

CASE STUDY

A Detailed Case Report on *Gridhrasi* with special reference to Sciatica

Author: Aiswarya E.K¹

Co Authors: Gopi Krishna²

^{1,2}Department of Roganidana Evum Vikirita Vigyana, Sri Dharmasthala Manjunatheshwara College of Ayurveda Hospital, Hassan, KA, India

ABSTRACT

Introduction: *Gridhrasi* comes under *Nanatamja Vata vyadhi*. *Gridhrasi* is the condition causing back pain and pain in the lower limb. *Gridhrasi* can be correlated to sciatica because of same clinical presentations. Sciatica is a neuralgic pain referred to the muscles supplied by the sciatic nerve. **Materials and methods:** A single case study where patient is having low back pain since one month and Ayurvedic treatment including both shodhana and shamana (oral medicine) treatment given. **Observations and results:** After the completion of treatment the assessment was done by both subjective and objective parameters. Patient got significant relief from the complaints. **Discussion and conclusion:** The treatment principles applied for the management of this disease condition are Vedanasthapana Chikitsa (analgesic), Shothahara (anti-inflammatory) and vata dosha pacifying treatment. The combined effect of these treatments will give relief from the symptoms effectively.

Key Words *Gridhrasi, Sciatica, Nanatamja Vata vyadhi*

Received 18th June 22 Accepted 15th July 22 Published 10th September 2022

INTRODUCTION

Gridhrasi is the condition causing back pain and pain in the lower limb. This condition leads great discomfort to the patient and affects his daily routine as it is directly related to the locomotor system¹. The name itself indicates the way of gait shown by the patient due to extreme pain just like a *Gridhrasi* (vulture)². *Gridhrasi* comes under *Nanatamja Vata vyadhi*³. The symptoms of *Gridhrasi* are *Ruk* (pain) that starts from *Sphik* (buttock) and then radiates to *Kati* (lower back), *Prishtha* (back), *Uru* (thigh), *Janu* (knee),

Jangha (calf) and *Pada* (foot) along with *Stambha* (stiffness), *Toda* (pricking pain), and *Spandana* (twitching)⁴. *Sakthi kshepa nigraha* (i.e., restriction in upward lifting of lower limbs)⁵. In *Gridhrasi*, *Tandra* (Drowsiness), *Gaurava* (Heaviness), and *Arochaka* (Anorexia) may be present if *Kapha* is associated with *Vata*⁶. On the basis of involvement of Dosha it is of two type *vataja* and *vata-kaphaja*.

Gridhrasi can be correlated to sciatica because of same clinical presentations. Sciatica is a neuralgic pain referred to the muscles supplied by

CASE STUDY

the sciatic nerve⁷. The prevalence of sciatica varies considerably ranging from 3.8% in the working population to 7.9% in nonworking population⁸.

In Ayurveda classics various treatments are explained for the treatment of *Gridhrasi* like symptomatic treatment, *raktamokshana* (bloodletting therapy) *basti* (enema), *agnikarma* (cauterization). Hence this article made to explore the Ayurvedic management in *Ghridhrasi* w.s.r to sciatica.

MATERIAL AND METHODS

Patient information and present history:

A 48 year old female patient [Table1] came to Kayachikitsa OPD Sri Dharmasthala Manjunatheshwara Ayurveda Hospital Hassan for the consultation on 16/05/2022 having complaints of low back pain radiating in left lower limb towards left limb great toe since one month. The patient also having the associated complaints of difficulty in walking and bending forward, numbness, stiffness, tingling sensation in left lower limb, heaviness in both legs since one month [Table 2]

Table 1 Demographic detail of the patient

Name	Xyz
Age	48
Sex	Female
Marital status	Married
Address	Arakalagodu, Hassan
Opd No	058368
Height	157cm
Weight	71 kg
Occupation	House wife
Socio-economic status	Middle class

