

A CLINICAL CASE STUDY TO EVALUATE AYURVEDIC MANAGEMENT OF VATA-KAPHAJA GRIDHRASI W.S.R TO SCIATICA

Priyanka Kumari Meena and Maya*

MD Scholar, Department of Agad Tantra and Vidhi Vaidyak, National Institute of Ayurveda, Jaipur, Rajasthan.

Article Received on
28 Feb. 2023,

Revised on 19 March 2023,
Accepted on 09 April 2023

DOI: 10.20959/wjpr20236-27852

*Corresponding Author

Dr. Maya

MD Scholar, Department of
Agad Tantra and Vidhi
Vaidyak, National Institute
of Ayurveda, Jaipur,
Rajasthan.

ABSTRACT

Background: Sciatica is a strike pain, which causes difficulty in walking. The disease 'Sciatica' is named because of involvement of sciatic nerve. Intense pain radiating from the gluteal region down the posterolateral leg to the foot more or less following the distribution of the sciatic nerve is known as Sciatica, which is commonly caused by nerve root compression or irritation. Our Ancient Acharyas had identified this problem long back and named it '*Gridhrasi*'. Despite recent advancement in modern neurology, an effective and safe cure for sciatica is still not found, except for giving some temporary relief through analgesics, or surgical interventions. Already the efficacy of ayurvedic drugs and techniques has gained global popularity in

Musculo-skeletal disorders. **Aim:** To evaluate the effectiveness of *Shamshaman Chikitsa* to the management of *Vatakaphaja Gridhrasi* w.s.r. to Sciatica. **Materials & Methods:** In present case study, a 34-year old, diagnosed case of Sciatica with complaints of pricking pain in lower back, buttock and left foot since 4 months which was associated with numbness and stiffness in lower back, buttock and left foot, came at the OPD of National Institute of Ayurveda, Jaipur. The patient of Sciatica was treated with *Ekangaveer rasa*, *Chandraprabha vati*, *Simhanada guggulu*, and *Rasnasaptaka kwath*. **Observations:** After a month, the patient's symptoms were assessed, and the results were satisfactory. The patient's overall quality of life had also considerably improved. **Conclusion:** In managing *Gridhrasi*, the aforementioned treatment provides symptomatic relief.

KEYWORDS: *Vatakaphaja Gridhrasi*, Sciatica, *Shamshaman Chikitsa*.

INTRODUCTION

Pain is the chief cause of visiting a doctor in most patients. This era is the era of lifestyle disorders. In this world of modernization, humans are neglecting their health for achieving their goals. Today's lifestyle and nature of work are putting added tension on the usual health. The aggravating factors such as over exertion, sedentary occupation, jerky movements during travelling leads to low backache. Certain occupations are also directly producing the deformities in the bone, especially the joints of back. The most common musculoskeletal disorder affecting the movement of leg is low back pain. Our Ancient Acharyas had identified this problem long back and named it '*Gridhrasi*'. Gait of gridhrasi patient during walking resembles with '*Gridhra*'^[1] (vulture) and hence the name given to it. Gridhrasi is a *Rujapradhan Nanatmaja Vaat Vyadhi*,^[2] intervening with the functional ability of low back and lower limbs. The cardinal features of Gridhrasi Roga are *ruk* (pain) starting from *sphik* (buttock) and then radiates to *Kati* (waist), *Prishtha* (back), *Uru* (thigh), *Janu* (knee), *Jangha* (calf), and *pada* (foot) along with *Stambha* (stiffness), *Toda* (pricking pain), *Spandana*^[3] (twitching). Whereas in *Vata Kaphaj* type of Gridhrasi, *Arochaka* (aversion to food), *Tandra* (feeling of drowsiness), and *Gaurava* (feeling of heaviness) are found additionally. The description narrated in these classics exactly coincides with the description of '*Sciatica*'. The disease '*Sciatica*' is named because of involvement of sciatic nerve. Sciatica is a disease with neurological symptoms pertaining to *sciatic nerve*.^[4] Intense pain radiating from the gluteal region down the posterolateral leg to the foot more or less following the distribution of the sciatic nerve is known as *Sciatica*, which is commonly caused by nerve root compression or irritation.^[5] The main cause behind the irritation of sciatic nerve is degenerative pathology of inter vertebral disc like bulging, desiccation, prolapse of intervertebral disc. Although sciatica has several causes, compression of lumbosacral nerve is the principle cause. The most common cause of sciatica is a herniated or bulging lumbar intervertebral disc.^[6] Despite recent advancement in modern neurology, an effective and safe cure for sciatica is still not found, except for giving some temporary relief through analgesics, or surgical interventions. Already the efficacy of ayurvedic drugs and techniques has gained global popularity in Musculo-skeletal disorders.

