

## A COMPARATIVE CLINICAL STUDY OF KATI BASTI WITH CHINCHADI TAILA AND NIRGUNDI TAILA IN THE MANAGEMENT OF GRIDHRASI

<sup>1</sup>Dr Rahul Debnath <sup>2</sup>Dr Rashmi R

<sup>1</sup>P.G Scholar, <sup>2</sup>Professor and HOD, Dept of Panchakarma, Ramakrishna Ayurveda Medical College and Hospital, Bengaluru-Karnataka

### ABSTRACT

Kati Basti is believed to have a noteworthy role in the management of such conditions like Musculo skeletal pain predominant diseases like Gridhrasi. Sciatica (Gridhrasi) is a challenging disease to manage as various factors influence the outcome. Most Sciatica (Gridhrasi) patients are characterized by pain in one or both legs associated with Stamba, Toda, Ruk, Spandana, Aruchi, Gourava, Supti, Sparshaasayatha, Tandra. The aim of this study was to find out the efficacy of Kati Basti with Chinchaditaila and Nirgundi taila in the management of Gridhrasi. Kati Basti with ChinchadiTaila( Group A) - showed improvement in presentations like Toda (70%), Ruk( 75%), Supti (65%), Sparshaasayatha (50%) Spandana (80%), Gourava (50%), Aruchi(50%). Kati Basti with NirgundiTaila (Group B)- showed improvement in presentations like Toda (65%), Ruk ( 70%), Supti(55%), Sparshaasayatha(50%) Spandana (85%), Gourava (55%), Aruchi (55%) . Group A patients showed decrease in mean of  $1.40 \pm 0.11$  grading ( SLR) and Group B patients showed decrease in mean of  $1.35 \pm 0.11$ grading ( SLR).

**KEYWORDS:** Gridhrasi , Sciatica, Kati Basti , Chinchadi Taila, NirgundiTaila

### INTRODUCTION

In the present era, Musculo-skeletal diseases are more common because of competition or race for everything. The prime factors that are responsible for the decline of Musculo skeletal strength are irregular food habits, swift jerky movements, stress, suppression of natural urges, lack of proper sleep and relaxation. In this scenario specially Sciatica, Low back pain incidences are increasing day by day.

The first attack is often sudden in onset and occurs while lifting stooping, though sometimes pain in slight at first but increase

over the next few hours the patient may be fixed, bent and has backache. Sometimes sciatica follows soon after and made worse by straining. Usually these symptoms subside in a few days or week. Low back pain is more common, second only to the common cold. With all the symptomatology of Sciatica comes under the purview of Gridhrasi. According to Acharya charaka, stamba, Ruk, Toda, Spandana, Aruci, Tandra and Gourava are the symptoms<sup>1</sup>. About 90% of sciatica is due to a spinal disc herniation pressing on the one of the lumbar or sacral nerve

roots.<sup>2</sup> Gridhrasi is pathological entity in which pain starts from the buttocks, waist or back and radiates gradually towards the thigh, knee, leg and foot. Sedentary life style, stress, improper posture, continuous jerky movements, long travelling etc, put maximum pressure on the spine and lower portion of the pelvis.<sup>3</sup> If there is stiffness pain, pins and needles restricted mobility and frequent catching sensation it is due to vata on the other hand if drowsiness heaviness and anorexia are present in addition it is due to vayu and kapha.

Despite of technological and pharmacological advances, the management of sciatica is still a medical problem, where no permanent medical treatment is available, except some palliative measures, were again chances of reoccurrence are high.

Ayurvedic approach towards the disease is holistic. Numerous therapeutic modalities have been advocated by our Acharyas in the management of each and every disease.

Management of Gridhrasi comes under the treatment protocol of VataVyadhi Chikitsa

### MATERIALS AND METHODS

Details of Chinchadi Taila and Nirgundi Taila

Chinchadi Taila	Quantity	Nirgundi Taila	Quantity
• Cinhcapatra Kasaya	11200 gms	• Nirgundi Kashaya	11200gms
• Sigru Kalka	100 gms	• Nirgundi Kalka	350 gms
• Sarjarasa Kalka	100gms	• Langalikalka	350 gms
• Arjaka Kalka	100 gms	• TilaTaila	2800gms
• SaindhavaLavana	100 gms		
• SauvarcalaLavana	100 gms		
• Samudra Lavana	100 gms		
• BidaLavana	100 gms		
• Tilataila	2800 gms		

#### Source of Data

40 patients with features of Gridhrasi, were selected randomly for the study from the OPD and IPD of RAMC, H and RC, Bangalore.

where in Snehana, Swedana, Basti chikitsa make a major part.