Table 2 Chief complaints

Sl No	Chief complaint	Grade	Duration
01	Pain in low back region and radiating to left leg and toe	5+ vas score	1 month
02	Difficulty and pain in waking and bending forward	5+ vas score	1 month
03	Stiffness in low back region and left leg	3+	1 month
04	Numbness in left leg	3+	1 month
05	Tingling Sensation left leg	3+	1 month
06	Heaviness in both the legs	3+	1 month

Patient was having history of fall before six months and she consulted nearby hospital and got relief from symptomatic treatment. Patient was apparently healthy before 1 month. Then she gradually developed pain in low back region. Pain was intermittent in nature and it was getting reduction by taking rest. After one week patient developed shooting type of pain in the low back region that radiates to the hips and spreads to the left lower limb and was reached to the great toe along with heaviness and weakness. After the onset of radiating pain, it persisted for three weeks along with stiffness, numbness and tingling sensation in the left lower limb. Patient was not getting any relief from taking rest at this stage. Pain aggravated while lifting the heavy weight, during laborious work, cold climate, squatting position. Pain was severe with disturbed sleep and patient was not able to do daily routine work.

Patient consulted nearby allopathic hospital where she was given oral medications (pain killers and vitamin supplements) but patient developed allergic reactions along with

CASE STUDY

peripheral oedema over feet and hands after taking medicine for two days. Hence she discontinued the medications. After two days patient was developed unbearable pain and visited nearby hospital where she was given pain killers, injections and got some relief. Patient was undergone to x-ray and MRI from that patient was advised to go for surgery. As patient was not willing to go for surgery and pain was reduced due to medications hence patient came to Sri Dharmasthala Manjunatheshwara Ayurveda Hospital for better management. Ayurvedic management with Shodhana and Shamana Chikitsa was prescribed to him. Examination of the patient including Vitals examination,

Ashtavidha pariksha and specific loco motor system examination are mentioned in Table 3, 4 and 5 respectively.

Table 3 Vital examination

01	Blood –Pressure	110/70 mm/hg
02	Pulse	74/min
03	Respiratory-rate	18/min
04	BMI	28.8 kg/m ²

Table 4 Ashtavidha pariksha

01	Nadi (Pulse)	Pitta-Vata
02	<i>Mala</i> (stool)	<i>Samyak</i> (satisfactory once per day)
03	<i>Mutra</i> (urine)	<i>Samyak</i> (4-5 times/day)
04	<i>Jihwa</i> (tongue)	<i>Alipta</i> (not coated)
05	<i>Shabda</i> (Speech and hearing)	<i>Spashta</i> (clear)
06	<i>Sparsha</i> (Skin)	<i>Anushnasheeta</i>
07	<i>Druk</i> (eyes)	<i>Prakruta</i> (normal)
08	<i>Akruti</i> (Posture)	<i>Madhyama</i>

Table 5 Examinations Specific to diagnosis loco motor system examinations

01	Inspection	Limping gait Discomfort in walking and sitting for long duration No localized swelling and redness Deformity Scoliosis Reflexes are intact No varicosities
02	Palpation	Tenderness 2+ at L ₄ -L ₅ region Muscle tone–good Muscle power grade–right extremities (upper and lower)–5/5 left extremities (upper and lower)–5/5
03	Range of movement of Lumbar spine (ROM)	Forward flexion of lumbar spine is limited to 20 cm above ground Abduction in left side of hip is limited to 30° with pain Extension in is limited to 10° with pain Internal rotation in left side is limited to 30° with pain External rotation in left side is limited to 35° with pain
04	Special test	SLR test- Left leg positive at 10° active Bragard’s test- Positive in left leg Lasegue test- Positive in left leg Flip test- Positive Femoral nerve stretch test- Positive Hoover’s test- Positive in left leg Schober’s test- Positive Faber’s test- Positive

Past history:

Patient is having history of fall twice before Six months
No history of major medical illness (e.g., HTN/DM/bronchial asthma/dengue).

No any surgical intervention.

