

A Case Study on Ghatyantra and Shaman Yoga Chikitsa in Management of Gridhrasi (Sciatica Neuritis)

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ABSTRACT

Gridhrasi is one of the most common disorders of Vata, which closely resembles with sciatica, which is characterized by pain or discomfort associated with Sciatic Nerve. Gridhrasi is a Vatavyadhi or Rujapradhana Nanatmaja Vatavyadhi. It is characterized by Stambh (Stiffness), Ruk (Pain), Toda (Pricking pain) and Spandana (Frequent switching). These symptoms initially affect Sphik (Buttock) as well as posterior aspect of Kati (Waist) and then gradually radiates to Uru (Thigh), Janu (Knee), Jangha (Calf) and Pada (Foot) as described by all Acharyas. The prevalence of sciatica varies considerably ranging from 3.8% in the working population to 7.9% in the non-working population. Various methods used for Gridhrasi treatment but Raktamokshana is one of the fascinating subject and satisfactory answer for Gridhrasi. In this case study, patient suffering from Gridhrasi was treated with Ghatyantra as a para-surgical method and Vatagajankush Ras, Tab Shallaki as a Shaman chikitsa for one month in MIAE&RH Mandsaur. Pain, tenderness, walking distance and SLR test were taken for assessment parameters. Patient got relief in all parameters after treatment.

Keywords: Ghatyantra, Gridhrasi, Sciatica, Tab Shallaki, Vatgajankush ras.

INTRODUCTION

Gridhrasi comes under Nanatamja Vata vyadhi [1]. Gridhrasi the name itself indicates the way of gait shown by the patient due to extreme pain that is Gridha or vulture.

The cardinal signs and symptoms of Gridhrasi are Ruk (pain), Toda (pricking sensation), Muhsandan (Tingling sensation), Stambha (stiffness) in the Sphik, Kati, Uru, Janu, Jangha, and Pada in order [2] and Sakthikshepanigraha (i.e., restriction in upward lifting of lower limbs) [3]. In Gridhrasi, Tandra (Drowsiness), Gaurav (Heaviness), and Aruchi (Anorexia) may be present if Kapha is associated with Vata [4]. Still, while enumerating the diseases, the disease

Gridhrasi has been mentioned of two types, (1) Vata dominant and (2) Vata-Kapha dominant. The common symptoms of Gridhrasi are—pain starts from Sphik (buttock) and then radiates to Kati, Prushta (back), Uru (thigh), Janu (knee), Jangha (calf), and Pada (foot) along with Stambha (stiffness), Toda (pricking pain), Spandana (twitching) [5] and causes the Sakthiutkshepa Nigraha [6] (restricted movement of lifting of the leg) whereas in Vata Kaphaja type of Gridhrasi, Arochaka (aversion to food), Tandra (feeling of drowsiness), and Gaurava (feeling of heaviness) are found additionally. The prevalence of sciatica varies considerably ranging from 3.8% in the working population to 7.9% in non-working population [7]. It is most prevalent in people during their 40s and

50s and men are more commonly affected than women. Low back pain has been enumerated as fifth most common cause for hospitalization and the third most frequent reason for a surgical procedure [8]. At present, the lifestyle is gradually shifting away from healthy living, and therefore people fall victim of various diseases. Sedentary lifestyle, stress, improper posture, continuous jerky movements, long traveling, *etc.*, put maximum pressure on the spine and lower portion of the pelvis. About 80–90% of people get affected by low back pain and 5% of those become victims of sciatica [9]. Sciatica is a crippling disease cause pain in hip and to the whole path of sciatic nerve; it referred down back of the leg and sometimes to the foot. Trauma on lumbosacral spine (*Abhighata*), postural defects (*Vishamachesta*), overloading (*Bharavahana*), abrupt unbalanced movements (*Atichesta*), continuous jerky movements, sedentary lifestyle as well as psychological factors (*Chinta, Shoka, etc.*) are considered as causative factors of the disease [10].

