

“A CLINICAL CASE STUDY TO EVALUATE THE EFFICACY OF VIDDHA AGNI KARMA IN GRIDHRASI W.S.R TO SCIATICA SYNDROME”

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ABSTRACT

INTRODUCTION: *Gridhrasi* (Sciatica Syndrome) is one of the *Vatavyadhi* and the most prevalent disorders that affects the lower limb and causes morbidity throughout the productive years of life, making it difficult to walk. It is characterized by pain, stiffness, and recurrent twitching sensation felt along the course of sciatic nerve in the buttocks, low back, thighs, back of knee, calf region, and foot, along with restricted movement of the affected body parts, as it is caused by aggravated *Vata Dosh*. If the disease is caused by both *Vata* and *Kapha Dosh*, it results in drowsiness, heaviness and anorexia as additional symptoms. Sciatica Syndrome have become a disorder with a high prevalence, estimated to have 10 million cases reported annually from India. Especially in the 40–60year age group in males.

Acharya Sushruta mentioned *Agnikarma Chikitsa* in the management of *Sira*, *Snayu*, *Sandhi* and *Gridhrasi*. Acharya Charaka mentioned *Agnikarma Chikitsa* in the management of *Gridhrasi* (Sciatica Syndrome) at the site of *Antara-Kandara-Gulpha Pradesha*. Considering these, present study was taken up with the objective of evaluating the efficacy of *Viddha Agnikarma* in the management of *Gridhrasi*.

Materials and Methods: This is a single case study about the effective management of *Gridhrasi* with *Viddhagni Karma*. The duration of the treatment was 21 days with follow up for next 2 months. Assessment criteria was done before treatment, on 7th, 14th and on 21st day.

Result and Conclusion: *Viddhagni Karma* blocks pain by activating a variety of bioactive chemicals through peripheral, spinal and supraspinal mechanisms. It may be concluded that there is significant result of *Viddhagni Karma* in the treatment of *Gridhrasi* and gives relief in pain and other symptoms of this condition.

KEYWORDS

Gridhrasi, Viddhagnikarma, Sciatica Syndrome, Ayurvedic management

INTRODUCTION

Gridhrasi is one of the 80 varieties of *Nanatmaja Vatavyadhi*. The word itself refers to the abnormality in gait that patient's exhibit while they are in excruciating pain. Similar to the vulture *Gridhra*, this illness not only produces discomfort but also makes walking difficult, which the patient finds extremely annoying. The Cardinal symptoms and indicators are *Ruk*, *Toda*, *Spandana* in the *Sphik*, *Sthamba*, *Kati*, *Uru*, *Janu*, *Jangha*, and *Pada*, *Tandra*, *Aruchi*, *Gaurav*.¹ *Gridhrasi* can be co-related to Sciatica Syndrome based on its cardinal symptoms.

Sciatica Syndrome is a debilitating condition in which the patient experiences pain and/or paraesthesia in the sciatic nerve distribution or an associated lumbosacral nerve root. Sciatica

Syndrome pain often is worsened with flexion of the lumbar spine, twisting, bending, or coughing. Sciatica Syndrome is a clinical diagnosis, and therefore, a thorough history and physical examination are necessary for a complete evaluation and diagnosis.

Treatment involves short course of oral NSAIDs, Opioid and Non-opioid analgesics, Muscle relaxants, a course of oral corticosteroids may be beneficial, localized corticosteroid injections, Spinal manipulation, Deep tissue massage may be helpful, Surgical evaluation and correction of any structural abnormalities such as disc herniation, epidural hematoma, epidural abscess, or tumour. All these are having their own complications and adverse reactions like increased pain over time, paraesthesia in the affected leg, loss of muscular strength in the affected leg, loss of bowel and/or bladder function, permanent nerve damage.

In Ayurvedic texts, there are various methods used as the line of treatment, some of which are effective, simple, safe and cheap for the patient e.g. *Siravedha* (Venesection), *Agnikarma* (kind of cautery), *Basti Chikitsa* (Enema), *Snehana*, *Swedana* etc.