Medication history:

Initially patient had taken tablet Paracetamol 500mg TID, Tablet Pantop 150 mg, Tablet Myosil 4 mg OD, Vitamin D tablets, Tablet

CASE STUDY

Pregabalin 75mg OD for 14 days. From the tablet Pregabalin patient developed allergic reactions like oedema hence patient discontinued the medicine. Later patient had taken Dolonex 1 ml injection, Dolowin mr tablet, Pantop 150 mg and Gabawin 50 mg for low back pain.

Personal History

Food habits: mixed diet, craving for pungent food items

Appetite: reduced appetite

Sleep: disturbed sleep due to pain.

Family History

Not significant

Nidana Panchaka

Hetu (etiology or causative factors): *Ruksha* and *Katu Rasatmak ahara* and patient fallen twice

Purvarupa (Prodormal symptoms): *Avyakta* (Not manifested)

Rupa (Symptoms): pain in lower back region radiating to left leg, stiffness in lower back region and left leg, tingling sensation in the left leg, heaviness in legs, difficulty while walking and bending forward.

Upashaya (relieving factors): rest in supine position and after taking analgesic medicine.

Samprapti (patho-physiology of the disease):

Due to *abhighata vata dosha* get aggravated and it vitiates other *dosha (kapha)* and *dushya (Rasa, rakta, snayu, and mamsa)* and get *sthana samshraya* (lodgment) in *kati, uru, sphik*. This ultimately causes obstruction to the neural conduction (*Vatavahini Nadi*) and elicited as radiating pain from *Kati* (lumbar region), *Prushta*

(back), *Uru* (thigh), *Janu* (knee), *Jangha* (calf), and *Pada* (foot), and leads to generation of *Gridhrasi* (sciatica). In this disease, the main *Dushya* are *Rakta, Kandara*.⁹

Investigations Done:

Magnetic planar MR imaging of the lumbar spine was performed using a phased array spine coil and large FOV on 09-05-2022 reveals impression of

- Grade 1 retrolisthesis of L4 over L5 vertebral body
- L3-L4: 3mm diffuse disc bulge, ligamentum flavum thickening and facet joint arthrosis causing mild central canal and bilateral neural foraminal stenosis.
- L4-L5: 8mm diffuse disc bulge and broad based posterocentral protrusion causing moderate to severe central canal and lateral recess stenosis with indentation on L5 traversing nerve root. Moderate bilateral neural foraminal stenosis due to foraminal disc bulge and facet joint arthrosis.
- L5-S1: 3 mm diffuse disc bulge and facet joint arthrosis causing moderate bilateral neural foraminal stenosis. No central canal stenosis.

Samprapti Ghataka

Dosha: Vata and Kapha

Dushya: *Rasa, Rakta, Asthi, Majja, Sira, Kandara, and snayu*

Srotas: *Rasavaha, Asthivaha, Majjavaha, and Purishavaha*

Srotodushti: *Sanga*

Rogamarga: *Madhyama*

CASE STUDY

Agnimandya: *Ama, Jathargnimandya,* and
Dhatvagnimandya

Udbhavasthana: *Pakvashaya*

Adhishtana: *Kati and Prushthavamsha*

Vyaktasthana: *Sphik, Kati, Prishtha, Uru, Janu,*
*Janghaand Pada*¹⁰

Diagnosis:

Vata-kaphaja Ghridhrasi (Sciatica)

Treatment Advised:

By considering the above pathogenesis treatment was given in both *shodhana* and *shamana aushadhi* (Table 6 &7)

Table 6 Shodhana chikitsa (Yoga basti)

