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## Journal of

# **Ayurveda and Integrated Medical Sciences**

**CASE REPORT** 

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# Ayurvedic management of *Gridhrasi* with special reference to Sciatica: A Case Study

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## ABSTRACT

Background: About 70% to 80% of people in India report having low back pain, making it one of the most prevalent complaints. The most frequent intervertebral disc prolapse among the many causes of low back pain is referred to leg, buttock, or hip which frequently outlines the characteristics of Sciatica syndrome. Sciatica is similar to Gridhrasi, one of the most prevalent Vata illnesses, according to Ayurveda. Aims & Objectives: The purpose of this study was to evaluate the effectiveness of Ayurvedic treatment in Gridhrasi. Materials and Methods: Single case study of a 44-year-old married man who had been visiting an Ayurvedic hospital for Ghridrasi of the right leg for eight months had previously been diagnosed with a diffuse bulging of the L4-L5 intervertebral disc. He had one month of Panchakarma therapy, which included Abhyanaga Swedana, Patra Pinda Swedana, and Tila Pinda Swedana in combination with Shamana Chikitsa. Results: After a month, the patient's symptoms were assessed, and the outcomes were good. The patient's general quality of life had also greatly improved. **Conclusion:** The mentioned treatment reduces *Gridhrasi* symptoms significantly.

Key words: Ghridrasi, Sciatica, Abhyanga, Swedana, Patra Pinda Swedana, Kati Basti, Shamana Chikitsa.

#### **INTRODUCTION**

In India, low back pain is among the most prevalent complaints, affecting 70% to 80% of the population. The most typical intervertebral disc prolapses among the numerous causes of low back pain. L4-L5 and L5-S1 discs are most frequently impacted in 95% of lumbar disc herniations, and the pain may be limited to the lower back exclusively or described as affecting the leg, buttock, or hip, which frequently describes the characteristics of Sciatica syndrome. [1] Epidemiological

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research indicated that the lifetime incidence ranged from 10% to 40% and the annual incidence ranged from 1% to 5%. From 3.8% in the working population to 7.9% in the non-working population, the prevalence varies greatly. [2,3] Men are more frequently afflicted than women, and it is more prevalent in men between the ages of 40 and 50.

Sciatica is a crippling ailment caused by sciatic nerve root pathology that makes it difficult to walk and leaves patients with pain and paresthesia in the sciatic nerve distribution. Because of its severity, it can occasionally interfere with a person's everyday activities and lower their quality of life. Typically, coughing, bending, or twisting makes the discomfort worse. Analgesics, muscle relaxants, painkillers, anticonvulsants, and NSAIDs to reduce inflammation are frequently used in modern treatment.[4] and surgical operations with an eye toward a negative outcome

In Ayurvedic medicine, the illness Sciatica is comparable to Gridhrasi, which is classified as a Nanatmaja Vataja Vikara.<sup>[5]</sup> The word *Gridhrasi* generally suggests the patient's stride, which

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resembles that of a vulture because of the patient's excruciating, ongoing, and radiating pain. *Ruk* (pain), *Toda* (pricking feeling), *Muhuspandana* (tingling sensation), and *Stambha* (stiffness) in the *Sphik*, *Kati*, *Uru*, *Janu*, *Jangha*, and *Pada* are the four primary symptoms of *Gridhrasi* (*Vataja* kind).<sup>[7]</sup>

In Vata-Kaphaja Gridhrasi, one might see Tandra (drowsiness), Gaurav (heaviness), and Aruchi (anorexia). Ayurvedic management of Gridhrasi (sciatica) involves Bastikarma, Siravyedha and Agnikarma<sup>[6,8]</sup> In this case study, Shamana Chikitsa, Sarvanga Abhyanga Swedana Patrapinda Swedana, and Kati Basti have all been recommended.

