

A CLINICAL STUDY TO EVALUATE THE EFFICACY OF HINGUTRIGUNA TAILA VIRECHANA KARMA IN GRIDHRASI w.s.r TO SCIATICA

Karthikeya Prasad¹, Vineeth Joseph²

¹Guide; ²PG-Scholar;

Department of PG Studies in Panchakarma, Karnataka Ayurveda Medical College and Hospital, Ashoknagara, Mangalore, Karnataka, India

Email: drkarthikshet@gmail.com

ABSTRACT

Gridhrasi is a *vata*vikara characterised by *shoola* starting from *sphik* and radiates down to *kati*, *prishtha*, *uru*, *janu*, *janga* and *paadha* and associated with *sthamba*, *ruk*, *toda*, and *spandana*. *Gridhrasi* when associated with *kapha*, it presents with symptoms like *tandra*, *gaurava* and *arochaka*. The signs and symptoms of *Gridhrasi* mentioned in Ayurvedic classics can be correlated to sciatica of modern medicine, where symptoms precise along the course of the sciatic nerve, most often with pain radiating into the buttock and lower limb. It is a relatively common condition with a lifetime incidence varying from 13% to 40%. *Virechanakarma* is one of the *sodhanakarma* where *adhobhagaharasodhana* is achieved. **Objectives of the Study:** 1. To study effect of *Virechanakarma* in detail. 2. To evaluate the efficacy of *Hingutrigunatailavirechanakarma* in *Gridhrasi*. It was a single blind clinical study with a pre and post-test design in 30 patients who were diagnosed with *Gridhrasi*. Then *virechana* with *hingutrigunataila* was carried as per the procedure of *virechana*. Patients were subjected to *samsarjanakarma* based on their *shuddhilakshanas*. The assessment criteria were noted before and after treatment and on follow up. **Results:** The assessment of the overall effect of the treatment revealed showed moderate response in symptoms after treatment.

Keywords: *Gridhrasi*, *Sciatica*, *Trikatuchurna*, *Tilataila*, *Hingutrigunataila*.

INTRODUCTION

Ayurveda is one of the most ancient medical sciences in the world. It is the 'Science of life' which deals with all aspects of life. It aims at not only curing the disease, but also in maintaining the health of healthy individuals. Ayurveda classics always emphasized the need of advancement in the science to keep pace with the need of time.

Twenty-first century is the era of lifestyle disorders. Humans by their innate nature get along with these changes and adopt very quickly. In the world of modernization, man is neglecting his health for achieving various goals and worldly pleasures. Overexertion, improper sitting and standing postures in work place, jerking movements in the travel etc. invariably causes jerks to the spinal column, leads to

low back ache and its related problems like Sciatica. In this way, this disease is now becoming a significant threat to the working population.

According to classics, *Gridhrasi* is a *vatavikara* characterised by *shoola* starting from *sphik* and radiates down to *kati*, *prishtha*, *uru*, *janu*, *janga* and *paadha* and associated with *sthamba*, *ruk*, *toda*, and *spandana*. *Gridhrasi* when associated with *kapha*, it presents with symptoms like *tandra*, *gourava* and *arochaka*.¹

The signs and symptoms of *Gridhrasi* mentioned in Ayurvedic classics can be correlated to sciatica of modern medicine. Sciatica is caused by compression or irritation of the sciatic nerve, the longest nerve in the human body. Injury to the sciatic nerve and its branches results in sciatica, pain that may extend from the buttock down the posterior and lateral aspect of the leg and the lateral aspect of the foot.²Hence, movement of the affected leg is restricted and patient walks with difficulty. The treatments available in modern medicine like muscle relaxants, NSAIDs, corticosteroids and physiotherapy gives temporary relief from pain and has adverse effects on long term usage. Surgery is the last option in patients with adverse symptoms where there is lot of complications incurred due to non-invasive procedure, which may result in physical disability of any kind. There is a lot of scope in finding safer drugs and some cost effective non-invasive procedures for achieving better efficacy.

