

A CLINICAL STUDY ON THE EFFICACY OF KATI BASTI USING SAHACHARADI TAILA IN VATAJA GRIDHRASI W.S.R (SCIATICA)

ABSTRACT

Gridhrasi is one of the eighty **Nanatmaja Vata Vikara** (Diseases only due to vitiated *Vata*) according to Acharya Charaka, who has also mentioned its types as- *Vataja* and *Vata-Kaphaja*. Acharya Sushruta has also considered it as a *Vataja* disorder and given its description in **Vatavyadhinidana** chapter. Acharya Vagbhatt has also included it among eighty *Vataja* disorders. Considering the cardinal symptoms which are *Ruka* (pain), *Toda* (pricking sensation), *Stambha* (stiffness) and *Muhurspandana* (twitching) in the waist, hip, back of the thigh, knee, calf region and foot respectively, it can be best correlated to sciatica. **Sciatica** is defined as pain along with the course of the sciatic nerve which is felt in the back of the leg running from the buttock down to the back of the thigh into the calf and foot. It is a symptom that arises due to compression or inflammation of the sciatic nerve. **Kati Basti** is an unparalleled treatment in painful conditions caused mainly by *Vatadosha*, usually in degenerative diseases. Kati Basti is used mainly to relief from pain and stiffness associated with bone, joint and or musculoskeletal pains. **MATERIAL AND METHOD::** In this study, *Kati Basti* was done in 10 patients selected from *Panchkarma* OPD, GAMC&H, Akhnoor, for 21 days for the management of *Vataja Gridhrasi* and the results were recorded after every follow up. **RESULTS:** The results observed based on the relief obtained on the subjective and objective parameters taken for consideration for this study and were found significant on all the above parameters. **CONCLUSION:** It showed that *Kati Basti with Sahacharadi taila* significantly helped in reduction of the signs and symptoms of the *Vataja Gridhrasi*.

KEYWORDS: *Gridhrasi, Vataja Gridhrasi, Nanatmaja Vata Vikara, Muhursapnandana, Sciatica, Sciatica nerve, Kati Basti, Sahacharadi taila.*

INTRODUCTION

Kati Basti is a combination of two words- *Kati* and *Basti*.

"Kati" is described as **"Sariramvatasthane shvekam"** in the Charaka Samhita⁽¹⁾, which means that it is the *sthana* of *Vata*. In the Susruta Samhita, the *Pramana* of *kati* is 18 *angula*⁽²⁾.

"Basti" is derived from the root **"Vas,"** suffixed by **"Tich"pratyaya**. The root "vas" can indicate the following meanings, according to *Vachaspathyam*⁽³⁾

- **"Vas –nivase"** – means to remain, to stay.
- **"Vas- acchadane"** – means to cover or wrap.

This is the form of giving fomentation or sudation to a localized area. The oils are heated to a tolerable temperature and then pooled over the painful area. *Kati Basti* is also considered as *Bahya Sthanika Basti*⁽⁴⁾.

Sciatica is a crippling ailment caused by sciatic nerve root pathology that makes it difficult to walk and leaves patients with pain and paresthesia in the sciatic nerve distribution. Because of its severity, it

occasionally interferes with a person's everyday activities and lowers their quality of life. Typically, movement aggravates the pain. Analgesics, muscle relaxants, painkillers, anticonvulsants, and NSAID's to reduce inflammation are frequently used in modern treatment and surgical operations with an eye toward a negative outcome⁽⁵⁾.

In Ayurvedic medicine, the illness Sciatica is comparable to *Gridhrasi*, which is classified as a *NanatmajaVatajaVikara*⁽⁶⁾. The word *Gridhrasi* generally suggests the patient's stride, which resembles that of a vulture because of the patient's excruciating, ongoing, and radiating pain⁽⁷⁾. *Ruka* (pain), *Toda* (pricking feeling), *Muhuspandana* (tingling sensation), and *Stambha* (stiffness) in the *Sphik*, *Kati*, *Uru*, *Janu*, *Jangha*, and *Pada* are the four primary symptoms of *VatajGridhrasi*. In *Vata-KaphajaGridhrasi*, one might see *Tandra* (drowsiness), *Gaurav* (heaviness), and *Aruchi* (anorexia)⁽⁸⁾. *SnigdhaSwedanas* like *Kati Basti* is typically utilized to treat low back pain and lumbosacral diseases. It improves local circulation, nourishes and bolsters muscles and nerves, and helps calm tenseness and spasms, and bring back adaptability. The intervertebral disc has degenerated in this instance, and the lubricating function of *ShleshakaKapha* is compromised⁽⁹⁾. This causes compression, irritation or inflammation of the *GridhrasiNadi* (sciatica nerve), which results in excruciating agony.