#### **CASE REPORT**

A 44-year married male came to Kayachikitsa OPD of Ayurveda Mahavidyalaya Hospital, Heggeri Extension Hubli with complaints of pain in the lower lumbar region radiating to the right lower limb from three months. He also had complaints of stiffness in the lower back region from two months and feeling difficulty while walking from one month. These symptoms were associated with reduced appetite from three months, gaseous distension of abdomen from two months, constipation and general weakness from one month.

The patient hailed from a Lower middle-income family from Hubli. His was working as a clerk in court. He gradually developed pain in low back region. It was managed with symptomatic allopathic treatment. Later he again gradually developed pain in the lower lumbar region and then gradually radiates to the posterior aspect of the thigh, knee, calf region and foot of the right leg from eight months. Gradually he experienced stiffness in the lower back region from two months, feeling of tingling sensation in the right leg, heaviness and difficulty while walking. He was admitted to the IPD after careful examination.

He has no prior surgical history; however, he does have a traumatic history of mild RTA. Nobody in the family had ever experienced diabetes, hypertension, or IHD. The patient is a vegetarian. He has less of an appetite. He had a normal bladder habit. He suffered from constipation. He doesn't engage in any other addictions like smoking or drinking. His pain kept away him from sleeping well.

#### **CLINICAL FINDINGS**

#### **General Examination**

#### Asthavidha Pariksha

BP: 130/80 mmHg

PR: 76/min

RR: 18/min

Temperature: 98.6°F

Wt: 80 kg

BMI: 27.5kg/m2

Nadi (pulse): Vata-Kaphaja

Mala (bowels): Asamyak (Constipated)

Mutra (urine): Samyak

Jihwa (tongue): Sama (coated)

Shabdha (speech): Prakruta

Sparsha (skin): Anushnasita

Druk (eyes): Prakruta

Akruti (posture): Madhyama

#### **Details of Locomotor Examination**

#### **Locomotor Examination**

#### Inspection

- Antalgic gait, short step.
- Discomfort in walking and sitting for a long duration.
- Restriction of Spinal and hip movements.

#### **Palpation**

- Tenderness at L4 L5 region
- Good Muscle tone
- Muscle power grade both at right & left extremities (upper and lower) - 5/5

### Range of movement of Lumbar spine (ROM)

- Forward flexion of the lumbar spine is limited to 30 cm above ground
- Extension is limited to 10° with pain
- Right lateral flexion is limited to 10° with pain
- Left lateral flexion is limited to 10° with pain

#### **SLR test (active)**

- Positive at 30° on the right leg
- Negative on the left leg.

#### **Bragard's test**

- Positive at the right leg.
- Negative on the left leg.

#### **Radiological Investigations**

- Broad-based bulge with right superimposed the thecal sac and the nerve root in the left lateral recess are both indented and compressed by the L4-L5 disc's paracentral protrusion.
- Narrowing of the neural foramina on both sides, especially so on the right, caused by complicated disc osteophytes.

Diagnosis: Vata-Kapha Gridhrasi

#### **Therapeutic Intervention**

The patient was advised of the following treatment.

- Sarvanga Abhyanga with Nirgundi Taila and Murivenna Taila<sup>[9]</sup> followed by Bhashpa Sweda for 30 mins for 8 days.
- 2. Patra Pinda Sweda<sup>[10]</sup> for 30 mins for 8 days.
- 3. *Kati Basti* with *Bala Ashwaghanda Taila* and *Sahacharadi Taila*<sup>[11]</sup> for 30 mins for 8 days.
- 4. Shamana therapy
  - Sahacharadi Kashaya 10ml-0-10ml with 45 ml warm water
  - Kaishora Guqqulu 0-1-1
  - Yogaraja Guggulu 1-0-1

Pathyapathya (diet & lifestyle regimens)

Usual diet. Complete rest.

Avoid forward bending, lifting heavyweight, strenuous activity and jerk to the low back region. Abstain from alcohol, tobacco chewing.

Follow up on the 31st day.