Acharya Charaka mentioned *Agnikarma-Chikitsa* in the management of *Gridhrasi* at the site of *Antara-Kandara-Gulpha Pradesha*.² *Acharya Sushruta* mentioned *Agnikarma-Chikitsa* in the management of *Sira*, *Snayu* or *Sandhi* or *Asthi Samprapti* and *Gridhrasi* which may origin involving these structures.³

Now-a-days, Ayurvedic para-surgical procedures like *Shastrakarma*, *Ksharakarma*, *Raktamokshana* procedures are gaining popularity in forthright and conscious society. Many research works have been carried out regarding efficacy of these procedures. *Agnikarma Chikitsa* have yet to gain popularity in society and many Ayurveda physicians are far away from scientific approach towards of it, as because very few works have been carried out and there is no pinpoint description about *Agnikarma Chikitsa* elsewhere. That's why keeping view the importance of the disease as well the treatment and above all points, it was decided to carry out *Agnikarma Chikitsa* specially *Viddhagnikarma* for the effective management of *Gridhrasi*.

AIMS AND OBJECTIVES

- To study in detail about *Gridhrasi* and Sciatica Syndrome
- To study in detail about *Viddha Agni Karma*.

CASE DESCRIPTION

A female patient 36 years old OPD reg no 23-1649 residing in Shivakote visited Panchakarma OPD, Sri Paripoorna Sanathana Ayurveda Medical Hospital on 2nd February 2023 presenting with low back pain radiating to bilateral lower limbs since 2 years associated with numbness in both hands since 1 year.

CHIEF COMPLAINTS

- Low back pain radiating to bilateral lower limbs and stiffness since 2 years.
- Numbness in both the hands since 1 year.

HISTORY OF PRESENT ILLNESS

Patient was apparently normal 2 years back. Patient fell from 4 feet tall wall on her back which resulted in pain in low back region. Patient gradually started to develop radiating type of pain, started in left lower limb from low back region till the great toe. 3 months later, experienced same radiating type of pain in right lower limb. Patient told that pain used to aggravate after strenuous work and used to reduce after taking rest in supine position. Patient also developed

with numbness in both the hands along with stiffness in both the lower limbs. Consulted Allopathic hospitals for the same, was prescribed with oral medications and advised to take complete rest. Partially pain used to subside for 2-3 days, later on again pain used to recur and was continuous in nature. So, for all the above said complaints patient came to SPSAMCH & RC for a better treatment.

HISTORY OF PAST ILLNESS

- H/O Migraine 15 years back – not under medications
- Not K/C/O DM, HTN, Thyroid disorder
- Surgical history – Underwent Tubectomy 14 years back

FAMILY HISTORY

Nothing Significant

PERSONAL HISTORY

- *Ahara - Katu Rasa Pradhana Ahara* (mixed diet)
- *Vihara – Ati Asana, Avyayama, Diwaswapna, Ratri Jagarana*
- *Agni – Mandagni*
- *Koshta – Mrudu Koshta*
- *Mala – Samhata Mala*
- *Mutra – Peeta Varna* (4-5 times/day)
- *Nidra – Alpa Nidra* (due to pain)

TREATMENT HISTORY

1. Tab. Marshel 0-0-1
2. Tab. Pregabalin 1-0-0
3. Tab. Ultracet 1-0-0

GYNAECOLOGICAL AND OBSTETRIC HISTORY

- Menarche – 12 years
- Menstrual cycle – 28-30/3-4 days
- Associated complaints – Abdominal cramps (1st day)
- LMP – 12/1/23
- OBG – G2 P2 A0 L2 D0
- Nature of Delivery – Normal delivery

PSYCHOLOGICAL HISTORY

MANOBHAVAS	PRESENT	ABSENT
<i>Krodha</i>	+	
<i>Shoka</i>	+	
<i>Bhaya</i>		-
<i>Harsha</i>	+	
<i>Vishada</i>		-
<i>Kama</i>	+	
<i>Lobha</i>	+	
<i>Ershya</i>	+	
<i>Matsarya</i>		-
<i>Moha</i>	+	

ASHTA STHANA PAREEKSHA

1. Nadi – Chapala gati (72bpm)
2. Mutra – Peeta varna (4-5 times/day)
3. Mala – Samhata mala (once/day)
4. Jihwa – Alipta
5. Shabda – Prakruta
6. Sparsha – Sheetha
7. Drik – Prakrutha
8. Akrti – Sthoulya [BMI – 32.8 kg/m³ – Obese Class 1]