SahacharadiTaila is a classical Ayurvedic oil primarily indicated for treating Vata-related disorders affecting the muscles, joints, blood vessels, and nerves. It is prepared by infusing a base of sesame oil with a decoction of various potent herbs, prominently featuring Sahachara (*Strobilanthes ciliatus*). It is *Vatahara* (Alleviates Vata dosha), *Vedanasthapana* (Relieves pain), *Balya* (Strengthens muscles and nerves), *Snigdha* (Provides deep tissue nourishment), *Shothahara* (Reduces inflammation and swelling), *Ropana* (Promotes healing of tissues) and *Rasayana* (Rejuvenates musculoskeletal and nervous systems).

Its main ingredient are:⁽¹²⁾

1. *Sahachara*: Primary herb targeting nerve and muscle disorders.
2. *Dashamoola*: Alleviates inflammation and pain.
3. *Abhiru (Shatavari)*: Rejuvenates musculoskeletal and nervous system.
4. *TilaTaila*: Penetrative, nourishing base oil suitable for balancing Vata dosha.
5. *Go kshira*: Enhances the nutritive quality of the oil.
6. Paste of drugs like *Sevya (Khuskhus)*, *Nakha (Himsra)*, *Kushtha*, *Hima (Chandhana)*, *Ela*, *Surahva (Devdaru)*, *Priyangu*, *Nalada (Jatamansi)*, *Agaru*, *Lohita (Manjishtha)*, *Sprikka*, *Nalika*, *Ambu (Hribera)*, *Shaileya*, *Choraka*, *Mishiand Nata (Sugandhabala)*

AIMS AND OBJECTIVES

AIM: To evaluate the efficacy of *Kati Basti* using *Sahacharadi taila* in the management of *Vataja Gridhrasi*.

OBJECTIVES:

1. To reduce the pain associated with *Vataja Gridhrasi*.

2. To reduce the associated symptoms of *VatajaGridhrasi* like numbness, Stiffness, tingling sensation and weakness.
3. To reduce impact of disease on daily activities.

MATERIALS AND METHODS

MATERIALS:

- 1) *Masha powder* (Black gram powder) – ½ kg to 1 kg.
- 2) *Sahacharaditaila*– 200 -500 ml

METHOD:

10 patients between 25-70 years of age diagnosed with *VatajaGridhrasi* were selected after informed consent for the study. All the patients underwent uniform assessment that included detailed medical history, local examination and systemic examination. ECG was conducted to rule out heart failure and ischemic heart diseases. Liver function tests and kidney function tests were performed to rule out renal and hepatic dysfunction. Some basic blood tests were conducted, including tests for ESR, CBC, HIV, HbsAg and Anti HCV to look for any inflammation or infections. *Kati Basti* was performed in all 10 patients for 21 days with regular follow up.

POORVA KARMA (PRE-OPERATIVE PROCEDURE):

Patients were asked to evacuate urine and stools before coming to the table. A lumbosacral x-ray was obtained beforehand to specify the location for *Kati Basti*.

PRADHAN KARMA (OPERATIVE PROCEDURE)⁽¹⁰⁾:

Patients were asked to lie down on the table in prone position. First the lumbar region was cleaned with cotton where we apply *Kati Basti*. *Masha* dough was made into a ring shape and then fixed on the site of pain. Then lukewarm *Sahacharaditaila* was poured into the ring made of *masha* dough, placed over their lower back with the help of cotton from a distance of 4 *Angula* and kept for 30-45 minutes duration. The uniform temperature of the oil was maintained constantly during the treatment.