Sl No	Type of chikitsa	Drug	Duration
01	<i>Sarvanga Udwartana</i> and <i>bhaspa sweda</i>	<i>Udwartana churna</i>	1 day
02	<i>Sarvanga Abhyanga</i> followed by <i>bhaspa sweda</i>	<i>Vishagharbha taila</i>	15 days
03	<i>Nirooha basti</i>	<i>Erandmola kashaya</i> -250ml <i>Goarka</i> – 15ml <i>Nirgundi taila</i> – 100ml <i>Madhu</i> – 80 ml <i>Saindhava</i> – 5 g <i>Bala + shilajatu kalka</i> – 30g	8 days (Alterante <i>nirooha</i> and <i>anuvasana basti</i> is given)
04	<i>Anuvasana Basti</i>	<i>Sahacharadi taila</i>	
05	<i>Sihanika Lepa</i>	<i>Shunti churna</i> + <i>rasna churna</i> with warm water	15 days

Table 7 Shamana Chikitsa (Oral Medicine)

Sl No	Drug	Dose	Time administration	of Anupana	Duration
01	<i>Dhanwantari vati</i>	1 TID	Before food	Luke warm water	15 days
02	<i>Rasna Saptaka kashaya</i>	15ml+ 45ml water B D	Before food	Luke warm water	15 days
03	<i>Cap Freemodex</i>	1 TID	After food	Luke warm water	15 days
04	<i>Tab Anulomana D.S</i>	1 HS	After food	Luke warm water	15 days

OBSERVATIONS AND RESULTS

After completion of Ayurvedic treatment (shodhana and shamana) patient has slight relief from pain in low back region, tingling sensation,

heaviness, stiffness. Assessment was done by both subjective and objective parameters (Table 8)

Table 8 Subjective and objective parameters

Sl. No	Criteria	Before treatment	After treatment
Subjective criteria			
1	Radiating pain from lumbar region to left leg	5+ (VAS score)	3+ (VAS score)
2	Stiffness in lower back region and left leg	3+	1+
3	Heaviness in both legs	3+	2+
4	Tingling sensation in the left leg	3+	1+
5	Difficulty and pain while walking and bending forward	5+ (VAS score)	3+ (VAS score)
6	Loss of appetite	3+	1+
Objective criteria			
1	SLR test (active)		

CASE STUDY

	Left leg	+ve at 10°	+ve at 60°
2	Bragard's test		
	Right leg	Negative	Negative
	Left leg	Positive	Negative
3	Lasegue test	Positive in left leg	Negative
4	Gait	Limping Gait	No Limping Gait
5	Flip test	Positive	Negative
6	Femoral nerve stretch test	Positive	Negative
7	Hoover's test	Positive in left leg	Negative
8	Schober's test	Positive	Negative
9	Faber's test	Positive	Negative
10	ROM of lumbar spine:		
A	Forward flexion	20cm above ground	15cm above ground
B	Abduction in left	30° with pain	30° without pain
C	Internal rotation in left side	30° with pain	30° without pain
d	Extension	10° with pain	20° without pain
e	External rotation in left side	35° with pain	35° without pain

DISCUSSION

Ghridhrasi comes under nanatmaja vata vyadhi. The Ayurvedic treatment principles for *ghridhrasi* according to classics are *basti karma*, *siravyadha* and *agnikarma*. The treatment was planned for this patient can be divided into *Shodhana Chikitsa* with *Vasti karma* along with *Shamana Chikitsa*. The treatment principles applied for the management of this disease condition are *Vedanasthapana Chikitsa* (analgesic), *Shothahara* (anti-inflammatory), and *Vata dosha* pacifying treatment along with strengthening and nutritive therapy for the various musculatures and structures in lumbar region and lower extremities¹¹. The probable mode of action of these aforementioned *Shodhana* and *Shamana Chikitsa* can be explored as follows:

Shodhana Chikitsa

Sarwanga Abhyanga with vishagharbha taila: *Abhyanga* (local massage) is one of the *Purvakarma*, which acts on the roots of

mamsavaha srotas (channels carrying muscle nutrients and waste), that is, *Snayu*, *twak* and *raktavahini*. It may thus nourish the superficial and deep muscles and make the joint stable. It acts on *Sparshnendriya*, which is the seat of *Vayu*¹². *Abhyanga* with *Vishagharbha taila* is having analgesic, anti-neuralgic, and anti-inflammatory properties. It is indicated in muscle spasm, joint stiffness, backache, and arthritis.