Panchakarma is the unique part of purification therapy of Ayurveda. Procedure in *panchakarma* eliminates vitiated *doshas* completely and thus prevents the recurring of the disease.⁴The procedure by which the vitiated *doshas* are get eliminated from the body is called *shodhana*.⁵The *Virechanakarma* is one of the five *sodhanakarmas* where *adhobhagaharasodhana* is achieved.⁶

Virechanakarma is simple, easy to perform and readily accepted by the patients. In the clinical texts, large number of formulations is described for *Virechanakarma*, but only few are in practice. Acharya

Charaka mentioned *mridhusnehana* and *virechana* for the *vatavyadhis*.⁷

In *Bhaishajyaratnavali* also, the administration of *virechana* karma using *erandataila* mentioned for *vatavyadhis*.⁸In *Gridhrasi*, *Virechana* is advised by Acharya Vangasena.⁹

Hingutrigunataila used in this study which acts as *vatakaphahara* and has *ushnavirya*, *deepana*, *pachana*, *adhobhagahara* properties. The *erandataila* in it expels the *doshas* accumulated in the *dhatu*s. Thus considering the above facts, the present study “The efficacy of *hingutrigunatailavirechana-karma* in *gridhrasi*” was undertaken.

OBJECTIVES

The objectives of the study are

- To study effect of Virechana karma in detail.
- To study the disease Gridhrasi in detail.
- To evaluate the efficacy of Hingutrigunataila Virechana karma in Gridhrasi.

MATERIALS AND METHODS:

SOURCE OF DATA

Literary source:

All the Ayurvedic, modern literatures and contemporary texts including the journals, websites about the disease, procedure and drugs are reviewed and documented for the intended study.

Sample source:

Patients attending the OPD and IPD of Department of Panchakarma, Karnataka Ayurveda Medical College Hospital and other camps complaints of *Gridhrasi* will be included for the proposed study.

Pharmacological source:

The formulation selected for research work, *Hingutrigunataila* was prepared in Bhaishajyakalpana department, Karnataka Ayurveda Medical College.

Sample size

In this study total 30 patients between the age of 30 to 60 years having classical signs and symptoms of *Gridhrasi* were selected randomly from OPD and IPD of Panchakarma Department of Karnataka Ayurveda Medical College Hospital, Mangalore.

Inclusion criteria

- Patient with features of *Gridhrasi* namely *ruk, toda, stambha, spandana* over *sphik, kati, prishtha, uru, janu, jangha* extending upto *pada*.
- Positive SLR test.
- Positive Bragard’s test.
- Positive Lasegue’s sign.
- Patients with age of 30 to 60 years.
- Patients fit for *Virechanakarma*.

Exclusion criteria

- Patients with history of trauma and infections to spine.
- Patients with metabolic disorders like diabetes mellitus, hyperlipidemia are excluded.
- Patients not fit for *Virechanakarma* are excluded.

Diagnostic criteria

- *Ruk* on *sphik, kati, prishtha, uru, janu, jangha* and *padaparyantavedana*

- *Toda*
- *Stambha*
- *Spandana*
- *Gourava*
- *Aruchi*
- *Tandra*
- Patient presenting with signs and symptoms of Sciatica.
- Radiological examination of the lumbosacral spine in anteroposterior and lateral position.

Investigations

- Blood Routine Examination (CBC, S. Creatinine, S. Uric acid, RA factor, RBS)
- Radiological examination of the lumbosacral spine in anteroposterior and lateral position.
- Urine routine examination.
- MRI if necessary.

Table 1: Method of drug administration for *Virechana karma*

Procedure	Drug and dose	Duration
<i>Deepana</i> and <i>pachana</i>	<i>Trikatuchurna</i> 3g twice a day with warm water	3 days
<i>Snehapana</i>	<i>Murchitatilataila</i>	3 – 7 days
<i>Abhyanga</i> and <i>swedana</i>	<i>Murchitatilataila</i>	3 days
<i>Virechanakarma</i>	<i>Hingutrigunataila</i> 20 – 30 ml	1 day
<i>Samsarjanakarma</i>	Diet as per <i>shuddhi</i>	3 – 7 days

Follow up: Approximately 20 days after treatment.

CRITERIA FOR ASSESSMENT

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

SUBJECTIVE CRITERIA (GRADING)

1. Ruk (Pain)

Table 2: Grading of *Ruk* parameter

Severity of <i>ruk</i> (pain)	Grade
No pain	0
Occasional pain	1
Mild pain (No difficulty in walking)	2
Moderate pain (Slight difficulty in walking)	3
Severe pain (Severe difficulty in walking)	4

2. *Toda* (Pricking sensation)

Table 3: Grading of *Toda* parameter

Severity of <i>toda</i> (pricking sensation)	Grade
No pricking sensation	0
Occasionally pricking sensation	1
Mild pricking sensation	2
Moderate pricking sensation	3
Severe pricking sensation	4

3. *Stambha* (Stiffness)