PASCHAT KARMA (POST OPERATIVE PROCEDURE)⁽¹⁰⁾:

After the completion of the treatment, first the oil was removed, then *Mashapishti* and the area was cleaned with cotton. *Mridhusamvahana* (oil massage) to whole body or lumbar region, buttocks and legs was given without applying pressure. After massage *Nadiswedana* or *Rookshaswedana* was given, according to the need. Patient was asked to take comfortable position and rest for another half an hour. The patients were advised not to be exposed to the air directly and to take rest in supine position on hard bed.

INCLUSION CRITERIA

1. Patients between the ages of 25-70 years were included in the study.

2. Random selection of patients irrespective of their gender, occupation, religion etc. was done from the OPD and IPD of Panchkarma Department of GAMC, Akhnoor, Jammu, J&K UT after informed consent was taken.
3. Patients suffering from *VatajaGridhrasi* were included only.

EXCLUSION CRITERIA

1. Patients with complete disc prolapse were excluded.
2. Patients suffering from *Vata-KaphajaGridhrasi* were excluded.
3. Patients with co-existing medical conditions such as heart failure, chronic liver disease, chronic renal disease, and chronic infectious diseases like tuberculosis (TB), HIV, hepatitis B, and hepatitis C were excluded from the study.
4. Patients with cardiovascular diseases like hypertension, coronary artery disease etc. were not included in the study.

DURATION OF COMPLETE TREATMENT

The *KatiBasti* treatment was performed for 45 mins for 21 days with 7 day procedure in two sessions and 7 days gap in between. A total of three follow ups were recorded i.e.

Day 0 = Enrollment day (F0)

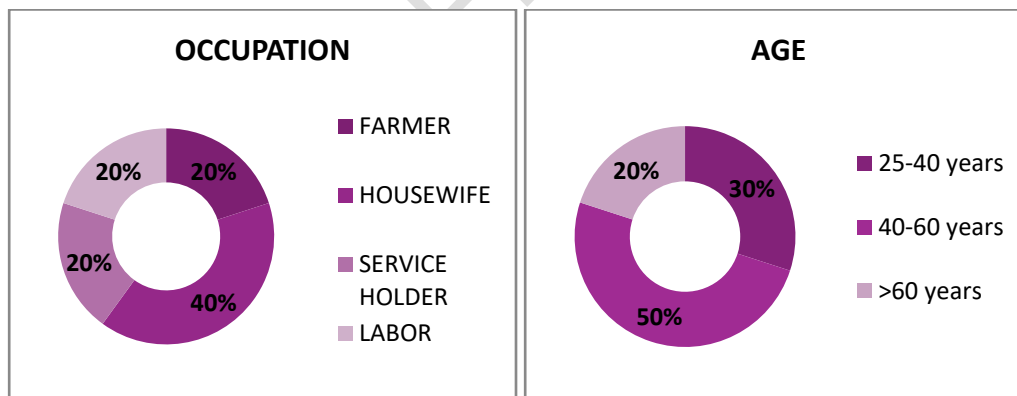
Day 7 = First follow up (F1)

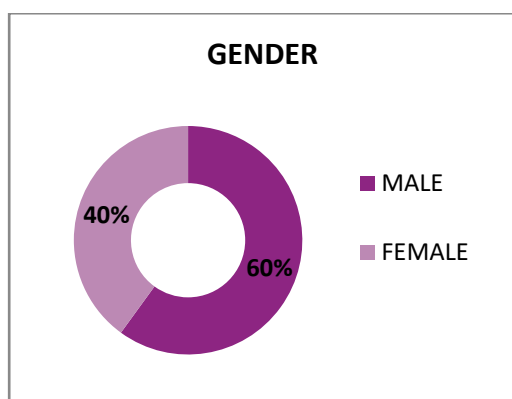
Day 14 = Second follow up (F2)

Day 21 = Third follow up (F3)

STATISTICAL DATA OF THE PATIENTS

The clinical observations from different aspects of the treatment have been represented showing the statistical analysis according to various factors like occupation, gender and age of the patients.





