

A SINGLE CASE STUDY ON SUCCESSFUL AYURVEDIC MANAGEMENT OF GRIDHRASI (SCIATICA) - CASE STUDY

Manish Choudhari^{1*}, Naresh Jain² and Preeti Jain³

¹P.G. Scholar, Department of Kayachikitsa in Govt. (Auto) Dhanwantari Ayurvedic College & Hospital Ujjain (M.P.), India.

²Associate Professor, Department of Kayachikitsa in Govt. (Auto) Dhanwantari Ayurvedic College & Hospital Ujjain (M.P.), India.

³Assistant Professor, Department of Agadtantra in Govt. (Auto) Dhanwantari Ayurvedic College & Hospital Ujjain (M.P.), India.

Article Received on
12 Sept. 2021,

Revised on 02 October 2021,
Accepted on 22 October 2021

DOI: 10.20959/wjpr202113-22166

*Corresponding Author

Dr. Manish Choudhari

P.G. Scholar, Department of
Kayachikitsa in Govt.
(Auto) Dhanwantari
Ayurvedic College &
Hospital Ujjain (M.P.),
India.

ABSTRACT

Background:- *Gridhrasi* is a most common disease among the *Vata Nanatmaja Vikaras* mentioned by *Acharyas*, which closely resembles with sciatica, which is characterized by discomfort or pain associated with sciatic nerve. Sciatica is mainly seen in people aged 40-59 years and the prevalence of sciatica is found to be 3.8% in the working population and 7.9% in the non-working population. Contemporary medicine has limitations of providing short-term relief in pain, hence *Ayurvedic* therapy is more effective in *Gridhrasi*. **Aim and Objectives:-** The aim of this study was to access the efficacy of *Ayurvedic* management including *Shodhan* and *Shaman Chikitsa* in *Gridhrasi*. **Materials and Method:-** A 45-year-old female patient was reporting back pain for three consecutive months. When his SLR test

was done, the test was found negative on the right leg and positive on the left leg at 30 degrees, which we correlated to *Gridhrasi*. The patient was treated in *Ayurvedic* hospital with *Abhyanga*, *Patra Pinda Swedana*, *Mridu Virechana* (~*Shodhan*), *Kati Vasti*, and *Shaman* therapy including *Yograj Guggula*, *Trayodashaanga Guggula*, *Rasana Saptaka Kwatha* and *Dashamularishta*. The treatment continued for one and a half months. **Results:-** The symptomatic evaluation of the patient was done after one and half month and we had satisfactory results and the overall quality of life of the patient was greatly improved.

Conclusion:- By doing the above therapy, symptomatic relief was found for the management of *Gridhrasi*.

KEYWORDS:- *Gridhrasi*, *Sciatica*, *Shodhan Chikitsa*, *Shaman Chikitsa*.

INTRODUCTION

Sciatica disease can be correlated with *Gridhrasi Roga* of *Ayurveda*. This disease is one of the 80 types of *Vata Nanatmaja Vikaras*.^[1] In this disease, the patient's gait becomes like a *Gridhra* (~vulture) bird, hence it is called *Gridhrasi*. *Gridhrasi* is divided into 2 types on the basis of *Dosha* involvement. One is *Vataja* and other is *Vata-Kaphaja*. The sign and symptoms of *Vataja Gridhrasi* is *Sthamba* (~stiffness), *Ruka* (~pain), *Toda* (~pricking sensation) and *Ispandana* (~repeated twitching) respectively in the *Sphiga* (~buttock), *Kati* (~low back region), *Prastha* (~back region), *Uru* (~thigh region), *Janu* (~knee region), *Jangha* (~calf region) and *Paad* (~foot). In *Vata- Kaphaja Gridhrasi*, symptoms such as *Tandra* (~drowsiness), *Gourav* (~feeling of heaviness) and *Arochaka* (~anorexia are found)^[2]. Today's lifestyle and increasing trend towards work, over exertion, sedentary occupation, in the form of jerky movements cause physical stress during travel, and lifting, which leads to low back pain and one of the main causes back pain is intervertebral disc prolapsed (IVDP).