MATERIALS AND METHODS

Case report: The National Institute of Ayurveda in Jaipur received a visit from a 34-years-old male patient who was diagnosed with Sciatica and complained of pricking pain in lower

back, buttock and left foot since 4 months which was associated with numbness and stiffness in lower back, buttock and left foot.

Investigation

MRI of lumbar sacral spine: (26/10/2022) – Straightening of dorso-lumbar curvature is seen. Disc desiccation with Diffuse disc bulge is seen at L4-5 level indenting the anterior thecal sac and moderate compression on bilateral sided exiting nerve roots. Disc desiccation with Diffuse disc bulge with ligamentum flavum hypertrophy and posterocentral extrusion is seen at L5-S1 level indenting the anterior thecal sac and severe compression on bilateral sided exiting nerve roots.

Examination of the patient: The patient underwent a general and particular examination in accordance with modern and Ayurvedic practises; the specifics are mentioned in tables 1,2 & 3.

Table no. 1: Ashtavidha pariksha.

1	Nadi	Vata-Kaphaja, 78/minute, regular
2	Mala	Prakruta
3	Mutra	Prakruta
4	Jivha	Nirama
5	Shabda	Spashta (clear)
6	Sparsha	Anushnasheeta
7	Drika	Prakruta
8	Aakriti	Madhyama

Table no. 2: Aaturbala pramana pariksha.

1	Prakruti	Kapha-Vataja
2	Sara	Raktasara
3	Samhanana	Madhyama
4	Pramana	Weight – 62kg, Height – 174cm
5	Satmya	Madhyama
6	Satva	Madhyama
7	Aharashakti	Madhyama
8	Vyayamashakti	Avara
9	Vaya	Yuvavastha
10	Desha	Sadharana

Table 3: Examinations specific to diagnosis locomotor system examination.

Inspection	Limping gait Discomfort in walking and sitting for long duration No localized swelling No varicosities Reflexes are intact.
Palpation	Tenderness 2 + at L4–L5 region Muscle tone–good Muscle power grade–right extremities (upper and lower)–5/5 left extremities (upper and lower)–5/5
Range of movement of Lumbar spine (ROM)	Forward flexion of lumbar spine is limited to 10 cm above ground Right lateral flexion is limited to 25° with pain Left lateral flexion is limited to 20° with pain Extension is limited to 10° with pain
Special test	SLR (active): Left leg: positive at 10° Braggard's test: positive at left leg

Personal history

- Diet- Mix
- Appetite- Normal
- Bowel- Normal
- Bladder- Normal
- Sleep- Disturbed due to pain
- Addiction- No any
- Occupation- Student
- Past illness- Not K/C/O any major illness
- Family History- Nil
- Surgical History- Nil

Vital examinations

- Pulse Rate – 78/minute, Regular
- Blood Pressure – 120/70 mmHg
- Temperature – 98.6° F
- Respiratory Rate – 18/minute

There were no abnormalities in the respiratory, cardiovascular, or neurological systems. Per abdomen examination was found normal.

Table no. 4: Samprapti ghataka.

1	<i>Dosha</i>	<i>Vata Kapha</i>
2	<i>Dushya</i>	<i>Rasa, Rakta, Asthi, Majja, Sira, Kandara, and Snayu</i>
3	<i>Srotas</i>	<i>Rasavaha, Asthivaha, Majjavaha, and Purishavaha</i>
4	<i>Srotodushti</i>	<i>Sanga</i>
5	<i>Roga marga</i>	<i>Madhyama and bahya</i>
6	<i>Adhisthan</i>	<i>Kati and Prushthavamsha</i>
7	<i>Udbhavasthana</i>	<i>Pakwasaya</i>
8	<i>Vyakta sthana</i>	<i>Sphik, Kati, Prushtha, Uru, Janu, Jangha, and Pada.</i>
9	<i>Agni</i>	<i>Ama, Jathargnimandya, and Dhatvagnimandya</i>
10	<i>Ama</i>	<i>Jatharagni Janya Ama</i>
11	<i>Roga Prakrti</i>	<i>Chirkari</i>

Diagnosis – Vata-Kaphaja Gridhrasi (Sciatica)

Subjective criteria

A. Ruk (Pain) – VAS

Parameters	Score
No pain- Scale reading zero	0
Mild pain complained by patient when asked – Scale reading >0-3	1
Patient frequently complained of pain and has a painful look – Scale reading >3-6	2
Severe pain associated with painful cries and agonizing look – Scale reading >6-10	3