ASSESSMENT CRITERIA:

1. NATURE OF PAIN

G0: no pain

G1: dull ache or slight discomfort

G2: sharp or throbbing pain

G3: intense, debilitating pain

2. RADIATION OF PAIN

G0: no radiation

G1: radiation to thigh

G2: radiation to calf

G3: radiation to foot

3. ACTIVITY

G0: no impact on activities

G1: mild discomfort while performing tasks

G2: major discomfort, may require physical therapy or some analgesics

G3: severe debility along with weakness, inability to perform any task

4. ASSOCIATED SYMPTOMS

G0: No associated symptoms

G1: mild tingling sensation present

G2: tingling sensation with numbness present

G3: tingling, numbness and severe weakness present

163 **OBSERVATION**

PATIENTS	FOLLOW UPS	ASSESSMENT CRITERIA				IMPROVEMENT
		PAIN	RADIATION	ACTIVITY	ASSOCIATED SYMPTOMS	
Patient 1	Day 0 (F0)	G3	G3	G3	G2	N/A
	Day 7 (F1)	G2	G3	G2	G1	27.3%
	Day 14 (F2)	G2	G2	G2	G1	36.7%
	Day 21 (F3)	G1	G1	G1	G0	72.7%
Patient 2	Day 0 (F0)	G2	G2	G2	G1	N/A
	Day 7 (F1)	G1	G2	G1	G1	28.6%
	Day 14 (F2)	G1	G1	G1	G1	42.8%
	Day 21 (F3)	G1	G0	G0	G0	85.7%
Patient 3	Day 0 (F0)	G3	G2	G3	G3	N/A
	Day 7 (F1)	G2	G2	G2	G2	27.3%
	Day 14 (F2)	G2	G1	G1	G2	45.4%
	Day 21 (F3)	G1	G1	G0	G1	72.7%
Patient 4	Day 0 (F0)	G2	G1	G1	G2	N/A
	Day 7 (F1)	G2	G0	G0	G1	50%
	Day 14 (F2)	G2	G0	G0	G1	50%
	Day 21 (F3)	G0	G0	G0	G0	100%
Patient 5	Day 0 (F0)	G3	G3	G3	G3	N/A
	Day 7 (F1)	G2	G3	G3	G2	16.6%
	Day 14 (F2)	G2	G2	G2	G2	33.3%
	Day 21 (F3)	G1	G1	G2	G1	58.3%
Patient 6	Day 0 (F0)	G3	G2	G2	G1	N/A
	Day 7 (F1)	G1	G1	G1	G1	50%
	Day 14 (F2)	G1	G1	G1	G1	50%
	Day 21 (F3)	G1	G0	G0	G0	87.5%
Patient 7	Day 0 (F0)	G3	G2	G3	G2	N/A
	Day 7 (F1)	G3	G1	G2	G2	20%
	Day 14 (F2)	G2	G1	G1	G2	40%
	Day 21 (F3)	G1	G0	G1	G0	80%
Patient 8	Day 0 (F0)	G1	G1	G1	G0	N/A
	Day 7 (F1)	G0	G0	G0	G0	100%
	Day 14 (F2)	G1	G0	G0	G0	66.7%
	Day 21 (F3)	G0	G0	G0	G0	100 %
Patient 9	Day 0 (F0)	G2	G2	G2	G2	N/A
	Day 7 (F1)	G2	G2	G2	G1	12.5%
	Day 14 (F2)	G2	G1	G2	G1	25%
	Day 21 (F3)	G1	G0	G1	G0	75%
Patient 10	Day 0 (F0)	G3	G2	G2	G3	N/A
	Day 7 (F1)	G2	G1	G1	G1	50%
	Day 14 (F2)	G2	G1	G1	G1	50%
	Day 21 (F3)	G1	G1	G0	G1	70%

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165 **CALCULATIONS :**

166 Let G0 =0, G1=1, G2=2 and G3=3

167 Improvement in %age = [(Sum of Initial value (F0)– Sum of Final value) / Sum of Initial value (F0)] ×
168 100

169 **RESULTS**

170 Overall efficacy of *Kati Basti* using *Sehcharadi taila* was found to be 80.20%

171 **DISCUSSION**

172 Mode of action depends on the selection of proper area for procedure, oil used, duration of contact of
173 oil with area of application, amount of oil placed, duration of procedure and temperature of oil
174 applied. Because they function at the *Samprapti* location, the native *Snehana* and *Swedana* are
175 particularly effective and yield immediate effects.