A case study

History of present illness:- The demographic details of the patient are shown in the Table 1. A 45-year-old married female patient was apparently healthy before three months, then suddenly started complaining of pain in her lower back region and then gradually the pain spread to thigh, knee, back of calf region and foot of left leg. The pain worsens when coughing, sneezing or straining and lying flat may be relieved. She complained of stiffness in the lower back region and left leg, heaviness and tingling sensation in the left leg for three months and swelling of the right leg due to less use of the left leg due to pain and difficulty in walking and bending forward for two months. These Chief complaints are briefly mentioned in Table 2. Simultaneously, she had constipation for one months. Along with above complaints, she had associated symptoms of loss of appetite, abdominal distension and acidity formation, which are briefly mentioned in Table 3. The patient had also taken allopathic medicine for low back pain for 15 days but it did not give satisfactory relief and from last one-week lower back pain was increasing. So, she visited the *Kayachikitsa* OPD no. 27 of Govt. (Auto.) *Dhanwantari Ayurvedic* Hospital, Behind Chimanganj Thana, Ujjain, M.P., India. The *Ayurvedic* treatment of the patient was started from 30/6/2021 and continued

till 31/7/2021 and she was advised to discontinue all his previous allopathic medicines and to take *Ayurvedic* management *Snehana*, *Swedana*, *Mridu Virechana*, *Kati Vasti* and internal medicines. Required patient examinations, including vital examination, *Ashtavidha Pariksha* and specific locomotor examination are outlined in Tables 4, 5 and 6, respectively.

Patient information:- The information of the patient are shown in the Table-1 below.

Table 1: Patient information.

1.	Name	XYZ	6.	Hight	5.2 Feet
2.	Age	45 year	7.	Weight	48 kg
3.	Sex	Female	8.	Marital status	Married
4.	Address	Village- Gangedi, Ujjain	9.	Occupation	House wife
5.	OPD No.	13370	10.	Socioeconomic status	Lower class

Clinical findings with duration:- The Clinical findings of the patient are shown in the Table-2 below.

Table 2: Clinical findings with duration.

Chief complaints	Grade	Duration
Pain in lower back region radiating to left leg	6+	For 3 months
Heaviness and tingling sensation in the left leg	5+	For 3 months
Stiffness in the lower back region and left leg	5+	For 3 months
Difficulty in walking and bending forward	3+	For 2 months
Swelling of the right leg due to less use of the left leg	2+	For 2 months
Pain worsens when coughing, sneezing or straining and lying flat may be relieved	2+	For 1 and half month

Associated complaints:- The associated complaints of the patient are shown in the Table-3 below.

Table 3: Associated complaints.

Associated complaints	Grade	Duration
Constipation	4+	For 1 months
Loss of appetite	2+	For 15 days
Abdominal distension	1+	For 15 days
Acidity formation	3+	For 10 days

History of past illness:- One day suddenly there was a jerk in the waist after bowing down for years continuously and pulling the water up from the well. No history of trauma or falls was found. No history of major medical illness was found. No any surgical intervention.

Personal history

1. Food habits- Only veg diet
2. Sleep- Disturbed sleep due to working load and pain
3. Addiction- Tea (5-6 times a day) and tobacco (3-4 times a day)
4. Digestion- Constipation (for 1 months)
5. Body build- Normal

Treatment or medication history:- The patient was taking medication (Tab Ibuprofen 200 mg OD, Tab Diclofenac 100 mg BD, Cap. Nurokind-Next 100 mg OD, and Flexabenz Gel for local application) for back pain for the past 15 days.

Vitals examination:- The Vitals examination of the patient are shown in the Table-4 below.

Table 4: Vitals examination.

Pulse (P)	76/min.
Blood pressure (BP)	130/80 mm of Hg
Respiratory rate (RR)	22/min.
Body mass index (BMI)	19.1 kg/m ²

Ashtavidha pariksha:- The Ashtavidha Pariksha of the patient are shown in the Table-5 below.

Table 5: Ashtavidha pariksha.^[3]

Name	Finding	S.N.	Name	Finding
<i>Nadi</i> (~pulse)	76/min.	5.	<i>Shabda</i> (~speech)	<i>Spashta</i>
<i>Mutram</i> (~urine)	<i>Samanya</i>	6.	<i>Sparsha</i> (~skin)	<i>Ruksha</i>
<i>Malam</i> (~stool)	<i>Saam</i>	7.	<i>Driga</i> (~eyes)	<i>Samanya</i>
<i>Jivha</i> (~tongue)	<i>Saam</i>	8.	<i>Aakriti</i> (~posture)	<i>Samanya</i>

Locomotor examination:- The Locomotor examination of the patient are shown in the Table-6 below.

Table 6: Locomotor examination.

