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Case Study

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# ROLE OF KATI BASTI WITH PRABHANJAN TAIL IN THE MANAGEMENT OF SCIATICA – A CASE STUDY

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# **ABSTRACT**

Sciatica is a prevalent form of neuropathic pain, affecting up to 10% of people with chronic low back pain and having a lifetime incidence of 10% to 40%, sometimes reaching as high as 70%. The prevalence of sciatica varies considerably ranging from 3.8% in the working population to 7.9% in the non-working population. It is typically caused by compression or injury to the sciatic nerve, most often due to lumbar disc herniation. Other contributing factors include age, occupation, obesity, and smoking. *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 (Frequents 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. *Kati Basti* is an external therapy that acts as both *Snehan* and *Swedan* therapy. So, In the present single case study patient was treated with *Prabhanjana Vimardanam tail Kati basti*. *Kati basti* of *Prabhanjana Vimardanam tail* was effective in relieving symptoms like pain, stiffness, pricking sensation and numbness of leg.

**KEYWORDS:** Sciatica *Gridhrasi*, *Kati basti*, *Vatavyadhi*.

# **INTRODUCTION**

Gridhrasi is one among Vataja Nanatmaja Vikara, characterised by sequential pain starting from Sphik (waist) which extends to Kati (low back), Prishta (buttocks), Uru (thigh), Janu

(knee), Jangha (calf), and Padam (foot). [1] Gridhrasi is of two types viz. Vataja and Vata Kaphaja. [2] Vataja Gridhrasi is characterized by Todam (pain), Dehasya Athi Vakrata (deformity), Sphurana (pulsating pain) and Sthabdhata (stiffness). [3] Whereas, Vata Kaphaia Gridhrasi is characterized by Gaurava (heaviness), Tandra (stupor), Mukhapraseka (watering from mouth), and *Bhakthadvesha* (aversion towards food). [4,5] Sciatica is characterised by constant aching pain felt in the lumbar region, which radiates to the buttock, thigh, calf, and foot, and pain is experienced along the sciatic nerve pathway. This term is more specifically used to denote nerve dysfunction caused by compression of one or more lumbar or sacral nerve roots from a spinal disc herniation. The pain is characteristically of a shooting type quickly travelling along the course of the nerve. [6] Thus, Sciatica may be readily correlated to Gridhrasi. Basti Karma, Agni Karma, and Siravyadha are considered the treatments of choice in the management of *Gridhrasi*.<sup>[7]</sup>

The sciatic nerve provides direct motor function to the hamstrings, lower extremity adductors, and indirect motor function to the calf muscles, anterior lower leg muscles, and some intrinsic foot muscles. Also, indirectly through its terminal branches, the sciatic nerve provides sensation to the posterior and lateral lower leg and the plantar aspect of the foot. It is an important distinction to know that most cases of sciatica result from an inflammatory condition leading to an irritation of the sciatic nerve. Conversely, direct compression of the nerve leads to more severe motor dysfunction, which is often not observed and, if present, would warrant a more thorough and expedited workup. [8,9,10]

Reference of Prabhanjana Vimardanam Tailam.[11] is in book Sahasrayogam, Taila Yoga Prakarana and indications is Katishula, monoplegia and paraplegia. Considering this fact present study was carried out to measure efficacy of Kati Basti with Prabhanjan Tail in the management of Gridhrasi.

The use of Prabhanjana Vimardanam Thailam dates back over a millennium, with references found in late medieval compendia that built upon classical works like the Ashtanga Hridaya and Sushruta Samhita. Although these older texts don't name it verbatim, marginal notes in 15th-century commentaries by Govindadasa hint at a "Vimardanam taila" used for muscle disorders and Vata imbalance. By the 17th century, the regional tradition around Kerala incorporated local herbs, giving rise to what we now call Prabhanjana Vimardanam Thailam. Local healers in Travancore and Cochin documented its

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success in reducing stiffness after martial arts injuries (traditional *Kalaripayattu* sprains), and temple records show it was offered as *Prasadam* to deities worshipped for healing.

#### **CASE REPORT**

A 68 years male patient came with chief complaints of pain in right lumber region radiating towards right thigh, calf and foot, tingling sensation and stiffness in right lower limb, difficulty in walking for 3 months. The patient was alright before 3 months. Then he started above symptoms gradually. He had taken modern medicines like pain killers at private clinic and also apply local *Ayurvedic Lepa* but the symptoms aggravated in the last 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. The patient was daily needs shop owner by occupation. Blood investigations were within normal limits. The MRI scan of Lumbosacral spine reports Diffuse Posterior Bulge of L3–4 and L4–5 discs, indenting thecal sac. Bilateral facetal arthropathy L3-4 and L4-5 levels. Digital X- Ray of Lumbosacral Spine reports Lumbar Spondylosis with degenerative changes in dorsal spine. After the examination this patient was diagnosed as *Gridhrasi* (sciatica). He was treated with *Prabhanjana Vimardanam Tailam Kati Basti*.

#### **CLINICAL FINDINGS**

#### **General Examination**

BP: 130/80 mmHg, PR: 76/min, RR: 18/min, Temperature: 98.6°F, Wt.-80 kg.

# **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, S1 S2 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.

# **SLR** test (active)

Positive at 30° on the right leg. Negative on the left leg.

