

Management of gridhrasi (Sciatica) through panchakarma and shamana chikitsa: A case study.

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Abstract

Background: Gridhrasi (Sciatica) is a disease with sciatic nerve compression due to various reasons such as heavy weight lifting, excessive strenuous work and dominance. There's severe pain in the buttock region that radiates towards the toe. **Aim and Objective:** This study aimed to assess the efficacy of Panchakarma and shaman chikitsa in Sciatica. **Materials and Method:** It is a single case study. A 35-year old male patient had been suffering from Gridhrasi for six months correlated with Sciatica. The patient complained of severe pain in the right leg while walking and sitting. He could not sit correctly and had a tingling sensation in his right leg, and pain radiated to the toe; he was admitted to the Panchakarma ward in Mahatma Gandhi Ayurveda Hospital. He was diagnosed with Lumber spondylosis with Sciatica based on MRI reports. The patient was treated with Panchakarma procedures such as Panchtikta ksheer basti for 21 days, Abhyanga with sahachar tail and Swedana with naadi Sweda. Along with Simhanad Guggul two tablets twice a day, Trayodashang Guggul twice a day, Amapachak vati. **Result:** Symptomatic assessment of the patient was carried out after one month, and a satisfactory outcome was there, and the overall quality of life of the patient was significantly improved. **Conclusion:** This case shows that Ayurveda treatment can be helpful in the case of Gridhrasi.

Keywords: Gridhrasi, Sciatica, Panchatikta ksheer basti, Simhanad guggul, Ampachak vati.

Introduction

Sciatica is a disorder in which acute pain radiates down the leg from the low back. In clinical practice, this is a rather prevalent ailment [1]. Low back pain affects 60 percent to 80 percent of adults at some point during their lives [2]. Sciatica in which nerve compression occurs due to strenuous work or heavy weight lifting. There may be severe pain in the buttock region which radiates towards the toe. Pain in the distribution of the lumbar or sacral roots (Sciatica) is always due to disc protrusion. It is often precipitated by trauma (usually heavy weight lifting while the spine is flexed); genetic factors may also be necessary. The nucleus pulposus may bulge or rupture through the annulus fibrosus, giving rise to pressure on nerve endings in the spinal ligaments, changes in the vertebral joints or pressure on nerve roots [3]. This condition can be correlated with Gridhrasi in Ayurveda. Gridhrasi (Sciatica) is one of the vata vyadhi mentioned by various Acharya in Ayurveda. It is characterized by pain in the lower lumbar region that radiates to the toe and is associated with numbness in the lower lumbar region to the leg [4]. It can be managed

with anti-inflammatory analgesics and physiotherapy or surgical correction. Furthermore, surgery for this illness is costly, and there is a risk of recurrence. Ayurveda provides a wide range of treatment choices for this unpleasant condition. Apana Vayu and Vyana Vayu vitiation are the most common symptoms of this condition, but Kapha is also present as an accompanying Dosh. So, for Gridhrasi treatment, a medicine with Vatashamaka, Kaphashamaka, Vatanulomaka, Dipana-Pachana (digestive carminative), and Shulaprashamana qualities should be used [5]. Ayurvedic management can be effective in the case of Gridhrasi (Sciatica) with satisfactory results.

Patient information

It is a single case study having demographic details mentioned in (Table 1).

The primary concern and symptoms of the patient

The chief and associated complaints of the patients are mentioned in (Table 2).

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Table 1. Details of the patient.

Name	X.Y.Z
Age	35 year old
Sex	Male
Occupation	Police
D.O.A	10-09-2021
D.O.D	30-09-2021

Table 2. Complaints of the Patient.

Nature of Complaints	Duration
Unable to sit and walk properly	Six months
Pain while walking and sitting	Six months
Numbness in the lower lumbar region to leg	Six months

History of the Patient

Medical, family and psychosocial history

No other specific family, medical or psychosocial history was found.

Relevant past interventions with outcomes

The patient had the same complaints one year back and taken some modern treatment from his family doctor

Clinical findings and Interventions.

Clinical examination

Ayurvedic examination

An ayurvedic investigation is narrated in (Table 3).