Inspection	Trouble walking Difficulty sitting for a long time Walking by rubbing the left foot on the ground.
Palpation	Tenderness at L4-L5 region Muscle tone slightly good Muscle power is less in the left leg than in the right leg.
Straight leg raise (SLR)	SLR Test Right leg- negative Left leg- positive at 30°
Range of motion (ROM)	Forward flexion of lumbar spine is limited to 25 cm above ground Right lateral flexion is 80° without pain Left lateral flexion is

	limited to 30° with pain Extension of left leg is 10° with pain
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Diagnostic assessment:- MRI Lumbosacral spine L5 –S1, Diffuse annular bulge causing indentation of thecal sac between lateral recess narrowing and just abutting both transversing nerve roots.

Therapeutic interventions:- In this case study the treatment plan for patient includes, *Sthanik Snehana* with *Saindhavadi tail* and *Patra Pinda Swedana* to both leg and lumbar region for 8 days, and *Mridu Virechana* with *Erand Tail* for 3 days at an interval of one day in a week. After 8 days *Kati Vasti* given with *Mahavishgarbha tail* for 14 days, along with internal medicine i.e. *Yograj Guggula*, *Trayodashaanga Guggula*, *Rasana Saptaka Kwatha* and *Dashamularishta* given for 1 month.

Detailed of treatment

1. **Abhyanga (~Snehana):-** Ayurvedic massage was done on lumbosacral region and both leg of the body with *Saindhavadi Tail* for about 15 min. daily for 15 days.

Content and Benefits of *saindhavadi tail*^[4]: *Saindhava Lavana*, *Shunthi*, *Pippali Mula*, *Chitraka Mula*, *Shuddha Bhilava*, *Tila Tail*, *Kanji*. All these medicines reduce the pain by being *Vata Shamaka*. Due to *Deepana* and *Pachana* properties *Gouravta*, *Aruchi*, *Amlapitta* and *Ajirna* are also reduced.

2. **Patra pinda swedana:-** In *Ayurveda*, *Swedana* or fomentation is a treatment procedure that involves inducing sweat in an individual by heat application in the form of steam or other heated medicaments. As the body starts sweating in the *Swedana* treatment, stiffness, heaviness, and coldness are eliminated. In *Patra Pinda Sweda*, leaves of medicinal plants and other drugs are tied up in the cloth and applied to the body while frequently heating it. *Patra Pinda Swedana* was given by using *Erand* (*Ricinus communis*) *Patra*, *Nirgundi* (*Vitex negundo*) *Patra* and *Arka Patra* (*Calotropis procera*) to the lumbar and both leg region for about 15 min. daily for 15 days.

Benefits of *Nirgundi* and *Arka patra*:- *Patra Pinda Sweda* provides relief from stiffness and heaviness of joints, back pain or body ache, sciatica, chronic pain, myalgia, post traumatic dysfunctions etc due to its *Vata* balancing property. It also helps manage inflammatory reactions by inhibiting the activity of certain mediators due to its anti-inflammatory property.

3. **Mridu virechana-** For *Mridu Virechana*, drink 20 ml. *Erand Tail* with 100 ml some warm milk for 7 days at an interval of one day in a 2 week after 3 hours of dinner.

Benefits of erand tail *Erand Tail* provide effective relief from constipation, hyper acidity, Heaviness in body, swelling in body parts and regularizes bowel movements.

4. **Kati vasti:-** *Kati Vasti* was provided with *Mahavishagarbha Tail* on L5 and S1 region continuously for 10 days.

Content and Benefits of mahavishagarbha tail^[5]: *Kalka Dravyas- Trikatu, Rasna, Kutha, Naagarmotha, Devdaru, Vatsanaabha Vish, Yavkshara, Srjikshara, Saindhava Lavana, Samudra Lavana, Souvarchala Lavana, Vida Lavana, Aoudbhida Lavana, Tutiya, Kataphala, Pathaa, Bharangi, Navsacara, Trayamana, Javasa, Shweta Jira, Indravaruni, Murkshita Tila Tail, Shringika Vish, Kuchala. Kwatha Drvyas- Dhatura Panchanga, Nirgundi Patra, Katutunbini, Punarnava Mula, Erand Mulatwaka, Ashvagadha, Chakramarda, Chitraka, Shobhanjana, Kaakmachai, Kalihari, Nimba, Mhanimba, Dashmula, Shatavari, Karela, Sariva, Mundi, Vidarikanda, Arkamula, Snuhimula, Meshashringi, Karviradwayam, Vacha, Kaakjangha, Apamarga, Bala, Atibala, Naagbala, Mhabala, Kantakari, Vasamula, Soumlata, Gandhaprasarini. Mahavishagarbha Tail* used to manage the *Vata Vyadhis*. It is used to manage the neuromuscular conditions in the body. This oil works well to lessen the limbs and back region. Whereas the sciatica, *Kati Vasti* of this oil helps to manage the symptoms like numbness, stiffness, localised pain, tingling, weakness etc.

