



AYURVEDIC MANAGEMENT OF GRIDHRASI W.S.R SCIATICA ; A CASE STUDY

Ayurveda

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ABSTRACT

Approximately 70% to 80% of population gets affected by lower back pain with people of all ages from children to elder one. Among various causes of low back pain, Sciatica is most appearing one. Sciatica is characterized by excruciating pain and paresthesias in the sciatic nerve distribution or associated lumbosacral nerve root and can severely impact the quality of life of those affected. Sometimes the pain hampers the person's daily activities because of its intensity. As per Ayurvedic classics, its features closely resemble the "Gridhrasi". In this pain starts from Sphik (hip) and runs down to Kati Prusta (back), Uru (thigh), Jaanus (knee), Jangha (calf), and Pada (foot) along with pain it may be associated with stiffness, heaviness based on Dosha involvement. Ayurvedic treatment has good scope in managing "Gridhrasi" with Panchakarma procedures and with oral medication. Here in this case study, Patient was suffering from low back pain radiating to right lower limb. She was treated with one course of Kati basti followed by Sarvanga Baspha Sweda with one course of Kala Basti Krama with oral medication. After treatment, remarkable improvement was seen in symptoms, and she is able to do all routine daily activities properly. **AIM AND OBJECTIVES:** The aim of this study was to access the efficacy of Ayurvedic management including Shodhana and Shamana Chikitsa in Gridhrasi w.s.r to Sciatica. **MATERIAL AND METHOD:** It is a single case study. A 46-year-old female who was already diagnosed with Diffuse disc bulge of L3-L4 and L4-L5 intervertebral disc indenting on anterior thecal sac was correlated with Gridhrasi of right leg since 2 years approached to Ayurvedic hospital and was treated with Panchakarma treatment including Kala Basti, Kati Basti, and Patra Pottali Sweda along with Shamana Chikitsa. The treatment was continued for consecutive one month. **RESULT:** Symptomatic assessment of patient was carried out after one month and satisfactory outcome was there and overall quality of life of patient was significantly improved. **CONCLUSION:** The mentioned therapy showed symptomatic relief for the management of Gridhrasi.

KEYWORDS

Ghridhrasi, Sciatica, Shodhana Chikitsa, Kalabasti Krama, Shamana Chikitsa.

INTRODUCTION

Sciatica is a crippling condition caused by sciatic nerve root (L4-S3) compression caused by vertebral canal disk narrowing or trauma; in other words, vertebral disk protrusion or prolapse [1]. Furthermore, among the most common etiologies, sciatica is herniation due to trauma, or neural foramina stenosis. It is a clinical condition characterized by radicular pain beginning from the low back region and radiating downward along the course of the sciatic nerve. It can occur with or without lower extremity pain unilaterally or bilaterally, which may cause neurological deficits, including muscle weakness, absence of tendon reflexes or sensory deficit, numbness, and bladder dysfunction in some cases [2,3].

Patients with sciatica complain of chronic pain exacerbated by lumbar spine flexion and relieved by analgesics, such as non-steroidal anti-inflammatory drugs (NSAIDs). Sciatica affects both genders, and its incidence peaks in the fourth decade of age, with an annual incidence of 1-5% [4]. It rarely occurs before 20 years of age unless it is secondary to trauma and is triggered by physical activities and frequent workplace postures [4,5].

PREVALENCE

Sciatica varies considerably ranging from 3.8% in the working population to 7.9% in nonworking population. [6] It is most prevalent in people during their 40s and 50s and men are more commonly affected than women. About 80-90% of people get affected by low back pain and 5% of those become victims of sciatica. [7]

NIROUKTTI OF GRIDHRASI

In Ayurveda, Gridhrasi is suggestive of the typical character of pain and also the gait of the patient. Gridhra means vulture. Due to the persisting severe pain, the patient has a typical gait i.e. slightly tilted towards the affected side and affected leg in flexed position and another leg extended. This gait resembles that of a vulture. [8]