Table 4: Grading of *Stambha* parameter

Severity of <i>stambha</i> (stiffness)	Grade
No stiffness	0
Stiffness for few minutes after sitting for long duration but relieved by mild movements	1
Stiffness more than 1 hour or more than once in a day but routine works are not disturbed.	2
Stiffness 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

4. *Spandana* (Fasciculation)

Table 5: Grading of *Spandana* parameter

Severity of <i>spandana</i> (fasciculation)	Grade
No <i>Spandana</i>	0
Sometimes for 5 to 10 minutes	1
Daily for 10 to 30 minutes	2
Daily for 30 – 60 minutes	3
Daily >1 hour	4

5. *Gaurava* (Heaviness)

Table 6: Grading of *Gaurava* parameter

Severity of <i>gaurava</i> (heaviness)	Grade
No feeling of heaviness	0
Occasional feeling of heaviness not affecting the normal movements	1
Frequent feeling of heaviness affecting the normal movements	2
Feeling of heaviness throughout the day severely affecting the normal movements	3
Feeling of heaviness throughout the day totally Hampering normal movements	4

6. *Aruchi* (Anorexia)

Table 7: Grading of *Aruchi* parameter

Severity of <i>aruchi</i> (anorexia)	Grade
Normal taste in food, feeling to eat food in time	0
Feeling to take food but not having taste	1
<i>Anannabhilasha</i> – not feeling to take food even if hungry	2
<i>Bhaktadvesha</i> – aversion to food	3
<i>Abhaktachanda</i>	4

7. Tandra (Drowsiness)

Table 8: Grading of Tandra parameter

Severity of tandra (drowsiness)	Grade
No tandra	0
Mild tandra occasionally but does not affect daily routine	1
Moderate tandra frequently many times in a day that hamper daily routine	2
Moderate tandra whole day and Need to take rest can't work	3
Severe tandra whole day also at mental level, reduced alertness etc.	4

OBJECTIVE CRITERIA (GRADING)

Straight leg raising test

Table 9: Grading of SLR test

SLR test	Grade
More than 90°	0
71° – 90°	1
51° – 70°	2
31° -50°	3
Up to 30°	4

Bragard's test

Table 10: Grading of Bragard's test

Bragard's test	Grade
Absent	0
Mildly positive	1
Moderately positive	2
Highly positive	3

Deep tendon reflexes

Table 11: Grading of deep tendon reflexes

Deep tendon reflexes	Grade
Normal	0
Diminished	1
Exaggerated	2
Absent	3

Range of movements at lumbosacral spine

Table 12: Grading of range of movements of lumbosacral spine

Range of movements at lumbosacral spine		Score
Flexion	More than 90°	0
	71° – 90°	1
	51° – 70°	2
	31° – 50°	3
	Up to 30°	4

Extension	More than 30°	0
	21° – 30°	1
	11° – 20°	2
	Up to 10°	3
Lateral flexion	More than 30°	0
	21° – 30°	1
	11° – 20°	2
	Up to 10°	3
Lumbar Rotation	More than 45°	0
	31° – 45°	1
	16° – 30°	2
	Up to 15°	3

CRITERIA FOR ASSESSING THE TOTAL EFFECT

Considering the overall improvement had shown by the patient in signs and symptoms, the total effect of the therapy has been assessed as below

Table 13: Criteria for assessing total effect

Criteria for assessing total effect	
Complete relief	Complete relief
Marked improvement	Marked improvement
Moderate improvement	Moderate improvement
Mild improvement	Mild improvement
No improvement	No improvement

DISCUSSION

Deepanapachana

Deepanapachana is done for a period of three days using *trikatchurna*. The ingredients of *trikatchurna* have *katurasa*, *ushnavirya*, and *laghu*, *ushna*, *teekshna* qualities which do *amapachana* and *agnideepana* by virtue of its properties. The pacification of *kapha* and *vata* will occur. The process of *deepana* is stimulation of *agni*, whereas *pachana* is related with digestive and metabolic properties of *agni*. *Pachana* drugs does *pakwata* of *doshas* while *deepana* drugs cause separation of *slishtadoshas*. This helps to attain *niramavastha*, thereby facilitating *shodhana* efficiently.

Snehapana

After the *niramata* by *deepana* and *pachana*, *snehapana* was started with 30ml of *murchitatilataila* and increased 30 ml each day till *samyaksnigdhalakshanas* are observed. In present clinical study maximum dose given in a patient was 450 ml and a minimum

of 180 ml. This is one of the very important stages in *shodhana* procedure. Administration of *sneha* does the *doshavilayana* and moistens the *srotas*. *Snehapana* was indicated prior to *virechana* in the line of treatment and the purpose of giving *snehapana* is for *doshotkleshana* before *virechana*. *Snehana* makes *klinnata* of *dooshitadosha* which helps in *shakha* to *koshtabhigamana* of *doshas* after *swedana*.