5. **Internal medicine:-** The list of internal medicines to be given to the patient is shown Table-7 below.

Table 7: Internal medicine.

S. N.	Drug	Dose	Anupana	Time of Administration	Duration
1	<i>Yograj Guggula</i>	125mg 2 tab BD	Luke warm water	After meal	1 month
2	<i>Trayodashaanga Guggula</i>	125mg 2 tab BD	Luke warm water	After meal	1 month
3	<i>Rasana Saptaka Kwatha</i>	20mL + 20mL water BD	-	After meal	1 month
4	<i>Dashamularishta</i>	20mL + 20mL water BD	-	After meal	1month

Content and Benefits of yograj guggula^[6]: *Chitraka, Pippalimula, Ajvayan, Kalajira, Vaayvidanga, Ajmoda, Jira, Devdaru, Chavya, Choti Ilayachi, Saindha Namaka, Kutha, Rasna, Gokharu, Dhaniya, Haritaki, Vibhitaki, Aamalaki, Naagaramotha, Trikatu, Daalchini, Khas, Yavakshara, Talisapatra, Tejapatra, Shuddha Guggula, Grita.* Yograj Guggulu is used to relief joint pain, stiffness, inflammation and promotes comfortable movement of joints and strengthens the skeletal and neuromuscular system.

Content and Benefits of trayodashaanga guggula^[7]: *Babula Fali, Asaganda, Hibera, Giloy, Shatavara, Gokharu, Kali Nishotha, Rasna, Soufa, Kachura, Ajvayan, Shunthi, Shuddha Guggula, Grita.* Vatanulomana and Aampachana properties of the ingredients of Trayodashaanga Guggulu help in relieving Malabaddhata (~Constipation). Due to Deepana and Pachana properties Tandra, Gouravta, and Aruchi are also reduced. Along with this, it has anti-inflammatory, anti-arthritis, analgesic, muscle relaxant, and antioxidant properties by energize the growth of bone forming cells by producing more osteoclasts and osteoblasts.

Content and Benefits of rasana saptaka kwatha^[8]: *Rasna, Gokharu, Erand Mula, Giloy, Devadaru, Punarnava, Shunthi, Amaltaas.* Rasnasaptak Kwatha is having an excellent Vata Shamaka property. Along with Aampachana, all these herbs are known for their anti-inflammatory activity, analgesic, and anti-arthritic activity viz. *Rasna, Gokshura, and Erand.* Some of them even known for their immunomodulatory activity like *Giloy, Amaltaas* is having Vata-Kapha Shamaka properties and is Mridu Virechaka, so helps to remove constipation and also does antioxidant activity. *Erand Mula* is best Ayurvedic herb used to relieve inflammation, swelling, eases bowel movement, and *Giloy*, which is a well-known immune modulator corrects auto immune disorders.

Content and Benefits of dashamularishta^[9]: *Dashamula (Shaalparni, Prishnaparni, Brihati, Kantakari, Gokharu, Bilva, Agnimantha, Sonapatha, Patala, Gambhari), Chitrakmula, Pushkaramula, Giloy, Lodhra, Jvasa, Khadeer Sara, Vijay Sara, Triphala, Punarnava, Chavya, Jatamansi, Fulpriyangu, Saariva, Kala Jira, Nishotha, Renuka, Rasna, Pipal, Supari, Kachur, Haldi, Soya, Padyakha, Naagkeshra, Naagarmotha, Indrajou, Kakdasingi, Jivak, Vidarikanda, Shatavari, Asaganda, Varahikanda, Drakshaa, Madhu, Guda, Dhataki pushpa, Kankola, Sugandabala, Shwet Chandan, Jayaphala, Lavanga, Chaturjata, Pipal, Kasturi.* Dashamularishta is beneficial in increasing appetite, take care of digestive diseases, improves physical strength, improves immunity, relieves lower backache, relives swelling, relieves mental stress etc.