DASHAVIDHA PAREEKSHA

- Prakriti – Vata-Kapha
- Vikrti – Vata Pradhana Tridosha
- Satva – Madhyama satva
- Sara – Avara sara
- Samhanana – Pravara
- Satmya – Katu rasa pradhana
- Pramana – Pravara (sthula)
- Ahara Shakti – Abhyavarana Shakti – Pravara
Jarana Shakti – Pravara
- Vyayama Shakti – Avara
- Vaya – Madhyama vaya

GENERAL EXAMINATION

- BP – 110/70 mm Hg
- Pulse – 72 bpm
- Temperature – 97.6° F
- Height – 158 cm
- Weight – 82.7 kg
- Saturation – 98%
- Pallor – absent
- Icterus – absent
- Cyanosis – absent
- Clubbing – absent
- Koilonychia - absent
- Lymphadenopathy – absent
- Edema – absent

MUSCULO – SKELETAL SYSTEM EXAMINATION

Low Back Examination

Inspection

- Skin color – normal
- Texture – dry
- Swelling – absent
- Posture – normal
- Gait – Abnormal gait (due to pain)

Palpation

- Temperature – warm
- Tenderness – present
- Crepitus – absent

Range Of Motion

- Lumbar joint - Flexion – not restricted possible with pain
Extension – not restricted possible with pain
- Hip joint – Internal and External rotation – not restricted possible with pain
Abduction and Adduction – not restricted possible with pain
- Knee joint – Flexion and Extension – not restricted possible with pain

Percussion

No significant findings

Auscultation

No significant findings

TESTS

	Left lower limb	Right lower limb
SLR Test (Active)	Positive at 90 degree	Negative at 90 degree
Faber's Test	Positive	Negative
Femoral Nerve Stretch Test	Positive	Negative

INVESTIGATIONS

- ESR – 37 mm/hr.
- R.A Factor – 5.1 mg/dl - negative
- CRP – 9.4 mg/dl – positive

DIAGNOSIS

Vataja Gridrasi

STUDY DESIGN:

It will be a single blind Pilot study with pre-test and post- test design. The parameter of signs and symptoms will be scored on the basis of standard method and will be analysed statistically.

DURATION OF STUDY:

Study to evaluate the effect of Viddhagni Karma in Gridhrasi is done on 7-14-21 days after proper examination of the patient.

Follow up: 60th day after completion of treatment.

Study Duration: 80 days

VIDDHA-AGNI KARMA

PURVAKARMA

- **Sambhara Sangraha:** Needle, Sterile Gauze, Surgical Spirit, Betadine Solution, Sponge holding forceps, Cotton swab, Jathyadi taila, Earthing plate, Cautery machine, pen.
- **Atura Pariksha:** Dashavidha pariksha, Ashtasthana pariksha, Rogi-Roga pariksha, CT-BT, MRI LS spine
- **Atura Siddhata:** Patient was made to lie in prone position. Earthing plate was placed under abdomen. Lumbar region was cleaned with Betadine solution and Surgical spirit using Cotton swab and Sponge holding forceps.
- **Manasopachara** was done.
- **Swastivachana** was told.

PRADHANA KARMA

- Area of pain was demarcated using pen before starting with the procedure.
- Viddhagni karma was carried out using needles [depending on are of pain and specific points of maximum tenderness] and it was pierced about 0.5cm through the skin of the lumbar area at points of maximum tenderness demarcated beforehand.
- Using a Cautery machine a minimum setting of 0.50 MHz and maximum of 2 MHz is administered to each needle shaft for 2-5 seconds, depending upon the capacity and pain threshold exhibited by the patient.
- This cycle was repeated 3 more times after a 2-5 minutes' interval depending upon the capacity of patient.
- The process was repeated again with piercing needle at other sites on the lumbar region if patient complains of pain rather than at points of maximum tenderness.

PASCHATA KARMA

- After completing the necessary cycles, jathyadi taila was applied and bandaging was done.
- Viddhagni karma was administered to the patient for 3 sittings, with a 7-day interval in between each, over the duration of 21 days and follow up on 60TH day after completion.