Bhaspa sweda: *Swedana* (sudation) is *Sthambaghna* (removes stiffness), *Sandhicheshtakar* (increases joint mobility), *Srotoshuddhikara* (clearing the micro channels), and *Kapha-vata nirodhana* (removing excess *vata* and *kapha dosha*)¹³. Thus, it liquefies the *Doshas* and expands the *srotas*, helping the *doshas* to travel toward their own *sthana* leading to the *Srotosanga vighatana* (breakdown the pathogenesis by removing obstruction in the micro channels) and stiffness of the joint relieved.

Erandamooladi Nirooha and Sahacharadi taila

anuvasana basti: *Basti* is the best treatment for

CASE STUDY

Vata dosha as per *Acharya Charaka*¹⁴. *Vasti* has systemic action as the active principles (*Virya*) of *Vasti* preparation are absorbed through *Pakvashaya* (intestine) and spread to various channels of the body. It reaches at the site of lesion and induces systemic effects and relieves the disease¹⁴. *Vasti* helps to remove *Kapha Avarana* over *Vata* due to protrusion as well as it acts on *Vata dosha*, that is, *Pakvashaya*, which is the prime site of *Vata dosha*. It relieves constipation as well as helps to relieve edema, inflammation, necrosis due to its *Srotoshodhana* effect by *Vata kapha hara* properties of *Kwatha* drugs. *Anuvasana Vasti* with *Sahacharadi taila* get absorbed and spread throughout the body up to subtle channels¹⁵. *Sahacharadi taila* is having specific property of *Gati viseshatvam* (helps to move) due to its *Madhura* and *tikta rasa* and having *Vata hara*, *Brihmana* (nourishing), and *Pachana* properties¹⁶.

Sthanika lepa: Combination of *shunti* and *rasna moola* is used in this patient as *sthanika lepa*. *Shunti* acts as *vedanasthapaka* (analgesic), *shothahara* (reduces swelling), and *vatakaphahara* and *rasna* helps in reducing aggravated *vata*. From this *lepa* patient can get relief from pain.

Shamana chikitsa (Oral medicine):

Considering the symptoms of patient oral medicines are advised. *Dhanwantari vati* helps in *vaatanulomaka*. Capsule *freemodex* is a formulation contains *langali*, *shunti*, *Jeeraka*,

shilajatu, *yogaraja guggulu*, *shuddha kupilu*, *abhakra* and *Kasisa bhasma* which mainly acts as *shoola hara* (analgesic) sciatica, arthritis conditions. *Rasna Saptaka kashaya* is having excellent *vata Shamaka* property. Along with *Aampachana*, all these herbs are known for their anti-inflammatory activity, analgesic, and anti-arthritic activity.

Anulomana DS helps in *vatanulomana* and easy digestion. Combined effect of all these medicines helps to get relief from low back ache, stiffness, heaviness and tingling sensation etc

CONCLUSION

Ghrudhrasi is a condition where pain radiates starts from low back region to lower limb along with stiffness and heaviness. These conditions can be compared to sciatica. In this case study patient was having radiating pain from low back region to left leg along with heaviness, stiffness and tingling sensation. Patient was advised *sarvanga abhyanga* followed by *bhaspa sweda* and *yoga basti* along with some oral medications. By these treatment symptoms got reduced. The overall effect of the treatment shows that *ghrudhrasi* can be cured by Ayurvedic treatment effectively.