Sampraptighatak

Pathological components

- Dosha: Vata Kapha
- Dushya: Rakta, Mamsa, Majja, kandara, and sira
- Adhistana: Kati Pradesh and lower limb
- Srotas: Rakta, Mamsa, Asthi, Majja vaha
- Inspection: Gait was limping, unable to walk and sit for long and localized swelling was absent. No other abnormalities or scars suggest any surgery.
- Auscultation: Not found any specific abnormalities.
- Percussion: Not found any specific abnormalities.
- Palpation: Tenderness was present at L3-L4, and muscle tone and power were good.
- Local examination specific to the disease – Mentioned in (Table 4).

Investigation

Case report

A 35-year male patient came to the Panchkarma OPD in Mahatma Gandhi Ayurveda Hospital Salod. He complained of severe pain in the buttock region, which radiates towards the toe, associated with being unable to sit and walk properly. Numbness is present in the lower lumbar area to legs from six months. He took treatment from govt. hospital but got partial

relief for a few days. So he came to the Panchakarma OPD for further treatment and was admitted to the Panchakarma ward.

On examination

General condition of the patient was moderate with an antalgic gait, and he was unable to sit and walk properly due to severe pain. SLRT was positive on the 30° right side of the leg. Blood pressure was 130/90 mmHg, Pulse rate 78/ min, Weight 75 kg, and height was 5'10. Family history was not significant. He had no record of any addiction or trauma. He was non-diabetic and not hypertensive.

Diagnosis: Gridhrasi (Sciatica) (Figure 1).

MRI impression

- Lumbar spondylosis with discL2-3 shows diffuse circumferential bulge causing mild ethical sac compression.
- Disc L3-4 show diffuse circumferential bulge with posterior protrusion causing mild ethical sac and nerve root impingement with mild bilateral neural foramina narrowing.
- Disc L4-5 shows mild volume loss with diffuse circumferential bulge and posterior asymmetrical protrusion, causing moderate thecal sac and nerve root compression with spinal canal and neural foramina narrowing.
- Disc L5-S1 shows a mild diffuse bulge with slight right Para central protrusion causing impingement over the right transverse S1 nerve root.
- Small left posterior extradural soft tissue components are seen at the L4-5 level, causing focal thecal sac compression.

Mode of action of Panchkarma Chikitsa

Shamana Chikitsa (Palliative therapy)

- **Simhanad guggul:** The soothing and lubricating qualities of the drugs work to nourish and strengthen joint tissue and support their function. It also detoxifies and rejuvenates the joints due to its Ushna virya (hot potency). It helps to reduce pain and inflammation. This medicine contains Triphala, Shuddha Guggul, Shuddha Gandhak and Erand tail. It helps to pacify Vata, Pitta and Kapha dosha [6].

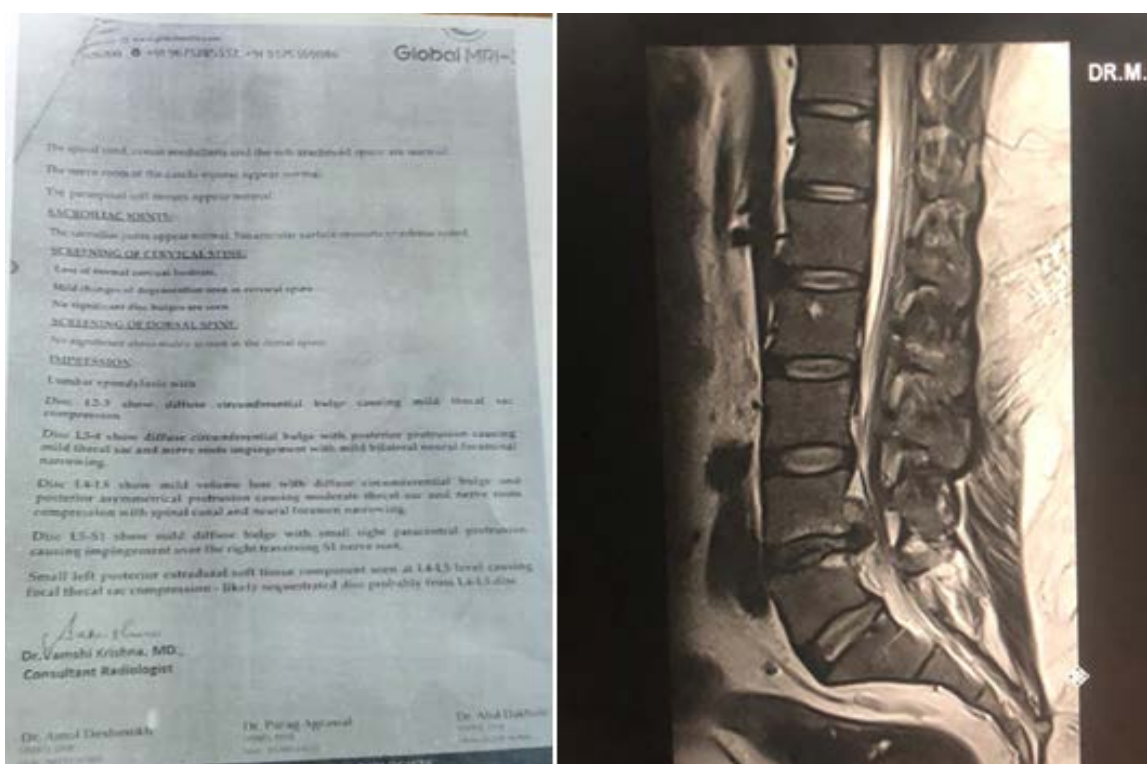
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Table 3. Ayurvedic investigation.