Kati basti is a bahyaupakrama which has both Snehana and Swedana effects, in which comfortably warm oil is kept over the kati region for a certain period of time. And Kati basti can be used as an OPD level procedure.

Chinchadi taila<sup>4</sup> is indicated in vatavyadhi has been taken up for the study in the form of Katibasti in the management of Gridhrasi. Its effects are compared to use of Nirgundi taila<sup>5</sup> in the form of Katibasti in the management of Gridhrasi

### AIMS AND OBJECTIVES

- 1) To evaluate the efficacy of Kati basti with Chinchadi Taila in the management of Gridhrasi.
- 2) To evaluate the efficacy of Kati basti with Nirgundi Taila in the management of Gridhrasi.
- 3) To evaluate the comparative efficacies of Kati Basti with Chinchadi Taila and Nirgundi Taila in the management of Gridhrasi.

#### Source of Drug

Genuine Raw drugs were procured from market. Nirgunditaila and Chinchadi Taila was prepared in Baishajya kalpana Dept of RAMC, Bengaluru.

### Diagnostic criteria:

1. SLR test positive, CBC, CRP
2. X-ray lumbosacral spine AP and lateral view
3. MRI if necessary

### Inclusion Criteria

1. Patients with clinical signs & symptoms of Gridhrasi & Sciatica like Stamba, Toda, Ruk, Spandana, Aruchi, Gourava, Supti, Sparshaasayatha, Tandra
2. Patients of age limits between 20 to 60 years, irrespective of Gender and socio-economic status.
3. Patients having tenderness along the course of the Sciatic nerve.
4. Patients fit for katibasti.

### Exclusion Criteria

1. Patients with other systemic diseases like Diabetes mellitus, Tuberculosis,
2. Traumatic lesion in lumbo-sacral region. Infective, Neoplastic conditions of Vertebral Column and Spine.
3. Hip joint arthritis.
4. Pelvis pathology.
5. Pregnancy.

### Study Design

A comparative clinical study with pre and post-test design was conducted on 40 patients with lakshanas of Gridhrasi.

### Assesment Criteria

The assessment was done on the basis of following subjective and objective parameters.

### Subjective Parameters

1. Ruk
2. Toda
3. Spandana
4. Supti
5. Sparshaasahyata
6. Gourava
7. Aruchi

### Objective Parameters

1. SLR test

### Grading

#### 1) Stambha (Stiffness)

- a) No Stambha – 0
- b) Mild Stambha – 1
- c) Moderate Stambha – 2
- d) Severe Stambha – 3

#### 2) Ruk(Pain)

- a) No pain– 0
- b) Mild pain – 1
- c) Moderate pain – 2
- d) Severe pain – 3

#### 3) Toda(pricking sensation)

- a). No pricking sensation– 0
- b). Mild pricking sensation – 1
- c). Moderate pricking sensation – 2
- d). Severe pricking sensation – 3

#### 4) Spandana (fasciculation)

- a). No Involuntary Movement spandana– 0
- b). Mild spandana( Sometimes for 5-10 mins) – 1
- c). Moderate spandana( Daily for 10-30 mins) – 2
- d). Severe spandana (Daily for 30-60 mins) – 3

#### 5) Sparshasahyatha( Tenderness)

- a) No Tenderness -0
- b) Mild Tenderness on deep touch-1
- c) Severe Tenderness with fine Touch -2

#### 6) Supti( Numbness)

- a) Absent - 0
- b) Present - 1

#### 7) Aruchi

- a) Absent - 0
- b) Present - 1

#### 8) Gourava( Heaviness)

- a) Absent - 0
- b) Present - 1

**9) SLR Test**

- a) >90 degree- 0
- b) 75 to 90 degree- 1
- c) 50 to 74 degree- 2
- d) 30 to 49 degree - 3
- e) <30 degree - 4

Assessment was done on: pretest-1<sup>st</sup> day, post-test – 7<sup>th</sup> day and on completion of virama kala i.e. on 14<sup>th</sup> day.

**Table 1 showing Overall assessment**

No Response	0% CHANGE
Mild Response	<20% improvement
Moderate Response	20-50% Improvement
Marked response	>50% Improvement

**Intervention schedule-**

Study was intervened by certain instruction given to the patients of two groups. Patients were advised to drink hot water, to avoid sexual intercourse, suppression of natural urges, exercise, excessive speech, uneven sitting and lying postures, exposure to wind, cold, heat, dust, anger and grief and advised to rest as much as possible.