CRITERIA FOR ASSESSMENT

The patient was examined daily. Change was observed in signs and symptoms by using proper clinical methods.

The detail of score given to each sign and symptom and clinical test carried out is described below.

1. STAMBHA {Stiffness}

- No. stiffness lasting for 5 minute: 0
- 5 minute to one hour: 1
- 1 hour to 2 hours: 2
- 2 hours to 4 hours: 3
- More than 4 hours: 4

2. RUK {Pain}

- No pain 0
- Mild pain 1
- Moderate pain 2
- Severe pain 3

3. TODA {Pricking Sensation}

- Absent 0
- Mild 1
- Moderate after movement frequent, but not persistent 2
- Severe persistent 3

4. MUHUSPANDANA {Twitching pain}

- Absent 0
- Occasional 1
- Continuous after movement 2
- Spontaneous and frequent 3

SHAMANA AUSHADHI

S NO.	Medicine	Dosage	Duration
1.	Sahacharadi Kashaya	15 ml BD with warm water on empty stomach	2 months
2.	Ekgaveera rasa	1 BD after food	2 months
3.	Sahacharadi taila	E/A	2 months

RESULT

CRITERIA	BEFORE TREATMENT	7 TH DAY	14 TH DAY	21 ST DAY
Low back pain radiating to Right leg	3	2	1	0
Low back pain radiating to Left leg	3	2	1	0
Stiffness	4	3	2	0

DISCUSSION

The pharmacodynamics of a therapy depends on its property like *Rasa*, *Guna*, etc. in term of Ayurveda. It is primarily the *Dosha Shamaka* activity, which is used to correct the vitiated Dosha to reinstate the *Tri-Doshik* equilibrium i.e. the main aim of therapy. Agni Karma is stated as the ultimate therapy for those disorders which are not curable with other measure.

Analysis of general *Samprapti* of *Gridhrasi* (Sciatica Syndrome) reveals that mainly *Vyana Vata* plays a major role in manifestation of disease and this is also supported by Harita's statement that *Gridhrasi* is result of vitiation of *Vyana Vata*. Here one thing is again noteworthy that *Acharya Charaka* and *Acharya Sushruta* have stated that when *Kapha* masks *Vyana Vata*^{4,5}, it gives rise to frequent restricted movement, that's why *Kapha* plays a role as *Anubandha* in manifestation of disease *Gridhrasi*. *Kandara* of *Parsni* and *Pratyanguli* have been stated as *Adhithana* of disease *Gridhrasi*.

Hence, when *Viddhagni Karma* is done, then by virtue of its *Ushna*, *Tikshna*, *Sukshma Guna* it breaks the *Avarana* of *Vyana Vata* by *Kapha* and release the *Vata* to perform its normal functions, thus *Stambha*, *Ruka* and *Toda* like symptoms get subsided. Here, disease *Gridhrasi* (Sciatica) should be considered as a *Prakriti Samvet Samavaya Vyadhi* that means clinical features as just similar to *Vyadhi Utapatikaraka Bhava* (causative factor of disease). Hence, to break that *Dosha-Dushya Samurchhana*, *Viddhagni Karma* is an ideal modality of treatment for *Gridhrasi*.

Viddhagni Karma blocks pain by activating a variety of bioactive chemicals through peripheral, spinal, and supraspinal mechanisms.⁶

These include opioids, which desensitize peripheral nociceptors and reduce pro-inflammatory cytokines peripherally and in the spinal cord, and serotonin and norepinephrine, which decrease spinal n-methyl-d-aspartate receptor subunit GluN1 phosphorylation to inhibit pain.