Abhyanga and swedana

Abhyanga was done in *vishramakala* before *virechanakarma* for three days. *Abhyangamurchitatilataila* was used and for *swedana*, *sarvangabashpasweda* was performed. *Tilataila* has *ushnavirya*, *vatakaphanashaka* property and *karmukata* of *sholanashana*. It brings *mardavata*, thereby pacifying *kapha*, *vata* and does *dhatupushti*. The obstruction of *srotas* is cleared by *abhyanga* due to softening occurs in tissues and accelerates the movement of lymph, which also carries out some waste products. It helps to increase the circulation of blood

which carries nutritional products. In *mriduswedana* using *sarvangabashpasweda*, it does liquefaction of *klinnadoshas* thereby helps to bring the vitiated *doshas* from *shakha* to *koshta*. Hence it helps in the elimination of vitiated *doshas* through *shodhana* procedure by bringing them to *koshta*.

Virechana

Virechanakarma is most commonly used *shodhana* therapy in general practice. It means elimination of vitiated *doshas* through *adhomarga*. Along with *ushna*, *tikshna*, *vyavayi*, *vikashi* properties, the *virechana* drugs have predominance of *prithvi* and *ap-mahabhuta* and *adhobhagaharaprabhava*.

The *virechanadravya* used in this study *hingutrigunatailahas hingu*, *saindava*, *erandataila* and *rasonarasa as ingredients*. *Hingu* has *deepana*, *pachana*, *vatakaphaprashamana* properties, thus it helps in the *deepana* and *pachana* of the patient along with controlling the vitiated *vata* and *kaphadosha*. *Saindava* is *tridoshahara* and it has *agnideepaka* and *pachaka karmas*. *Erandataila* helps in the expulsion of vitiated *vata* from the *pakwashaya*. It has *sothahara*, *vedanasthapana*, *deepana karmas*, thus helps in controlling the *shoola*. *Rasonarasa* has *vatakaphahara* properties and *vedanasthapana*, *deepana*, *pachana*, *anulomana*, *soolapraashamana*, *amapachana karmas*. It helps in controlling the vitiated *vata* and *kaphadosha*, *ruk* and also helps in *anulomana*.

Discussion on Overall Effect of the Treatment

In the overall assessment, among 30 patients, 26 patients showed moderate response (86.7%) i.e. 50-75% reliefs in signs and symptoms and 4 patients (13.3%) showed mild response i.e. below 50% relief in signs and symptoms.

CONCLUSION

On the basis of observations and results made and through the discussion the following conclusions are made at the end of this study.

- *Gridhrasi* occurs due to the vitiation of *vata* and it affects the normal movements of the lower extremities. Impairment of *sakthiutkshepana*

karma is main symptom along with *ruk*, *toda*, *stambha*, *spandana* etc symptoms.

- The signs and symptoms of *Gridhrasi* mentioned in Ayurvedic classics can be correlated to sciatica of modern medicine.
- The main cause of sciatica is the degenerative changes in the lumbar vertebrae, which can be correlated with *dhatukshayajanyanidana* of *Gridhrasi*.

Results

- In overall assessment of the study, 26 patients shown moderate response and 4 patients shown mild response to the treatment.
- Statistically there was moderate improvement noted.

Limitations of the study

- The sample size was small.
- Longer follow up was not done.
- The study duration is short. It requires repeated *shodhana* to achieve complete remission of disease. It can be best indicated as a long procedure.

Scope for the further study

- Same study can be repeated by taking larger samples.
- Same study can be taken for comparing with other *virechanayogas* and with other *shodhana* procedures.
- Possibilities of complete remission of disease by repeated *virechana* can be studied. Repeated *shodhana* helps in breaking *samprapthis* and give complete relief to patients.
- Effect of *virechana karma* along with external applications can be studied.

Source of Support: Nil

Conflict Of Interest: None Declared

How to cite this URL: Karthikeya Prasad & Vineeth Joseph: A Clinical Study To Evaluate The Efficacy Of Hingutriguna Taila Virechana Karma In Gridhrasi W.S.R To Sciatica. International Ayurvedic Medical Journal {online} 2018 {cited September, 2018} Available from: http://www.iamj.in/posts/images/upload/2030_2036.pdf