B. Toda (Pricking sensation)

Parameters	Score
No pricking sensation	0
Occasional pricking sensation	1
Daily frequent moderate pain but not persistent	2
Severe persistent pricking sensation, patient becomes restless	3

C. Stambha (Stiffness)

Parameters	Score
No stiffness	0
Occasionally restricted movements of legs but can do usual work	1
Continuously restricted movements of legs which hamper usual work	2
Unable to walk due to restricted movements	3

D. Gaurav (Heaviness)

No heaviness in body	0
Occasionally heaviness in body at morning and evening subsides without exercise	1
Daily, intermittent heaviness in body at morning and evening, subsides with mild exercise	2
Daily, persistent frequent heaviness in body at morning and evening not subsides by exercise	3

E. Tandra (Drowsiness)

No sleepiness	0
Occasional sleepiness, awoken on external stimulus	1
Daily, intermittent sleepiness, takes few times to awake on external stimulus	2
Daily, persistent, frequent sleepiness, not react/awake on external stimulus.	3

F. Arochaka (Anorexia)

Having proper taste and appetite	0
Occasional loss of taste with normal diet	1
Daily, frequent loss of taste with decreased appetite	2
Daily, persistent, frequent loss of appetite	3

G. Spandana (Tremors)

No Spandana	0
Occasional mild Spandana	1
Frequent, daily moderate spandana but not persistent	2
Severe, daily persistent Spandana	3

Objective criteria**Straight Leg Raise test (SLRT)**

More than 70°	0
61° – 70°	1
31° – 60°	2
Up to 30°	3

Table no. 5: Treatment Plan: Shamana chikitsa.

S.N.	Drugs	Dose	Time of Administration	Anupana	Duration
1.	<i>Ekangaveer rasa</i>	125mg	After food 2 times a day	Lukewarm water	1 month
2.	<i>Chandraprabha vati</i>	500mg	After food 2 times a	Lukewarm	1 month

			day	water	
3.	<i>Simhanada guggulu</i>	500mg	Before food 2 times a day	With <i>kwath</i>	1 month
4.	<i>Rasnasaptaka kwatha</i>	40ml	Before food 2 times a day	Lukewarm water	1 month

Table no. 6: Assessment of patient.

S.N.	Type of assessment	Before treatment	After treatment	
A	Subjective criteria		After 15 days	After 1 month
1.	Radiating pain from lumbar region to left leg	8+ (VAS score)	6+	2+
2.	Stiffness in lower back region and left leg	6+	3+	2+
3.	Tingling sensation in the left leg	3+	2+	1+
4.	Difficulty and pain while walking and bending forward	7+	5+	3+
B	Objective criteria			
1.	SLRT (active)			
	Left leg	positive at 10°	30°	45°
2.	Braggard's test			
	Left leg	Positive	Positive	Negative
3.	Gait	Limping gait	Improve	Improve
4.	ROM of lumbar spine			
	Right lateral flexion	25° with pain	35° with mild pain	35° without pain
	Left lateral flexion	20° with pain	30° with mild pain	35° without pain
	Extension	10° with pain	25° with mild pain	30° without pain
5.	Walking Distance	100m, with severe pain	400m, with moderate pain	500m, with mild pain
6.	Walking duration	5 min taken to walk 100 m	4min taken to walk 100m	3min taken to walk 100m

This finding demonstrates that the management of *Vata-Kaphaja Gridhrasi* is significantly improved by Ayurvedic treatment.

DISCUSSION

Vedanasthapana Chikitsa (analgesic), *Shothahara* (anti-inflammatory), and *Vata-Kapha* dosha pacifying treatment, along with strengthening and nutritional therapy for the various musculatures and structures in the lumbar region and lower extremities, are the treatment philosophies used for the management of this disease condition.

The following can be used to investigate the potential mode of action of the aforementioned *Shamana Chikitsa*:

1. ***Ekangaveer rasa***: *Vanga*, *Naga*, *Tamra*, *Abhraka*, and *Loha* are all ingredients in this herbo-mineral substance. The *shool/shothhara* quality of *Tamra*, the *kostashodhak* and *rasayana* qualities of *Loha*, and the use of *Vanga* in *nadi dourbalya*, which works on the vitiated *Gridhrasi nadi*. The digestive system, a source of *vayu*, is maintained by *loha*, which is *kosta shodhak*. *Naga* is regarded as a *balya*, which means that it both strengthens our bodies and the *Gridhrasi nadi*. *Rasayana* is regarded as *abhraka*. In the herbal section, *Nirgundi*, *Kupilu*, and *Sahijana* are *vedana shamakas*, while *Haritaki* is one of the finest *vatanulomakas* that purges vitiated *vayu* (relieves pain). Others, like *Maricha*, *Amlaki*, *Kooth*, *Aak*, etc., have anti-inflammatory, *vata kapha hara*, *shool hara* qualities and even regenerative qualities that alleviate the illness. In *Gridhrasi roga*, the combination of these herbs and minerals is therefore very efficient.
2. ***Chandraprabha vati***: There are 37 ingredients of plant and mineral sources in *Chandraprabha Vati*. Due to its anti-inflammatory and analgesic qualities, *Chandraprabha Vati* is beneficial for treating conditions like spinal arthritis and lower back discomfort.
3. ***Simhanada guggulu*^[7]**: *Simhanada guggulu*, which has potent analgesic, anti-inflammatory, and pain-relieving properties due to its bio-active components, provides significant relief from pain and inflammation and lowers the risk of developing chronic autoimmune inflammatory diseases like joint pain, rheumatoid arthritis, and osteoarthritis, which are brought on by the vitiation of *Vata* Doshas. It is used to address arthritic conditions, painful muscular spasms, sore muscles, and other inflammatory conditions because it is a natural vasodilator.
4. ***Rasnasaptaka kwatha*^[8]**: Is possessing a superb *Vata Shamaka Guna*. All of these herbs, including *Rasna*, *Gokshura*, and *Eranda*, are recognised for their anti-inflammatory,

analgesic, and anti-arthritic action in addition to *Aampachana*. Some of them, such as *Guduchi*, *Aragvadha*, which has *Vata-Kapha Shamaka* properties and is *Mridu Virechaka* and helps to relieve constipation and also performs antioxidant activity, are even renowned for their immunomodulatory activity.

CONCLUSION

Sciatica is a serious health condition that affects the locomotor system. As it is closely related to the locomotor system, this condition causes the patient great discomfort and interferes with his everyday activities. The prevalence of sciatica is increasing, and treating it requires a different strategy. Pain, incapacity, and discontent with current treatment options. If we are able to treat such a painful condition using the foundational ideas established by our ancient Acharyas, it will be a tremendous accomplishment. The current case study unequivocally shows that Ayurvedic practises and medications are highly successful in the treatment of sciatica. To achieve the desired effects, though, a thorough grasp of the *Pancha Nidana* and wise drug selection are necessary. In the current instance, it was discovered that *Ekanagaveer Rasa*, *Chandraprabha Vati*, *Simhanada Guggulu*, and *Rasnasaptaka Kwatha* were effective for Sciatica without causing any negative side effects.

Declaration of patient consent

Authors certify that they have obtained patient consent form, where the patient/caregiver has given his/her consent for reporting the case along with the images and other clinical information in the journal. The patient/ caregiver understands that his/her name and initials will not be published and due efforts will be made to conceal his/her identity, but anonymity cannot be guaranteed.

Financial Support and Sponsorship - Nil.

Conflicts of interest- There are no conflicts of interest.

REFERENCES

1. Yadunandan Upadhyaya Editor(s), Commentary Madhukosha of Shrivijayarakshit Shrikanthadatta on Madhava Nidana of Madhavakar, Purvardha; Vatavyadhi Nidanam: Varanasi: Chaukhambha Sanskrit, 2000; 30, 22: 54-55, 437-38.
2. Pandit Kasinatha Sastri, Dr. Gorakha Natha Chaturvedi, Charaka Samhita, Purvardha, Sutrasthana; Maharogadhyaya, 20: 11 - 399.

3. Pandit Kasinatha Sastri, Dr. Gorakha Natha Chaturvedi, Charaka Samhita, Utarardha, chikitsasthana; Vatavyadhi: Chapter, 28: 56 - 787.
4. <https://www.mayoclinic.org/diseases-conditions/sciatica/symptoms-causes/syc-20377435>.
5. Kumar J, Bhatted SK, Dharmarajan P, Kumar A. Evaluation of efficacy of Brimhana Ksheera Basti with Guggulu Tiktaka Ghrita in lumbar disc degeneration induced Gridhrasi (sciatica): A clinical study. J Indian Sys Medicine, 2019; 7: 146-50.
6. Davis D, Maini K, Vasudevan A. Sciatica. [Updated 2022 May 6]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing, 2022.
7. Shastri Kaviraj Ambikadatta, Bhaisajyaratnavali, Vidhyotini Hindi Commentry, Chaukhamba Sanskrit Sansthan, Varanasi Kasa Chikitsa Prakaran, 2002; 15, 1: 127-129, 855-856.
8. Tripathi I. Amavata Chikitsa, Rasnasaptaka Chikitsa. In: Chakradatta. Varanasi, Chaukhamba Sanskrit Sansthan, 166.