SL. NO	Shamana Aushadi	Contents	Doshagnata
1.	Sahacharadi kashaya ⁷	Sahachara [Strobilanthes ciliates] Suradaru [Cedrus deodara] Nagara [Zingiber officinale]	Vata kapha shamaka
2.	Ekgangaveera rasa ⁸	Shuddha parada [Purified Mercury] Shuddha gandhaka [Purified Sulphur] Kantaloha bhasma [Manganese calx] Vangabhasma [Tin calx] Naga bhasma [Lead calx] Tamra bhasma [Processed Copper] Abhraka bhasma [Processed Mica] Tikshna loha bhasma [[Processed Iron] Nagara [Zingiber officinale] Maricha [Piper nigrum] Pippali [Piper longum] Haritaki [Terminalia chebula] Vibhitaki [Terminalis bellerica] Amalaki [Embelica officinalis] Nirgundi [Vitex negundo] Chitraka [Plumbago zeylanica] Shigru [Moringa oleifera] Kushta [Saussrea lappa] Vishamushti [Purified Strychnus nux vomica] Arka [Calotropis procera] Dhatura [Datura metel] Bhringaraja [Eclipt alba]	Vata kapha shamaka
3.	Sahacharadi taila ⁹	Sahachara [Strobilanthes ciliates] Bilva [Aegle marmelos] Agnimantha [Premna mucronata] Shyonaka [Oroxylum indicum] Gambhari [Gmelina arborea] Patala [Stereospermum suaveolens] Shalaparni [Desmodium gangeticum] Prishnaparni [Uraria picta] Gokshura [Tribulus terrestris] Brihati [Solanum indicum] Kantakari [Solanum xanthocarpum] Abhiru [Asparagus racemosus] Sevya [Vetivera zizanoides]	Vata shamaka

		Nakha [Capparis sepiaria] Kushta [Saussea lappa] Hima [Santalum album] Ela [Elettaria cardamomum] Sprikka [Anisomeles malabarica] Priyangu [Callicarpa macrophylla] Nalika [Hibiscus cannabis] Ambu [Pavonia odorata] Shaileya [Parmelia perlata] Lohita [Rubia cordifolia] Nalada [Nardostachys jatamansi] Agaru [Aquilaria agallocha] Surahva [Cedrus deodara] Choraka [Angelica glauca] Mishi [Anethum sowa] Turushka [Amber orientalis] Nata [Valeriana wallichii] Ksheera Tila taila [Sesamum indicum]	
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CONCLUSION

The present study was conducted with an objective to evaluate the efficacy Viddhagnikarma in the management of Gridhrasi.

Gridhrasi is the most prevalent disorders that affects the lower limb and causes morbidity.

On the basis of this study it can be concluded that the treatment therapy i.e. Viddhagni Karma can be used as a way of treatment in the pain management of patients of Gridhrasi who are trying to get treated without side effect. There were no complications seen during the period of treatment and it is a safe, convenient and effective measure for the treatment of patients suffering from Gridhrasi.

REFERENCES

1. Charaka Samhita by Ravi Dutt Tripathi, Chaukhamba Sanskrit Pratishan Delhi, Edition 2006; pg 600.
2. Kasinantha Sastri, The Charaka Samhita of Agnivesha, Vol II, Reprint edition, New Delhi, Chaukambha Publication,2006, Page 700.
3. Vaidya Yadavji Trikamji Acharya, Charaka Samhita of Agnivesha, Reprint edition, Varanasi, Chaukambha Prakashan,2007, Page 621.
4. Charaka Chikitsa Sthana 28/76 Charaka Samhita, Ayurveda Deepika, Yadavji Trikamji, Reprint Edition 2009, Varanasi, Chaukhamba Orientalia p 620.
5. Sushruta Sutra Sthana 21/28 Sushruta Samhita, Nibandha Sangraha, Yadavji Trikamji Reprint edition 2010 Varanasi, Chaukhamba surbharti Prakashana p 104.
6. <http://www.ncbi.nlm.gov/pmc/articles/PMC3947568/>

7. Ram Nivas Sharma and Surendra Sharma, Sahasrayogam, edition 2007, Chaukambha Sanskrit Pratisthan, Kashaya Prakaranam, Vatahara Kasaya Pg no 32
8. Nighantu Ratnakara Nidanasaha Chikitsa by Krishnashastry Navare Nirnaya Sagar Publication Mumbai, Pg no 436
9. Vagbhata, Ashtanga Hridayam with commentary Sarvanga Sundari and Ayurveda Rasayana, Edn 8, Edr Bhashagacharya Harishastri Paradakara Vaidya, Chowkamba Orientalia, Varanasi, 1998, 276, 416, 418