#### Asthavidha Pariksha

1) Nadi (pulse): Vata-Kaphaja, 2) Mala (bowels): Asamyak (Constipated), 3) Mutra (urine): Samyak 4) Jihwa (tongue): Sama (coated), 5) Shabdha (speech): Prakruta, 6) Sparsha (skin): Anushnasita 7) Druk (eyes): Prakruta, 8) Akruti (posture): Madhyama.

# Nidan Panchak (etiology or causative factors)

**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*), Nonvegetarian, 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.

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 Degenerative 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 Vatakapha pradhanata. So, there is initiation of disease *Gridhrasi*. *Vyaktavastha* (Diagnosis): *Gridhrasi*.

The raw materials were collected from the local area, authentication was done in Botanist MIAER. *Prabhanjan Vimaradanam Tail* was prepared in the department of *Rasshastra* and *Bhaishajya kalpna* Mandsaur. Standardization of prepared oil was done in the department of *Rasshastra* and *Bhaishajya kalpna* MIAER.

#### SUBJECTIVE PARAMETER GRADATION

# Stambha (stiffness)

- No stiffness 0
- For few minutes after sitting for long duration but relieved by mild movements 1
- More than 1 hour or more than once in a day but routine works are not disturbed 2
- Lasting for more than 1 hour or many times a day mildly affecting the daily routine 3
- Episodes of stiffness lasting for 2-6 hours \ Daily routines are hampered severely 4

# Suptata (numbness)

- No numbness- 0
- Occasionally once in a day for few minutes -1
- Daily once in a day for few minutes -2
- Daily for 2 or more times/30-60 minutes -3
- Daily more than 1 hour/Many times a day. 4.

#### GRADATION OF SYMPTOMS FOR ASSESSMENT OF OBJECTIVE CRITERIA

# **Gradation for SLR - Criteria Grading**

SLR	More than 71° without pain	
	More than 71 <sup>0</sup> with pain	1
	More than $30^0$ to $70^0$ with pain	2
	Less than 30 <sup>0</sup> with pain	3

#### **Gradation for VAS Scale**

Range of Pain	Vas score	Grade
No pain	0	0
Mild pain	1-3	1
Moderate pain	4-6	2
Severe pain	7-10	3

**Table 1. Obtained Result.** 

Sr. no.	Criteria	<b>Before Treatment</b>	After Treatment
1	Stambha (stiffness)	2	0
2	Suptata (numbness)	3	0
3	SLR	$30^{0}$	75 <sup>0</sup>
4	Pain	3	1



Preparation of Prabhanjan Vimardanam oil.



Kati basti.

#### **OBSERVATIONS AND RESULTS**

After treatment significant relief in *Stambha* (stiffness), *Suptata* (numbness), pain and straight leg raising test were observed.

# FOLLOW UP AND OUTCOMES

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

#### DISSCUSION

Kati Basti is an Ayurvedic external oleation and fomentation therapy using warm medicated oils applied to the lower back (Kati Pradesha) to treat Gridhrasi (sciatica). It works by providing a Snigdha (unctuous) and Ushna (warm) effect to pacify the aggravated Vata dosha, reduce inflammation, and nourish the affected nerve and tissues, thereby alleviating symptoms like pain, stiffness, and numbness associated with sciatica. Kati Basti helps to reduce the symptoms of Gridhrasi by counteracting the Khara(roughness), Ruksha(dryness) Gunas of Vata, rigidity, and tightness by improving the conduction of nerves to travel uninterruptedly. Gridhrasi is primarily a Vata-dominant condition, the medicated oil provides lubrication to the spinal structures and muscles, reducing stiffness (Stambha) and improving joint mobility. Reduces pain (Ruk), Alleviates stiffness (Stambha) and heaviness

(Gaurava)Soothes tingling sensations (Toda, Spandana) and numbness (Suptata), Improves walking distance and reduces disability, Supports the healing of degenerated discs and nerve root compression

#### MODE OF ACTION

Kati Basti treats Gridhrasi (Sciatica) by applying warm medicated oil to the lower back, which provides heat (Swedana) and lubrication (Snehana) to the affected area. This process enhances blood circulation, relaxes tight muscles, strengthens Vata Dosha, and reduces pain by stimulating sensory receptors and decreasing the transmission of pain signals to the brain. The application of warm oil provides both Swedana (fomentation/sweating) and Snehana (oleation/lubrication). The heat from the warm oil causes vasodilation (widening of blood vessels), significantly increasing blood flow to the lower back and surrounding tissues. Increased circulation brings vital nourishment to the nerves, muscles, and joints, aiding in tissue repair and reducing stiffness. The heat stimulates sensory nerve endings, which helps to lower the intensity of pain signals sent to the brain. By promoting relaxation and improved blood flow, Kati Basti helps to relieve the pain and stiffness associated with Gridhrasi. The heat stimulates sensory nerve endings, which helps to lower the intensity of pain signals sent to the brain. By promoting relaxation and improved blood flow, Kati Basti helps to relieve the pain and stiffness associated with Gridhrasi.

# **CONCLUSION**

Katibasti is a type of Snigdha Sweda that can exert both cold and hot fomentation effects. The absorption, penetration, neural stimulation, vasodilation, and anti-inflammatory activity of Katibasti result in a reduction of signs and symptoms of sciatica or Gridhrasi. Prabhanjan Vimardana oil Katibasti showed clinically significant result in reduction of all the symptoms. Through this case we found a safe, simple, effective treatment without any complication, 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 hospitalization.

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