176 Some of the potential benefits of *Kati Basti* include⁽¹¹⁾:

177 **REDUCING PAIN AND INFLAMMATION:** The warm *Sahacharadi taila* used in *Kati Basti* helps to reduce
178 pain and inflammation in the lower back by increasing blood flow to the affected area. The oil also has
179 a soothing effect on the nerves in the lower back, which can help to reduce pain. For e.g.. Due to its
180 *Madhura* and *Tikta Rasa*, *Sahacharadi* has the unique quality of *Gati Viseshatvam* (aids in movement).
181 Its *Vatahara*, *Bruhana*, and *Shothahara* qualities, as well as its analgesic and anti-inflammatory effects
182 can help alleviate inflammatory changes in the nerve and possibly to reduce symptoms of nerve root
183 compression.

184 **IMPROVING FUNCTION:** *Kati Basti* with *Sahacharadi taila* helps to help improve flexibility and range of
185 motion in the lower back, which can improve overall function and reduce disability. It helps to reduce
186 the symptoms of *Vataja Gridhrasi* by counteracting the *Khara* (roughness), *Ruksha* (dryness) *Gunas*
187 of *Vata*, rigidity, and tightness by improving the conduction of nerves to travel uninterruptedly.

188 **PROPERTIES OF THE OIL USED:** The use of the *Kati Basti* with *Sahacharadi Taila* at L4-L5 region is more
189 effective in controlling symptoms such as *Stambha* (stiffness), *Gaurava* (heaviness) and *Tandra*
190 (tingling sensation) and also on walking distance and the magnitude of pain.

191 **RELAXING THE MUSCLES AND JOINTS:** The Effleurage and Petrissage massage that follows the
192 *Kati Basti* treatment helps the oil to penetrate deeper into the tissues, as well as to help release
193 tension and stiffness in the muscles and joints of the lower back.

194 **IMPROVING CIRCULATION:** Warm oil is thought to help increase blood flow to the affected area, which
195 can promote healing and reduce pain. Vasodilation is caused by hot fomentation which promotes the
196 flow of blood and nourishment to the organ and finally helps the *Sahacharadi* oil to reach the
197 target tissue or organ. Sweating flushes toxins from the body and relaxes the tissues resulting in an
198 overall improvement in muscle spasms and pain. Increased peripheral circulation aids in the reduction
199 of edema, which can aid in the reduction of inflammation, reduces pain, and aids in faster healing.

200 **TARGETS A PARTICULAR AREA:** The retention of *Sahacharadi taila* on the lower back for a certain period
201 of time is believed to help penetrate deep into the tissues, muscles, and joints and provide a

therapeutic effect. The Masha dough ring has excellent binding capacity that help contain the oil and prevent it from spilling and leaking out, allowing for a concentrated treatment in the targeted area. Alsolt has *Vatashamak, Balya, Snigdha, Sandhanakara and MamsaVardhaka*. It is Non- toxic and Skin friendly, Unlikely to cause any irritation even during prolonged contact.

CONCLUSION

Kati Basti is a form of *Snehayuktasweda, Sagni, Ekanga, Snigdha*, and *SamshamaniyaBahiparimarjanachikitsa*. It is the combination of *Snehana* and *Swedana*, both work together in synchronous manner and help to relieve *Stambha, Gaurava* and *Sheeta*, as well as to lessen the severity of pain. *Kati Basti* is one such method in which rapid relief from symptomatology can be acquired from a *Shamana* perspective, as well as numerous medications that ease the severity of pain and improve functional ability, both of which are important in *Gridhrasi*. It is a *Bahirparimarjanachikitsa* that relieves *Stambha* and provides *Brumhana* qualities in the *Kati* area, which is where the disease occurs (lumbosacral region). The absorption, penetration, neural stimulation, vasodilation, and anti-inflammatory activity of *Katibasti* with *Sahacharaditai* result in a reduction of signs and symptoms of *VatajaGridhrasi*.

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