**OBSERVATIONS AND RESULT:**

**Study design:** A Comparative two group prospective clinical study.

A Comparative clinical randomized two groups parallel study with 40 patients with Sciatica randomized in to two groups, 20 patients in Group A (Patients were subjected to Kati Basti with Chinchadi taila), 20 patients in Group B (Patients were subjected to Kati Basti with Nirgundi taila).

**Table 02: Age distribution of patients studied.**

Age in years	Group A	Group B	Total
21-30	2(10%)	1(5%)	3(7.5%)
31-40	4(20%)	9(45%)	13(32.5%)
41-50	7(35%)	6(30%)	13(32.5%)
51-60	7(35%)	4(20%)	11(27.5%)
Total	20(100%)	20(100%)	40(100%)
Mean ± SD	45.70±9.87	41.65±8.68	43.68±9.40

Samples are age matched with P=0.176, student t test

In Group A, 2(10%) were under the age group of 21-30 years, 4 (20%) were under the age group of 31- 40 years, 7(35%) were under the age group of 41- 50 years and 7(35%) were under the age group of 51- 60 years age group. In Group B, 1(5%) were under the age group of 21-30 years, 9 (45%) were under the age group of 30- 40 years, 6(30%) were under the age group of 41- 50 years and 4 (20%) were under the age group of 51- 60 years age group.

**Table 03: Gender distribution of patients studied**

Gender	Group A	Group B	Total
Female	9(45%)	8(40%)	17(42.5%)
Male	11(55%)	12(60%)	23(57.5%)
Total	20 (100%)	20 (100%)	40(100%)

Samples are gender matched with P=0.749, Chi-Square test

**Gender** - In Group A number of Male patients- 11(55%) and females 9(45%). In Group B number of Male patients - 12(60%) and females 8 (40%).

**Table 04: Education distribution in two groups of patients studied**

Education	Group A	Group B	Total
Graduate	10 (50%)	11 (55%)	21 (52.5%)
Post Graduate	1 (5%)	1 (5%)	2(5%)
R & W	9 (45%)	8 (40%)	17 (42.5%)
Total	20 (100%)	20(100%)	40 (100%)

P=1.000, Not Significant, Fisher Exact Test

In group A Graduate Patients were 10(50%), Patients who could Read & write were 9 (45%), Post Graduates 1 (5%). In group B Graduate Patients were 11(55%), Patients who could Read & write were 8 (40%), Post Graduates 1 (5%)

**Table 05: Occupation- distribution in two groups of patients studied**

Occupation	Group A	Group B	Total
Field work	2 (10%)	1 (5%)	3 (7.5%)
Physical Labor	4 (20%)	2 (10%)	6 (15%)
Sedentary	14 (70%)	17 (85%)	31 (77.5%)
Total	20 (100%)	20 (100%)	40 (100%)

P=0.542, Not Significant, Fisher Exact Test.

**Table 06: Diet- distribution in two groups of patients studied**

Diet	Group A	Group B	Total
Mixed	20(100%)	17(85%)	37(92.5%)
Veg	0(0%)	3(15%)	3(7.5%)
Total	20(100%)	20(100%)	40(100%)

P=0.231, Not Significant, Fisher Exact Test  
Diet of Patients- In Group A Number of Patients who were vegetarians were 0(0%) and who took mixed diet were 20 (100%).

In Group B Number of Patients who were vegetarians were 3(15%) and who took mixed diet were 17 (85%).

**Table 07: Toda (Pricking Pain)- A Comparative assessment at different study points in two groups studied**

Toda (Pricking Pain)	Before Treatment	After 7th sitting	After 14th day	% Difference
Group A (n=20)				
• No pricking sensation	0(0%)	0(0%)	1(5%)	5.0%
• Mild pricking sensation	0(0%)	3(15%)	14(70%)	70.0%
• Moderate pricking sensation	2(10%)	11(55%)	5(25%)	15.0%
• Severe pricking sensation	13(65%)	6(30%)	0(0%)	-65.0%
• Very Severe pricking sensation	5(25%)	0(0%)	0(0%)	-25.0%

Group B (n=20)				
• No pricking sensation	0(0%)	0(0%)	0(0%)	0.0%
• Mild pricking sensation	0(0%)	3(15%)	13(65%)	65.0%
• Moderate pricking sensation	9(45%)	12(60%)	7(35%)	-10.0%
• Severe pricking sensation	6(30%)	5(25%)	0(0%)	-30.0%
• Very Severe pricking sensation	5(25%)	0(0%)	0(0%)	-25.0%
P value	0.029*	1.000	0.731	-