As far as treatment of the disease sciatica is concerned, use of analgesics and physiotherapy will help to certain extent but is not the ultimate cure [11]. Surgeries are moreover expensive, and again there

are chances of recurrence as well [12]. In this disease, mainly *Apana* and *Vyana Vayu* Vitiation was observed, but most of the times *Kapha* remains as associated *Dosha*. So for, treatment of *Gridhrasi*, drug of choice should have *Vatashamaka*, *Kaphashamaka*, *Vatanulomaka*, and *Dipana-Pachana* (digestive-carminative), and *Shulaprashamana* properties.

Ghati yantra is a small glass pot (figure 1). It looks like cupping glass. It works similarly to *Alabu*. *Acharya Charak* has described its use in *Gulma* disease [13]. *Vatagajankush Rasa* is combination of *Sonth*, *Marich*, *Pippali*, works as *Deepan* and *Aam pachan* improves digestion. *Vatsnabha* has property of *Vikasi*, *Vyavai*, *Yogavahi*, which makes it easy to digest along with all the drugs present in *Vatagajankush Rasa*. It open all the microchennals and easy to reached on cellular level. *Haritaki*, *Agnimanth*, *Karkatshringi* also works as *Deepan*, *Vatanulomak*, *Kaphanissarak*, *Vatashamak*. All *Ras-Bhasma* increases *Agni* viz. *Jatharagni*, *Dhatwagni*, *Bhutagni*. Works as *Balya*, *Rasayana*, *Vatapradhan*, *Tridosh Shamak*. *Sallaki niryas* works as *Ama pachak*, *Vedanahara*, *Kaphapitta shamak* according to classics.



Fig. 1. Ghatiyatra



Fig. 2. Application of Ghatiyatra

CASE REPORT

A 68 years male patient came with chief complaints of pain in right lumbar region radiating towards right thigh, calf and foot, tingling sensation and stiffness in right lower limb, difficulty in walking since 3 month. The patient was alright before 3 month. Then he started pain in right lumbar region slowly, it radiated towards lower limb. After that Numbness and Tingling sensation started in right lower limb. He had stiffness in right leg, since 3 months. He had tried modern medicines like pain killers at private hospital. But the symptoms aggravated since 15 days so for further treatment he came to MIAE&RH Mandsaur. There was no history of Diabetes, Hypertension or any other major illness or surgery in the past.

INVESTIGATION

Investigation was done which revealed Hb. 13 g%, TLC 8400 th/ul, Neutrophill 61%, Lymphocytes 28%, Eosinophill 4%, Monocytes 7%, Basophill 0%, Platelet count 297, Uric acid 4.1 mg/dl. The MRI scan of Lumbosacral spine reports Diffuse Posterior Bulge of L3-4 and L4 -5 discs, indenting thecal sac. Bilateral facet arthropathy L3-4 and L4-5 levels. Digital X- Ray of L.S.Spine reports Lumbar Spondylosis with degenerative changes in dorsal spine. After the examination this patient was diagnosed as *Gridhrasi* (sciatica). He was treated with *Vatagajankush rasa*, *Tablet sallaki* (Himalaya) and Ghatiyatra therapy.

EXAMINATION

Table 1. Examination Specific to Diagnosis

Sr. no	Signs	Symptoms
Inspection		
1.	Pain	Unilateral leg pain greater then low back pain Pain radiating foot or toes
2.	Numbness/ Paraesthesia	Same distribution in both leg
3.	SLR Test	Induces more leg pain Left leg - 30 ⁰ angle Right leg - 40 ⁰ angle Both leg - 30 ⁰ angle

Palpation		
1.	Sensory loss	Mild sensory loss of Inner and outer calf and Dorsum of foot
2.	Weakness	Moderate weakness on Inversion of foot, Dorsiflexion of hallus or foot and plantar flexion
3.	Reflex	Knee, Hamstring, Ankle Reflexes normal
4.	Gait	High stepping, foot drop dorsiflexor gait