According to Acharya Charaka, 'Gridhrasi' is one among the 'Nanatmaja Vata Vyadhi' [9] which is characterized by Stambha (stiffness), Ruka (pain), Toda (pricking pain) and Spandana (frequent tingling). These symptoms initially affect Sphika (buttock) as well as posterior aspect of Kati (waist) and then gradually radiates to posterior aspects of Uru (thigh), Janu (knee), Jangha (calf) and Pada (foot). [10] and Sakthikshepanigraha (i.e., restriction in upward lifting of lower limbs). [11] According to Acharya Sushruta, where two Kandara i.e. ligament of heel and all the toes are affected by vitiated Vata, So

movement of the lower limb gets restricted; it is known as Gridhrasi. [12]

CASE REPORT

A 46-year-old female patient came to OPD with complaints of lower back ache radiating to right lower limb with tingling sensation and difficulty in walking with stiffness in calf muscle since 8 years along with constipation since 4 years. Patient had also taken treatment for low backache for one year by allopathy but didn't get satisfactory relief and there was increase in the intensity of symptoms since last week. Ayurvedic management with Shodhana and Shamana Chikitsa was prescribed to her.

• PATIENT DETAILS

- NAME-XYZ
- Age: 46 YR
- Sex: FEMALE
- Address : Mumbai
- Occupation: Tailor
- Marital status: Married
- Socioeconomic status: Middle class
- Weight: 67 kg
- Height: 5'4" feet (162 cm)
- Vitality stable.
- S/E-NAD.

ASHTAVIDHA PARIKSHA

1. Naadi: Vatakapaja
2. Mala: Malabadhata.
3. Mutra: Prakruta
4. Jihva: Saam
5. Shabda: Prakruta
6. Sparsha: Prakruta
7. Druk: Prakruta
8. Akriti: Madhyama

PAST HISTORY

No history of trauma or fall.

No history of major medical illness (e.g., HTN/DM/bronchial asthma/dengue). No any surgical intervention.

MEDICATION HISTORY

Patient had taken medicine (Tab Aceclo MR, Tab Rantac 150 mg, Tab

Neurobion forte 1 tab OD, and Diclo gel for local application) for low backache for more than one year.

PERSONAL HISTORY

- Ahara:** Ruksha and Katu Rasatmak ahara ,mixed diet, craving for pungent food items
- Vihara:** systemic Vata prakopa due to travelling, Jerky movements during tailoring, which induces Srotovaigunya.Sleep is disturbed due to pain.
- Addiction:** Tea (4 to 5 times in a day) and application of mishri (3–4 times a day)
- Aggravating factor**–constipation, age related degeneration (Marmabhighata)
- FAMILY HISTORY**–Not significant

SAMPRAPTI (PATHO-PHYSIOLOGY OF THE DISEASE):

Due to Vataprakopa ahara (Vata vitiating food items) and Marmabhighata at Kati pradesha (age-related degeneration) due to jerky movements while travelling and excess vitiation of Apanavayu due to constipation, which leads to vitiation of Vata and Kaphaja doshas along with vitiation of Rakta (blood), Sira (veins), and Dhamani (arteries). 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.[13]

INVESTIGATION

Magnetic resonance imaging (MRI) cervical spine with screening of whole spine dated on, 24, APRIL 2021. S/o Sacralisation of L5 vertebral body is seen (Castellvi type IIb).

Loss of cervical lordosis. Dorsal kyphosis & lumbar lordosis maintained.

Diffuse disc bulge of L3-L4 and L4-L5 intervertebral disc indenting on anterior thecal sac.

Disc desiccation of L4-L5 intervertebral disc is seen with partial disc desiccation at the level of D1-D2, D2-D3, D3-D4, D4-D5 and D5-D6 intervertebral discs.