#### **OBSERVATION AND RESULTS**

The patient had a considerable decrease in lumbar discomfort, lower back stiffness, tingling, and heaviness by the conclusion of the first month of therapy. His spine's range of motion had significantly increased, making it easier for him to go about his everyday business. He also had a better gait. The vital statistics were in order. The patient had total symptom alleviation. After the therapy was finished, no radiological investigation was done. The subjective and objective criteria, including the Oswestry Disability Index, were evaluated. [12] before and after treatment. The table below shows the chronology of clinical findings (assessment criteria).

# Details of Assessment parameters before and after treatment

SN	Assessment Parameters	Before Treatment	After treatment	
Subjective Parameters				
1.	Pain in the lower lumbar region radiating to the right lower limb	5 + (VAS score)	0 (VAS score)	
2.	Stiffness in the lower back region	3+	0	
3.	Tingling sensation in the right leg	2+	0	
4.	Heaviness in the right leg	3+	0	
5.	Pain and difficulty while walking	3 + (VAS score)	1 + (VAS score)	
6.	Appetite	2+	0	
7.	Gaseous distension of abdomen	2+	0	

8.	Constipation	3+	0	
9.	General weakness	3+	0	
10.	Sleep	3+	0	
Objective Parameters				
1.	ROM of the lumbar spine			
	1. Forward flexion	30 cm above ground	15 cm above ground	
	2. Right lateral flexion	10° with pain	30° without pain	
	3. Left lateral flexion	10° with pain	35° without pain	
	4. Extension	10° with pain	20° without pain	
2.	SLR test (active)			
	1. Right leg	Positive	Negative	
	2. Left leg	Negative	Negative	
3.	Bragard's test			
	1. Right leg	Positive at 40°	Negative	
	2. Left leg	Negative	Negative	
4.	Gait	Antalgic gait	No Antalgic gait	

## **DISCUSSION**

Gridhrasi (sciatica) is treated using Bastikarma, Siravyedha, and Agnikarma in an Ayurvedic manner. The Sarvanga Abhyanga Swedana, Patrapinda Swedana, Kati Basti, and Shamana Chikitsa protocols have been suggested in this situation.

Sarvanga Abhyanga with Nirgundi Taila and Murivenna Taila- Abhyanga has been praised as Vata Shamaka by Acharya Shushrut. Also, according to Charaka, Vayu dominates Sparshaendriya, and Abhyanga is extremely beneficial for Vata Vyadhi as

per Charka.[7] According to Dalhana, Sneha reaches to Majja Dhatu, when Abhyanga is done for 900 Matra. In Gridhrasi, Asthi Majja Vaha Strotas Asthi get disturbed, Sneha strengthens Strotas and pacify increased Vata Dosha at the site of affliction. Nirgundi has inhibitory action on prostaglandin biosynthesis; latest research proved that anti-inflammatory and analgesic properties mediated via PG synthesis inhibition. It acts as COX-2 inhibitors that might be responsible for its NSAID'S like activity.[13] The active principle in Murivenna provides synergistic action in relieving the symptoms. Its anti-inflammatory effect reduces pain, tenderness and swelling. Sarvanga Nadi Svedana with Dashmool Kwatha - Svedana is Vata Hara, cures stiffness, heaviness and is best treatment considered to relieve pain. Svedana with Dashmool Kwath[14] which is Ushna Virya, Guru and Snigdha helped in relieving symptoms of Vata like pain and stiffness in the patient.

Patra Pinda Sweda is a type of Sankara Sweda. It is an unparalleled treatment for painful conditions mainly caused by Vata Dosha and Vatakapha Dosha owing to the properties of ingredients used. It is mainly used to relieve pain, swelling, inflammation and stiffness associated with bone, joint and or musculoskeletal pain. [10] By promoting the release of toxins, reducing inflammation, and strengthening the joints, muscles, and nerves (by reducing compression of the nerve root) in the affected area, the Vedanasthapana, Vata Shamaka (analgesic), Shothahara (anti-inflammatory), and Dhatuposhaka properties (strengthening and nutritive therapy) of Patra Pinda Swedana can help improve muscle tone and tissues function and may alleviate the symptoms.