Table 2. Systemic Examination

Central nervous System	Normal
Respiratory System	Chest Clear, No added sound
Cardiovascular System	Trachea centrally placed, no dilated or engorged veins, no scars or other visible pulsation, Apical impulse felt, S ₁ S ₂ sound heard No thrill-Murmur.
G.I. Examination	P/A Inspection: No abnormality seen Palpation: Soft abdomen, no tenderness elicited on left side lumbar region, Abdomino-thoracic movement is Normal no bulging during expiration, no abdominal pulsation is seen, no dilated vein, No Hernia, no splenomegaly/hepatomegaly.

Table 3. Ashtavidha Pariksha

1.	Nadi (pulse)	86/minute
2.	Mala (stool)	Samyaka
3.	Mutra (urine)	Samyaka
4.	Jeeva (tongue)	Saam
5.	Shabda (speech)	Snigdha
6.	Sparsha (skin)	Samashitoshna
7.	Druka (eyes)	Prakrut
8.	Akruti (posture)	Sthool

Nidan Panchak

Hetu (etiology or causative factors): *Sannikrishta* and *Viprakrishta* both type of *Hetus* are responsible factor in the pathogenesis of the disease like improper food habits (*Mithyaahara*), taking food at irregular time (*Vishmasana*) or in state of indigestion (*Ajirnasana*), Non-vegetarian, spicy, and salty food; *Ruksha Ahar* (*Poha*, bread and toast), Addiction of Alcohol, Insufficient water intake, sedentary lifestyle, improper physical, mental or verbal activities, Psychogenic factors, low

immunity power, *Vridhhavastha*, and suppression of natural urges [9].

Purvaroop (Prodromal symptoms): *Agnimandhya*.

Roop (manifestation): *Stambh*, *Ruka*, *Toda*, *Spandana*, *Suptata*, *Aruchi*, *Agnimandhya*

Samprapti (Patho-physiology of the disease): In the present case, above causative factors provoked the *Dosha*, *Vata-Kapha Pradhan Tridosha Prakopa*

(Three elements of the body -*Vata, Pitta, Kapha*) gets *Agnimandhya* (low digestive power). Thus the food does not get digested properly leading production of *Ama* (undigested food). *Ama dosha* Increases the *Prabhava* on *Kapha dosha* vitiation Perform the *Margavrodhjanya samprapti* and old age factor, Psychogenic factors with all *Hetus* increase the condition of *Vata dosha* and responsible factors for Degenrative conditions in the body which act as *Dhatukshaya janya Samprapti*. These vitiated *doshas* flow through *Rakta dhatu* and spread in all over the body and accumulated at the place of *Kati pradesha* (lumber region) and shows

the above symptoms initially affect *Sphika* (buttock) as well as posterior aspects of *Kati* (waist) and then gradually radiates to *Ooru* (Thigh), *Janu* (Knee), *Jangha* (calf) and *Pada* (foot) according to *Dosh-dushya samurchana* (amalgamation of vitiated doshas with weak and susceptible tissues) with also involvement of *Rakta, Mamsa, Asthi, Majja, kandara, sira, snayu* with *Vatakapra pradhanata*. So there is initiation of disease *Gridhrasi*.