SAMPRAPTI GHATAK

Dosha: Vata and Kapha

Dushya: Rasa, Rakta, Asthi, Majja, Sira, Kandara, and Snayu

Srotas: Rasavaha, Asthivaha, Majjavaha, and Purishavaha

Srotodushti: Sanga

Rogamarga: Madhyama

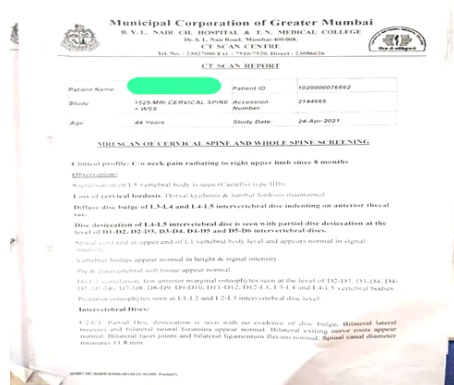
Agnimandya: Ama, Jathargnimandya, and Dhatvagnimandya

Udbhavasthana: Pakvashaya

Adhishtana: Kati and Prushthavamsa

Vyaktasthana: Sphik, Kati, Prushtha, Uru, Janu, Jangha, and Pada.

DIAGNOSIS :Vata– Kaphaja Gridhrasi (sciatica)



MRI REPORTS OF PATIENT

- TREATMENT PLAN
- 1. SHODHANA CHIKITSA

SR.NO	TYPE OF CHIKITSA	DRUGS	DURATION
1.	Sarvanga Snehana	Nirgundi Taila	15 days
2.	Sarvanga Nadiswada	Dashmoola Kwath	15 days
3.	Patrapinda Sweda	Nirgundi, arka, eranda, shigru, agnimantha, kottamchukadi taila	15 days
4.	Kati Basti	Sahacharadi taila	15 days
5.	Kalabasti karma	Niruha -Dashmoola, ashwagandha, guduchi, punarnava kwatha (700mL), saindhava lavana 10 gms, madhu 15 gms, sahachara taila 30 ml Anuvasana –Sahachar Taila (100 ml)	Kala basti (15 days) (For Koshtha shuddhi purpose, Niruha basti was given for consecutive three days, then alternate niruha and anuvasana basti was given for rest of the 12 days.)

2. SHAMANACHIKITSA

Sr No.	Drugs	Dose	Time Of Administration	Anupana	Duration
1	Yogaraja Guggulu	250 Mg 2 Tab Bd	After Food	Rasna Saptak	1 Month
2	Sahacharadi Kashay	15 Ml X 3	After Food	Lukewarm Water	1 Month
4	Gandharva Haritaki Churna	3 Gm At Night	After Food	Lukewarm Water	1 Month

OBSERVATION AND RESULT

After completion of one month of total Ayurvedic therapy (Shodhana and Shamana Chikitsa), the patient had found significantly relief in the lumbar pain, tingling sensation, and heaviness with increased range of movement of spine. Gait was also improved. The patient got complete symptomatic relief. Assessment of patient was carried out by specific subjective and objective criteria, which are shown in Table.

3. ASSESMENT OF PATIENT

A. SUBJECTIVE CRITERIA

Sr.no.	Type of assesment	Before treatment	After treatment After 15 days After 1 month
			1 Radiating pain from lumbar region to right leg 6 + (VAS score) 4 + (VAS score) 0 (VAS score) 2 Stiffness in lower back region and left leg 3 + 1 + 0 3 Heaviness in right leg 3 + 2 + 0 4 Tingling sensation in the right leg 2 + 1 + 0 5 Difficulty and pain while walking and bending forward 6 + (VAS score) 4 + (VAS score) 1 + (VAS score)

B. OBJECTIVE CRITERIA

Sr No.	Type Of Assesment	Before Treatment	After Treatment After 15 days After 1 month
1 a b	SLRT (active) Right leg Left leg	+ve at 40° +ve at 30°	+ve at 70° +ve at 60° Negative Negative