Naadi	Regular 78/ min
Mala	Irregular hard stool
Mutra	Normal 4-5times a day
Jivha	Saam (coated)
Sparsha	Anushnasheeta
Akruti	Madhyam (moderate)
Drik	No pallor
Shabda	Spashta (clear)

Table 4. Local Examination.

Type of examination		RT leg	Lt leg
1.	SLR	30°	30°
2.	Sciatic notch tenderness	+++	Absent

**Figure 1.** Report of MRI and Image of MRI of Patient.

- **Trayodashang guggul:** Their anti-spasm property treats muscle spasms and relieves pain in Sciatica. It is mainly in guru and snigdha gunatmak, which helps reduce the aggravated dosha due to manifestation of Gridhrasi; this medication is indicated in Sciatica with inflammation [7]. This medicine contains Abha, Ashwagandha (Withania somnifera), Hapusha (Juniperous communis Linn), Guduchi, Shatavari, Gokshur, Vriddhradaru, Rasna, Shatahva (Anethum Sowa kurz), Shati (Hedychium spicatum), Yamani (Trachispermum Amani), Nagara, Shuddha Guggul, and Ghrita. It acts as the best anti-inflammatory and analgesic [8].
- **Amapachak vati:** Two tablets before meal for better digestion. It contains Chitrak chal, Pippalimula, Ajvain, Shuddha javakhar, Shunthi, Chavya, Pippali, saindhav lavana, Beeda lavana, Samudra lavana [9].

Shodhana Chikitsa

Abhyanga

With saharadi tail, it's heavy and unctuous Guna and ushna virya helps balance vata dosha and encourage muscles by nourishing the muscle fibres in various body parts. It also promotes regular muscle functioning by aiding against inflammation [10].

Swedana

Naadi Swedana on the affected part of the body; due to swedana it helps to reduce muscle spasms by its ushna gun and gives lightness to the body.

Anuvasan basti

Sahachar tail basti is ayurvedic herbal oil that treats vata imbalance disorders and muscles and joint stiffness. It's heavy,

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and unctuous Guna helps to balance vata dosha. It nourishes muscle fibres, and promotes regular muscle functioning. Its phytochemical composition has a relaxing and soothing effect on tendons and ligaments [11].

Niruha Basti

Panchtikta Ghrita ksheer basti (medicated enema with milk) it is clear that there's a dushti of asthi majja vaha srotas (Bone and Bone marrow system) in Gridhrasi. Ksheer basti (medicated enema with milk) is a main line of treatment in vata vyadhi (disorders with Vata) in Charaka Samhita. The basti, which has milk, is the main ingredient known as ksheer basti, ksheer basti performs dual action in anuvasan and niruha basti, it acts as a shodhana as well as snehana. It helps to remove margavarodha and produce brihmana effect on the body. The rectum has a rich blood and lymph supply, and the drugs can cross the mucosa, such as other lipid membranes. Thus unionized and the rectal mucosa absorbs lipid-soluble substances in basti karma. It has the dominant ushna virya and tikshna rasa, which helps promote dhatavagni increasing dhatavagni increases nourishment of dhatus; hence it results asthi and majja dhatu getting stable. Due to the nutrition of dhatus asthi and majja dhatu kshaya may be decreased, and it may help slow down the degenerative process of

dhatus. Panchtikta Ghrita is predominant of akash and vayu mahabhuta, which helps to preserve the average health of asthi dhatu, Panchtikta Ghrita is vata - pitta shamaka, balya, agnivardhaka, madhura, saumya, and sheeta viryatmak which helps to pacify Vata, and helps to maintain the normal condition of the body, Ghrita and ksheer have Vit D which also good source of calcium, which helps to balance bone ligament.