Vyaktavastha (Diagnosis): *Gridhrasi*

Table 4. Samprapti Ghataka

1.	<i>Doshas</i>	<i>Vata (Apan and Vyan), Kapha</i>
2.	<i>Dusya</i>	<i>Rakta, Mamsa, Asthi, Majja, kandara, sira, snayu</i>
3.	<i>Agni</i>	<i>Vishmagni</i>
4.	<i>Strotasa</i>	<i>Raktavaha, Mamsavaha, Medovaha, Asthivaha, Majjavaha</i>
5.	<i>Udbhavsthana</i>	<i>Pakwashaya</i>
6.	<i>Adhithana</i>	<i>Kati, Uru, Jangha, Pada</i>
7.	<i>Dushti Prakara</i>	<i>Sanga</i>
9.	<i>Vyadhi swabhav</i>	<i>Ashukari/Chirkari</i>
9.	<i>Sadhysadhyata</i>	<i>Krichhasadhya</i>

Table 5. Treatment Given Bahya-(External Treatment)

1.	<i>Ghatyantra</i> therapy once in a week	For 15 days (2 sittings)		
Shamana Chikitsa				
S.No.	Aushadhi	Matra	Anupana	Kala
1.	<i>Vatagajankush Ras</i>	250 mg twice a day	Warm water	Before meal
2.	Tablet <i>Shallaki</i> (Himalaya)	500 mg twice a day	Warm water	Before meal

S. No.	Symptoms	Severity	Grade
1.	<i>Ruka</i> (Pain)	<ul style="list-style-type: none"> No pain Occasional pain 1-3 times in 24hrs. Frequent Pain with slight difficulty in walking Severe pain with marked difficulty in walking 	0 1 2 3
2.	Tenderness	<ul style="list-style-type: none"> No tenderness Tenderness on pressure Tenderness on touching Patient winces and not allow to touch 	0 1 3 4
3.	Walking Time	<ul style="list-style-type: none"> Walk upto 1 km without pain Walk upto 500m without pain Patient feels pain on standing Patient cannot stand 	0 1 2 3

4	SLR	<ul style="list-style-type: none"> • More than 71° without pain • More than 71° with pain • More than 30° to 70° with pain • Less than 30° with pain 	0 1 2 3
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Table 6. Obtained Result

S.No.	Criteria	Before Treatment	After Treatment
1.	<i>Ruka</i> (Pain)	3	1
2.	Tenderness	2	0
3.	Walking Time	2	0
4.	SLR	30 ⁰	75 ⁰

OBSERVATIONS AND RESULTS

After treatment there was significant relief in *Ruka*, tenderness, improvement in walking time and straight leg raising test was observed.

Follow Up and Outcome

The clinical features of *Gridhrasi* (Sciatica) were improved by the end of 4th week. During a follow up for a period of 1 month, no signs of recurrence were noticed.

DISSCUSSION

The Sciatica nerve is the largest and thickest nerves arise from the sacral plexus, which is situated largely anterior to the sacral and formed by the ventral rami of the spinal nerve l3-l4, 14- 15 and S1, S2, S3 sacral spinal nerves. Thus, the 5 Nerves group together on the front surface of the Piriformis muscle (in the buttocks) and become one large nerve - The sciatica nerve. This nerve travels than down the back of each leg, branching out to innervate specific regions of the leg and the foot.

Through the two main division of sciatica nerve *i.e.* – The Tibial nerve (medial popliteal) and the common Peroneal nerve (lateral popliteal) are bounded together by common sheath of connective tissue, they are separable upto the sacral plexus because of its different root value. Due to any cause like degenerative changes, herniation *etc.* in the disc then there is

sciatic nerve compression is occurs and shows all the sign and symptoms of sciatica disease like shooting pain, numbness begins from buttock and radiates downwards to the posterior aspects of thigh, calf and to the outer boarder of foot. According to *Ayurveda* commentator *Chakrapani* has defined as *Sira* and *Kandra* is *updhatu* of *rakta* [13].

Kandara assist the function of locomotion and *Sira* refers to the vascular structures in the body that perform the function of transport, circulation and the transmission of the bodily elements. The clinical manifestation of this disease is produce due to the morbid *Vata dosh* or by the combination of *vata-kapha dosh* [14].