DISCUSSION

2	Bragard's test	positive	Negative	Negative
a	Right leg	Negative	Negative	Negative
b	Left leg			
3	Gait	Limping Gait	No Limping Gait	No Limping Gait
4	ROM of lumbar spine:	20cm above ground	15cm above ground	15cm above ground
a	Forward flexion	20° with pain	30° without pain	35° without pain
b	Right lateral flexion	30° with pain	35° without pain	35° without pain
c	Left lateral flexion			
5	Walking Distance	100 m, with severe pain	200 m, without pain	400 m, without pain
6	Walking duration	5min taken to walk 100 m	3min taken to walk 100 m	3min taken to walk 100 m

Chikitsa Sutra (treatment principle) of Gridhrasi involves basti karma, Siravedha, and Agnikarma Chikitsa.[14] The treatment protocol, which was planned for this patient can be divided into Shodhana Chikitsa along with Shamana Chikitsa. The treatment principles applied for the management 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 extremities. The probable mode of action of these aforementioned Shodhana and Shamana Chikitsa can be explored as follows:

SHODHANACHIKITSAS

- Sarwanga Abhyanga: Abhyanga (local massage) is one of the Purvakarma, which nourish the superficial and deep muscles and make the joint stable. Abhyanga with Nirgundi taila[15] 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.
- Nadisweda: Sarwanga Nadi Svedana with Dashmool Kwatha - Svedana is Vata Hara, cures stiffness, heaviness and is best treatment considered to relieve pain. Svedana with Dashmool Kwath which is Ushna Virya, Guru and Snigdha helped in relieving symptoms of Vata like pain and stiffness in the patient.[16]
- Sarwanga Patra Pottali Sweda Patra Pinda Sweda is a type of Sankara Sweda. It is an unparalleled treatment for painful conditions mainly caused by Vata Dosha and Vatakaptha 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.[17]
- Kati Basti With Shacharadi Taila: It is a type of Snigdha Swedana. Application of Kati basti (L4-L5 region) was carried out to provide good nourishment and strengthen the affected part due to protrusion and alleviated Vatavyadhi. Its Vatahara, Bruhand, and Pachana qualities, as well as its analgesic and anti-inflammatory effects.[18] can help alleviate inflammatory changes in the nerve and possibly to reduce symptoms of nerve root compression.
- Dashmooladi Niruha Basti followed by Sahachara taila Anuvasana Basti: Basti is the best treatment for Vata dosha as per Acharya Charaka. It helps to remove Kapha Avarana over Vata due to protrusion as well as it acts on Vata dosha, that is, Pakwashaya, which is the prime site of Vata. It relieves constipation as well as helps to relieve edema, inflammation, necrosis due to its Srotoshodhana effect by Vata kaphahara properties of Kwatha drugs. [19]

SHAMAN CHIKITSAS

1. Yogaraja Guggulu: Yogaraja Guggulu has Vata Kapha Shamana, Ama Pachana, and Agni Deepana properties (Amavataadhikara). These medicines were suitable for subdue remaining vitiated Dosha.

Considering all of the above, the overall effect of all planned treatments on this patient induces Vedanasthapana Vata Shamaka (analgesic), Shothahara (anti-inflammatory) and Dhatuposhaka properties (strengthening and nutritive therapy) can help providing a significant improvement in the symptoms also the functional ability which in turn improves the range of motion at the Spine.[20]

2. Sahacharadi Kashaya is used to treat Vata related conditions such as a 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 lumbar region and extremities. [21]

3. Gandharva Haritaki Churna: it is polyherbal classical ayurvedic medicine. The ailment reside in the Kati Pradesh, which is the seat of Vata dosha, Mridu virechana is line of treatment of Vatavyadhi and this formulation has Vatahara, Vrishya and Snigdha Virechaka properties. This formulation is used for Anulomana, Ajeerna, and Aruchi induced diseases.

CONCLUSION

We can conclude that with proper assessment and treatment Gridhrasi can be successfully managed through Ayurvedic treatment of Panchakarma and Shamana Aushadhi with giving patient satisfactory result without any side effects.

ORIGINALITY OF RESEARCH WORK AND CONFLICT OF INTREST

I declare that, this is my Original research and I don't have any other interest except Public Awareness and health.

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