Preparation of basti

150 ml kwatha (decoction) prepared with Panchtikta dravya, 250 ml godugdha (milk) added to make Panchtikta siddha ksheer. The practice of basti with saindhav lavana- 5 gm, Honey- 5 ml, and Panchtikta ghrita- 20 ml. Basti was administered and Basti pratyagamana kala was noted. Basti was given for 20 days for better results (Tables 5 and 6).

Therapeutic outcome

Before treatment patient was unable to walk and sit properly due to severe pain, and his SLRT was 30° on the right side. After 20 days of treatment, he can walk and pose without difficulty and pain. His SLRT has changed to 80°, and the patient has 70% relief from his symptoms. And his antalgic gait has improved (Table 7).

Table 5. Shamana Chikitsa.

Medicine	Dose	Anupana (Vehicle)
Simhanad Guggul	250mg of Two tablets two times	Lukewarm water
Trayodashang Guggul	250mg of Two tablets two times	Lukewarm water
Amapachak vati	125 mg of Two tablets two times (before meal)	Lukewarm water

Table 6. Shodhana Chikitsa.

Panchkarma procedure	Quantity /duration	Time of administration
Abhyanga	45 min	Morning
Swedana (Nadi sweda)	20 min	Morning
Anuvasan basti with Sahachar tail	60 ml	After food
Niruha basti with Panchtikta Ghrita ksheer basti	120 ml	After food

Table 7. Therapeutic outcome.

Symptoms	Grade	Before Treatment	After Treatment
1. Difficulty in walking and sitting		4	1
No difficulty while walking and sitting	0		
Mild difficulty in walking and sitting	1		
Unable to walk and sit properly	2		
Severe pain while walking and sitting	3		
Unbearable pain while walking and sitting pain not even relieved by analgesics	4		
2. Pain in the lower lumbar region radiates towards the toe		4	0
No pain	0		
Bearable pain relieves without medicine	1		
Moderate pain relives from medicine	2		
Severe pain disturbs daily routine	3		
Unbearable pain	4		
3. Stiffness and numbness in leg		4	1
No stiffness and numbness	0		
Mild stiffness and numbness while sitting in one position for long	1		
Stiffness and numbness last for a few minutes	2		
Stiffness and numbness last for more than hours	3		
Stiffness and numbness last for more than 3-4hrs	4		

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Discussion

Excessively aggravated Vata enters the kandara of the legs and toes, causing pain and inability to extend in the thigh, known as Gridhrasi. Aggravation of vata in the lumbar region causes severe pain, stiffness and tingling sensation radiating from the lower leg to the toe. It might be aggravated due to excessive work and heavy weight lifting. Sciatica usually affects only one side of the lower body. This condition worsens, including being overweight, not exercising regularly, trauma, etc. Gridhrasi occurs due to Vata or Vata-Kapha Dosha and Dushya have seen in Rasa, Rakta, Mamsa, Meda, snayu, kandara and sira. Gridhrasi Adhistana is mainly Kati Pradesh and radiates towards the lower limb's posterior side. Gridhrasi correlates with Sciatica in modern; it mainly causes disc protrusion, heavy weight lifting while the spine is flexed, or genetic factors also responsible. Ayurveda said this body is controlled by vata. Vata removes the retention. It alone or combined with other dosha get aggravated in their location. Basti is for the elimination of dosha through the anal region; it eliminates other doshas and pacifies the aggravated dosha and impurities of the body. Hence Basti is the best procedure for eliminating the Vata dosha of the body and other contaminants. Shamana Chikitsa in Gridhrasi may give relief to symptoms. It helps to reduce inflammation and pain. But the administration of basti eliminates the whole body's impurities caused by the vitiated dosha. It relieves symptoms like numbness in the body and reduces vata and Kapha dushti.

Conclusion

The single case study showed that administration of panchtikta ksheer basti, abhyanga with sahachar tail and swedana with naadi sweda could be effective in case gridhrasi (sciatica), along with shamaniya medicine like trayodashang guggul and Simhanad guggul.

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