These provoke *Doshas* vitiated to the *Dushya* like *Rakta*, *Mans*, *Meda*, *Nadi sansthan* (sciatica nerve) and placed at the site of back, thigh, knee, calf and foot or obstruct to the transmission of the bodily elements circulate in the lower part of the body. In that condition *Ghatyantra* therapy with oral medication was used.

Mode of Action of *Ghatyantra* Therapy

Ghatyantra is the therapy comes under *Raktamokshana* by different types of methods. *Ghatyantra* is a glass pot or jar, correlates with *Alabu* used for *kapha dosha nirharana* through *rakta* or with cupping therapy. This therapy was used to expel out the vitiated *dosha* through blood.

Generally this therapy applied on *Vatakapha pradhan vyadhi* explain by *Acharya* in classics. *Gridhrasi* has 2 types *vataja* and *vata kapha pradhan*. In this case study, *Margawarodhjanya* and *Dhatukshaya janya Samprapti* was seen.

So, first do *Vedhan karma* before applied *Ghatyantra*. The site of *Viddhakarma* cleaned with spirit and *Suchivedhana* done with the help of needle 18×1 ½ sizes on the site of severe pain or on the back on the place of nerve root origin if the blood vessel is large, the blood can be evacuated. But if the *Sira* is non-visible, it is to be pricked by needle till it bleeds or may not bleed and then *Ghatyantra* is applied.

As we understand through *samprapti*, *vedhan karma* includes *Rakta*, *Mams*, *Meda dhatu*. *Sira* always carry all *Doshas* i.e. *Vata*, *Pitta* and *Kapha*, along with *Rakta*. After *viddha karma* *Ghatyantra* is applied on that place through vacuum process. Through it collect all the vitiated *doshas* along with *Vata* circulate in the lower part of the body in the *Ghatyantra*. It removes the obstruction with open all micro channels and function of transport, circulation, the transmission of the bodily elements was done properly. Thus, *Ghatyantra* if performed in correct manner on proper indicated points results in relieving pain and reduction in severity. It also produces a state of well-being.

Vatagajankush Ras

Vatagajankush Ras is combination of *Sonth*, *Marich*, *Pippali* works as *deepan* and *Aam pachan* (~) improves digestion. *Vatsnabh* has property of *vikasi*, *vyavayi*, *yogvahi* which makes it easy to digest along with all the drugs present in *Vatagajankush ras*. It opens all the microchannels and easy to reached on cellular level. *Hritaki*, *Agnimanth*, *Karkatshrangi* also works as *Deepan*, *Vatanulomak*, *Kapha nissarak*, *Vatashamak*. All *Ras-Bhasma*'s increases *Agni viz.* *Jatharagni*, *Dhatwagni*, *Bhutagni*.

Work as *Balya*, *Rasayan*, *Vata pradhan* *Tridosh Shamak* [15].

Shallaki Tablet

Works as *Aampachak* and *Kaphapitta Shamak*, *Vedanahara*, *Shotha Shamaka* according to classics [16]. Hence, there is combination of both the drugs has a great result and Works as *Tridosha shamak*.

CONCLUSION

In this case study *Ghatyantra therapy with Vatagajankush ras and Sallaki tablet* (Himalaya) having a great effect on symptoms and pathogenesis. Symptoms like *Stambh*, *Ruka*, *Toda*, *Spandana*, *Suptata* initially affect *Sphika* (buttock) as well as posterior aspects of *Kati* (waist) and then gradually radiates to *Ooru* (Thigh), *Janu* (Knee), *Jangha* (calf) and *Pada* (foot) *Aruchi*, *Agnimandhya* are the cardinal features of *Gridhrasi* and they are similar to that of *Sciatica*. *SLR* test was reduced remarkably and showed clinically significant result in reduction of all the symptoms. Through this case we found a safe, simple, effective treatment without any complication, easy to take and study was advance the knowledge in this way. This condition impacts on the economically active population representing a significant healthcare cost burden, as it is associated with restricted activity and/or hospitalization.

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