the second sitting, there was noticeable improvement in pain, stiffness, and overall mobility, along with an increase in the Straight Leg Raising (SLR) range. Upon completion of three sittings, a significant reduction in symptoms was noted, with complete relief from stiffness and marked improvement in pain and gait. The SLR test improved from 50° at baseline to approximately 90° after treatment, and the Bragard sign, which was initially positive, became negative. No complications were observed during or after the *Siravedhana* procedure.

Overall Outcome

- Pain and stiffness showed substantial reduction over the treatment period.
- Functional mobility improved, and the patient was able to walk with minimal difficulty.
- No adverse effects or complications were observed during or after the intervention.

Table 4: Timeline.

Date	Details of the visit	
	Complaints	Treatment given
9 years ago	Onset of symptoms	
October 2025	Stiffness and pain in the lower back, radiating to the left lower limb, became aggravated.	-
17/11/2025	Patient came to Shalya OPD in the Shalya Tantra department, CBPACS	-
17/11/2025	Diagnosed with <i>Gridhrasi</i> , the patient started treatment at the Shalya department of CBPACS.	Patient was advised the following treatment: <i>Trayodasang Guggulu</i> , <i>Dashmul Kwath</i> , <i>Chitrakadi Vati</i> , and <i>Panchgun Taila</i> . Preliminary investigations for <i>Siravedhana</i> were done on the same day, and planned for <i>Siravedhana</i> on the next visit after 7 days.
24/11/25	Mild pain and stiffness of the lower back reduced after 1 st <i>Siravedha</i>	1 st sitting of <i>Siravedha</i> done, rest of the medicine continues.
1/12/25	Stiffness was reduced totally, and pain was reduced; SLR increased	2 nd sitting of <i>Siravedha</i> done, rest of the medicine continues

8/12/25	Significant improvement was seen in pain, stiffness, and gait.	3rd sitting of <i>Siravedha</i> done, rest of the medicine continues, follow-up after 7 days
8/12/25	After 3 sittings of <i>Siravedha</i> , significant improvement was seen in symptoms and in the quality of life of the individual.	
15/12/25	Reduced symptoms	Follow Up
22/12/25	Symptoms reduced; improvement in	

DISCUSSION

Gridhrasi (Sciatica) is a complex clinical entity involving both mechanical compression and inflammatory mediator effects on nerve roots. It suggests that radicular pain is not only due to compression of the nerve root but also significantly influenced by inflammatory mediators released from degenerated intervertebral discs.^[10] These inflammatory mediators contribute to persistent neuropathic pain, explaining the limited relief of long-term conservative management in chronic cases of *Gridhrasi*. The present case, with a prolonged history of nine years and inadequate response to conventional therapy, needs integrative management.

In Ayurveda, *Gridhrasi* is classified under *Vatavyadhi*, where aggravated *Vata Dosha*, often associated with *Srotorodha* and *Rakta Dushti*, leads to characteristic symptoms such as *Ruka*, *Stambha*, and *Toda* with *Gaurava*. Considering the chronicity and severity of the disease, a combined approach involving *Shodhana* (eliminative) and *Shamana* (Palliative) therapies is applied.

Role of *Siravedha* (*Shodhana*)

Siravedhana, a type of *Sashastra Raktamokshana*,^[11] is indicated in conditions where disorders are not responding to *Snehana*, *Swedana*, *Shamana*, etc., *Chikitsa*, highlighting its role as an effective therapeutic intervention in chronic cases. It is further described as *Ardha Chikitsa*, emphasizing its significant clinical value in resistant conditions.^[12]

In the present case, the *Siravedhana* procedure marked clinical Improvement, particularly in radiating pain, stiffness, and functional mobility. The progressive improvement after each sitting indicates its direct action on the underlying pathology. Similar findings have been reported in clinical studies where *Raktamokshana* therapies give a significant reduction in pain and improvement in functional parameters in musculoskeletal disorders like sciatica.^[13]

From a modern perspective, the probable mechanism of Siravedhana is as follows

- i. Reduction of inflammatory mediator load- Bloodletting may decrease circulating inflammatory mediators contributing to nerve irritation.
- ii. Improvement of microvascular circulation- Enhanced perfusion reduces ischemia around nerve roots.
- iii. Decompression effect- Reduction in local venous congestion may reduce the pressure on neural structures.

Thus, *Siravedha* can be considered a targeted anti-inflammatory and circulatory intervention, effectively addressing both *Dosha Dushthi* and *Srotorodha* in chronic Gridhrasi.

Role of Shamana Chikitsa

Shamana Chikitsa plays a crucial supportive role by balancing the aggravated Dosha Sarvadehika and Sthanik. In the present case, the administration of formulations contributed through multiple pharmacological actions

1. *Trayodashanga Guggulu*- It is a polyherbal formulation with 13 herbs, with *Guggulu* processed in *Ghrit* (ghee), indicated in *Vatavyadhi*.^[14] *Trayodashanga Guggulu* has proven anti-inflammatory action, and *Ghrit* helps in the absorption of the drug.^[15]

2. *Dashmularishtha*- *Dashmoola* preparations are known for their anti-inflammatory and Vata Shamana effects, contributing to pain relief. Experimental and clinical studies have demonstrated that *Dashmularishtha* possesses significant anti-inflammatory and analgesic properties.^[16]

3. *Chitrakadi Vati*- Improves *Agni*, reduces *Ama* formation, prevents further *Srotorodha*, and acts as a *Deepana Pachana*.

4. Local application of *Panchguna Taila*- It is a polyherbal formulation oil used for massage in muscular and neurotic pain. In this case, *Panchguna Taila* reduced local stiffness and pain in the lower back.^[17]

These formulations collectively help in balancing aggravated *Vata Dosha*, improving *Agni*, and maintaining systemic equilibrium.

While *Shamana* therapy contributes to gradual symptomatic relief, it is often insufficient alone in chronic conditions. In the present case, its role can be considered a supportive role to *Siravedhana*.

The combined use of *Shodhana* and *Shamana* therapies reflects the classical Ayurvedic principle of “*Shodhana* followed by *Shamana*” for chronic and resistant conditions. *Siravedhana* removed the root pathological factors (*Rakta Dushti* and *Srotorodha*), while *Shamana* therapy stabilized the internal environment and prevented recurrence.

CONCLUSION

The present case demonstrates that *Siravedhana* plays a crucial role in the management of chronic persistent *Gridhrasi* (Sciatica). It provides significant relief in pain, stiffness, radiating pain, and functional limitation, especially in cases unresponsive to prolonged conservative management.

The therapeutic effect of *Siravedhana* may be attributed to its ability to eliminate vitiated *Dosha*, reduce inflammatory mediators, improve local circulation, and relieve nerve root irritation. *Shamana Chikitsa* serves as an important supportive modality by pacifying *Vata Dosha*, improving metabolic balance, and maintaining long-term stability. This case highlights the importance of an integrative Ayurvedic approach, where *Siravedhana* acts as a key interventional therapy, supported by *Shamana* treatment, in effectively managing chronic and difficult-to-treat cases of Sciatica.

Further large-scale clinical studies are required to validate these findings and establish *Siravedhana* as a standardized therapeutic option in *Gridhrasi*.

Declaration of patients consent

Proper consent was obtained from the patient in her own language. The patient has agreed for their clinical information to be reproduced to add knowledge to the clinical database.

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Conflict of Interest

There is no conflict of interest.

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