OBSERVATION

Assessment between before and after treatment of the patient are shown in the Table-8 below.

Table 8: Assessment between Before and After treatment.

S.N.	Type of assessment	Before treatment	After treatment
A.	Subjective criteria		
1.	Pain in lower back region radiating to left leg	6+	0
2.	Heaviness and tingling sensation in the left leg	5+	0
3.	Stiffness in the lower back region and left leg	5+	0
4.	Difficulty sitting for a long time	5+	1+
5.	Difficulty in walking and bending forward	3+	1+
6.	Swelling of the right leg due to less use of the left leg	2+	0
7.	Pain worsens when coughing, sneezing or straining and lying flat may be relieved	2+	0
8.	Constipation	4+	1+
9.	Loss of appetite	2+	0
10.	Abdominal distention	1+	0
11.	Acidity formation	3+	0
B.	Objective criteria		
1.	SLR Test (Active)		
a.	Right leg	Negative	Negative
b.	Left leg	+ve at 30°	Negative
2.	Range of motion (ROM)		
a.	Forward flexion of lumbar spine	25 cm above ground	20 cm above ground
b.	Right lateral flexion	80° without pain	90° without pain
c.	Left lateral flexion	30° with pain	85° without pain
d.	Extension of left leg	10° with pain	20° without pain
3.	Walking	Trouble walking & rubbing the left foot on the ground.	Normal walking

Follow UP

Patient will be advised to visit the hospital every week during the treatment.

Timeline

The patient was treated for one month.

Outcome

All the symptoms of the disease, mentioned by the patient before the therapy were completely reduced after the treatment. After the treatment, the SLR (Straight Leg Raise) test done on the left leg was also found negative, the patient did not find any problem in flexion and extension the both legs and the patient did not find any problem in walking.

DISCUSSION

The treatment protocol, which was planned for this patient can be divided into *Shodhan Chikitsa* and *Shaman Chikitsa*. After the *Snehana* and *Swedana* of the patient, *Mridu Virechana* was done with *Erand Tail* and the *Kati Vasti* was done with *Mahavishagarbha Tail* and as internal medicine, 2 Tab. BD of *Yograj Guggula* and 2 Tab. BD of *Trayodashaanga Guggula* were given after eating food for 1 month and *Rasana Saptaka Kwatha* and *Dashamularishta* in the amount of 20 ml mixed with equal water was given for 1 month after taking food. The main purpose of our treatment was to reduce the pain (~*vednasthapana*), reduce inflammation (~*shothahara*) and *Shaman* the *Vata Dosha* along with nutritive and strengthening therapy for the various musculature's structures in lumbar region and lower limbs.

CONCLUSION

Based on this single case report, it can be said that *Gridhrasi* (~*Sciatica*) can be successfully treated by *Ayurveda* treatment protocol. In this disease, *Mridu Virechana* with *Erand Tail* as *Shodhan Chikitsa* and *Abhyanga* with *Saindhavadi Tail*, *Patra Pinda Swedana*, *Kati Vasti* with *Mahavishagarbha tail*, *Yograj Guggula*, *Trayodashaanga Guggula*, *Rasana Saptaka Kwatha*, *Dashamularishta* etc were used as *Shaman Chikitsa*. After successful completion of this therapy, it was found that the patient got 90% relief in this disease.

Declaration of patient consent

DECLARATION OF PATIENT CONSENT-
PATIENT /VOLUNTEER INFORMED CONSENT FORM
 Title name- "A Single Case Study on Successful *Ayurvedic* Management of *Gridhrasi* (~Sciatica)" - Case Study

Name of Dr.: Dr. Manish Choudhari Contents of the information details that were provided have been read carefully by me / explained in detail to me, in a language that I comprehend, and I have fully understood the contents. I confirm that I have the opportunity to ask questions.

The patient was made fully informed about the treatment of the disease and he was told how and for how many days the therapy would last. If there is any kind of obstruction during the treatment, he himself will be responsible for it. I give permission for these individuals to have access to my records. I agree to take treatment.

 (Signature / Left Thumb Impression) Date: 30/6/2021
 Place: Ujjain

Name of the Patient: ManjulataKaag
 Complete postal address: Village- Gangedi, Ujjain
 This is to certify that the above consent has been obtained in my presence.

 Signatures of the Scholar Date: 30/6/2021
 Place: Ujjain

1) Witness – Patient's Husband

 Signatures
 Name: Ramprasad Kaag ji
 Address: Village- Gangedi, Ujjain

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