CASE STUDY

REFERENCES

1. (PDF) A Critical Review of Vataja & Vatakaphaja Gridhrasi. Available from: https://www.researchgate.net/publication/344853192_A_CRITICAL_REVIEW_OF_VATAJA_V_ATAKAPHAJA_GRIDHRASI [accessed Jun 07 2022].
2. Raja Radha kant deva, Shabda kalpa druma, vol. 4, edition 1967, Chaukambha Sanskrit Series, Varanasi, page-348
3. Sharma PV, editor. Sutrasthana; Maharog Adhyaya. Charaka Samhita of Agnivesha. 8th ed. Chapter 20, Verse 11. Varanasi, India: Chaukhamba Orientalia; 2007. p. 139.
4. Sharma PV, editor. Chikitsa sthana; Vatavyadhichikitsa Adhyaya. Charaka Samhita of Agnivesha. 8th ed. Chapter 28, Verse 56. Varanasi, India: Chaukhamba Orientalia; 2007. p. 466.
5. Sharma PV, editor. Nidanasthana; Vata vyadhi Nidana Adhyaya. Sushruta, Sushruta Samhita. Chapter 1, Verse 74. Varanasi, India: Chaukhamba Visvabharati; 2005. p. 15.
6. Sharma PV, editor. Chikitsa sthana; Vatavyadhichikitsa Adhyaya. Charaka Samhita of Agnivesha. 8th ed. Chapter 28, Verse 57. Varanasi, India: Chaukhamba Orientalia; 2007. p. 466.
7. Colin Ogilvie and Christopher C Evans. The Nervous System, Chamberlains Symptoms and Signs in clinical medicine, Chapter 10, 12 editions, Pub. Butterworth Heinerrann International; 1997; 266.
8. Kaila-Kangas L, Leino-Arjas P, Karppinen J, Viikari-Juntura E, Nykyri E, Heliövaara M. History of physical work exposures and clinically diagnosed sciatica among working and nonworking Finns aged 30 to 64. Spine (Phila Pa 1976) 2009; 34:964-9.
9. Sharma PV, editor. Nidanasthana; Vata vyadhi Nidana Adhyaya. Sushruta, Sushruta Samhita. Chapter 1, Verse 74. Varanasi, India: Chaukhamba Visvabharati; 2005. p. 15.
10. Rangarajan B, Muralidhara. Critical analysis and unique management of Gridhrasi W.S.R. to sciatica—A case report. J Ayurveda Integr Med Sci 2018;3:191-5
11. Mohan M, Sawarkar P. Ayurvedic management of Gridhrasi with special respect to sciatica: a case report. J Indian Sys Medicine 2019;7:131-8: Available from: https://www.researchgate.net/publication/341130582_Ayurvedic_Management_for_Gridhrasi_wit_h_Special_Reference_to_Sciatica-A_Case_Report
12. Kurubar D, Munnoli BT, Kumar V, Arbar A, Patil A. Role of Matra vasti (Enema) over Abhyanga (Massage) and Sweda (Sudation) in reducing spasticity in cerebral palsy with suddha bala taila—A randomized comparative clinical study. Int J Ayur Pharm Res 2014;2:47-52.
13. Tiwari S, Singh S, Sharma P, Sharma V. Management of low backache due to PIVD through Panchakarma: A case study. Int.J. Res. Ayurveda Pharm 2018;9:84-7.
14. Sharma PV, editor. Siddhisthana; September 10th 2022 Volume 17, Issue 2 **Page 201**

CASE STUDY

Bastivyapadasiddhi Adhyaya. Charaka Samhita of Agnivesha. 8thed. Chapter 7, Verse 64. Varanasi, India: Chaukhamba Orientalia; 2007. p. 638.

15. Sharma PV, editor. Chikitsa sthana; Netrabastipramanapra vibhaga chikitsam Adhyaya. Sushruta, Sushruta Samhita. Chapter 35, Verse 27. Varanasi, India: ChaukhambhaVisvabharati; 2005. p. 527.

16. Tripathi B, editor. Chikitsa sthana; Vatavyadhi Chikitsa Adhyaya. Vagbhata Ashatanga Hridaya. Chapter 21, Verse 67–69. Delhi, India: Chaukhambha Sanskrit Pratishthan; 2015. p. 510.