## DISCUSSION

Gridhrasi is an age old well documented disease which cripples humans. Gridhrasi not a contemporary health problem but it has been familiar to the mankind since Samhita period. The disease is caused by Vata Dosha. The causes of Gridhrasi are not described in the classics, but the factors vitiating Vata are the Nidanas for Gridhrasi. Bad posture, irregular and unwholesome dietary habits, travelling in jerky vehicles etc. are most commonly encountered factors in today's life. Vasti is a significant, quick acting, perfect sovereign panchakarma procedure. As such Kati vasti a localized form of Vasti strategy is implemented at this contemplation to scrutinize the efficacy in respect with vatahara property of Chinchadi Taila and Nirgundi Taila. Vata is an invincible dosha out of triad helps in maintenance of life i.e. Ayu. This not only depends upon the physical or materialistic factors but also on the psyche and factors influencing the mind. A base of tilaitaila, which is said as the best to, pacified Vata with its unctuousness and specific properties of Vataharatwam. It is also acting as brimhana, thereby nullifies Vata. Thus, the Chinchadi Taila and Nirgundi Taila, has been included in the process of pacifying the Vata. The reason behind could be Vata pacification through its action on vata and as Aromatherapy which

activates the nervous system through peripheral nerve endings by direct and also indirect. The said actions of Chinchadi Taila and Nirgundi Taila in the base of tila taila act traditionally on the Vata to neutralize. The process exerts physical pressure that activates nerves and its root cause. Phizoelectricity, physical pressure impulse electricity enhances the charge and discharges of nerve impulse and reduce the pain and oil with its properties nourishes the bone. Its action directly on the bone nourishment has to be elucidated in further.

## CONCLUSION

Gridhrasi has been considered as a major problem to the physicians since long but Ayurveda has concise but exact description of the disease in the samhitas. Gridhrasi is commonly seen in society as a prominent problem. Vyana Vayu is an essential factor for manifestation of the disease Gridhrasi. Mainly Vatavyadhi Chikitsa has been advocated in Gridhrasi. There is no direct reference regarding Nidana and Samprapti of Gridhrasi. Physical as well as mental stress was observing das the common causes. Gridhrasi comes under 80 types of Nanatmaja Vatavyadhi. Gridhrasi can be equated with Sciatica or Sciatic syndrome in modern parlance. Modern treatment of Sciatica is not very satisfactory and is often associated with

serious side effects. Katibasti may be considered as both Snehana and swedan process with more deviation toward the swedana as snehayukta type. Kati basti is a therapeutic procedure popularized during last of 20<sup>th</sup>, to treat different causes of lumbago, sciatica syndrome. Katibasti with Chinchadi Taila group and Katibasti with Taila group showed almost same percentage relief final assessment parameters. Katibasti with Chinchadi Taila is more effective to control Kapha dominance symptoms like Stambha, Graha, Gaurava and Tandra and also on walking distance and magnitude of Pain. No major adverse or side effects were encountered during this treatment period. Preventive aspect and patient's education play an important role in the management of Gridhrasi. Proper guidelines about posture etc along with exercises strengthening the spine are helpful for effective management.

#### REFERENCES

1. Agnivesa, Charaka samhita, Ayurveda Deepika commentary of chakrapani, Edited by Dr. Ramkaran sharma and Vaidya Bhagawan dash, Chaukamba Surabharati prakashan, Varanasi, Reprint-2010, Chikistasthan, volume-5, chapter-28, verse-56-57, pg-35.
2. <http://en.m.wikipedia.org/wiki/sciatica> as viewed on 15.02.2019.
3. Sathavane GV, Pandya DH, Baghel MS. Effect of vatariguggulu in the management of Gridhrasi (Sciatica), AYU 2015, VOL – 36, Issue:1, Page no- 41-45.
4. G Prabhakara Rao, Sahasrayogam, Sanskrit Text with English Translation and Prabhakara Vyakhyanam, Chaukhambha Publications – New Delhi, Chapter no – 18, Page no – 485

5. Agnivesha, Charak Samhita Chakrapani Datta Ayurveda Dipika by Ram Karan Sharma and Vaidya Bhagwan Dash, Chowkhamba Sanskrit Series Vol – V, Edition: Reprint -2004, Chapter no -28, Page no – 58.

#### CORRESPONDING AUTHOR

Dr Rahul Debnath

PG Scholar, Dept of Panchakarma, Ramakrishna Ayurveda Medical College and Hospital, Bengaluru-Karnataka

Email: rahulsalema22@gmail.com

Source of support: Nil

Conflict of interest: None Declared

#### Cite this article as

Dr Rahul Debnath: A Comparative Clinical Study of Kati Basti With Chinchadi Taila and Nirgundi Taila in the Management of Gridhrasi VI(5): 1944-1950