Snigdha Swedanas like Kati Basti is typically utilized to treat low back pain and lumbosacral diseases. It improves local circulation, nourishes and bolsters muscles and nerves, and helps calm tenseness and spasms. And bring back adaptability. The intervertebral disc has degenerated in this instance, and the lubricating function of Shleshaka Kapha is compromised. This causes compression, irritation, or inflammation of the Gridhrasi Nadi (sciatica nerve), which results in excruciating agony. Because they

function at the Samprapti location, the native Snehana and Swedana are particularly effective and yield immediate effects. Snigdha Guna, Ushna Virya, and Vata Kaphahara are present in Sahacharadi Taila, but generally it is Tridoshaghna and particularly efficient in Adha Kaya Vatarogas. Due to its Madhura and Tikta Rasa, it has the unique quality of Gati Viseshatvam (aids in movement). Its Vatahara, Bruhana, and Pachana qualities, as well as its analgesic and antieffects<sup>[15]</sup> inflammatory can help inflammatory changes in the nerve and possibly to reduce symptoms of nerve root compression. The use of the Kati Basti with Sahacharadi Taila at L4-L5 region is more effective in controlling Kapha dominance Gridhrasi symptoms such as Stambha (stiffness), Gaurava (heaviness) and Tandra (tingling sensation) and also on walking distance and the magnitude of Pain. Bala Ashwaaandha Taila deals with Vata Dosha helps in strengthening the related muscles.

Yogaraja Guggulu has Vata Kapha Shamana, Ama and Agni Deepana properties<sup>[16]</sup> Pachana. (Amavatadhikara, 48:15). These medicines were suitable for subdue remaining vitiated Dosha. Considering all of the above, the overall effect of all planned treatments on this patient this patient induces Shamaka Vedanasthapana Vata (analgesic), Shothahara (anti-inflammatory) and Dhatuposhaka properties (strengthening and nutritive therapy) can help providing a significant improvement in the symptoms of Gridhrasi and also the functional ability which in turn improves the range of motion at the Spine.

Sahacharadi Kashaya is used to treat Vata related conditions such facial palsy, paralysis, disc prolapse, sciatica, low back pain, and low back pain. All of the medications in Sahacharadi Kashayam have Vata-Kapha Shamaka, Vedanasthapana Shulahara, Shothahara, and Nadiuttejaka (Nerve Stimulant) properties in addition to strengthening and nutritional therapy for different musculature and structure in the lumber region and extremities, which is very effective in the treatment of Sciatica. [17]

Kaishora Guggulu derived from Bhaishajya Ratnavali is mentioned in Vatarakta Chikitsa. Drug combinations and characteristics demonstrate how effective *Yoga* is at removing *Margavarana*. The main components are *Triphala, Gudoochi,* and *Guggulu*. The effects of *Guggulu,* which include *Anabhishyandhi, Snigdha,* and *Sroto Shuhdhikaraka,* make it a unique substance. *Guduchi* is the medication of preference in *Vatarakta* since it is the greatest one that can be used in this situation. It is a wonderful *Rasayana* and serves as *Vyadhipratyneeka*. The effects of *Rookshana* and *Kapha Medo Hara* in *Triphala* are widely documented. The other components of *Yoga* all function in the same way.<sup>[18]</sup>

#### **CONCLUSION**

A primary cause of morbidity that renders a person unable of doing daily tasks is sciatica. This case study demonstrated the superior management of *Gridhrasi* by *Panchakarma* and *Shamana Chikitsa*. The patient's ability to convey the characteristics has increased, and there have been considerable changes in the patient's quality of life, according to subjective and objective metrics. As of right now, the patient is doing well with his regular routines. The results of this one case study have given rise to a lot of optimism and given *Gridhrasi* management options. However, certain big sample size randomized clinical studies will help to verify standard outcomes.

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