

CLINICAL EVALUATION OF SNIGDHA AGNIKARMA IN MANAGEMENT OF
GRIDHRASI W.S.R. TO SCIATICA- RESEARCH ARTICLEDr. Santosh Kumar M. Arjunagi*¹ and Dr. Arun B. Jainer²¹Professor and HOD, Dept. of Shalya Tantra, S.D.M Institute of Ayurveda and Hospital, Bangalore.²Associate Professor, Department of Panchakarma, S.D.M Institute of Ayurveda and Hospital, Bangalore.***Corresponding Author: Dr. Santosh Kumar M. Arjunagi**

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ABSTRACT

In recent decades, lifestyle is an important factor of health. According to WHO, 60% of related factors to individual health and quality of life are correlated to life-style. Gridhrasi (Sciatica) is one of the 80 types of Vatavyadhi. Considering signs and symptoms, Gridhrasi can be correlated with Sciatica. It is a *Ruja Pradhana (Painful) Vatavyadhi* i.e., **PAIN**, which makes the patient difficult to walk; hampering the daily routine of the individual, hence it is necessary to adopt fast management for the same. In this regard few Ayurvedic para-surgical procedures, which are very effective, simple, safe and economic in nature can become handy for AYURVEDIC PHYSICIANS. Agnikarma is one of such procedures. Sushrut acharya mentioned Agnikarma chikitsa in the management of Pain (Ruja) by Vitiated Vata (Prakupita Vata) Dosha in Twak (Skin). Mamsa (Muscle), Sira (Vessels), Snayu (Ligaments), Sandhi (Joints), and Asthi (Bone). Acharya Charak has not described it in separate chapter but has described it as one of the treatment measures in different Vatavyadhis (Neuromusculoskeletal Disorders) such as Gridhrasi (sciatica). Thus, the objective of present study was to evaluate the efficacy of Snigdha Agnikarma in case of Gridhrasi & thus improve the daily routine of affected individual. Open study was performed in SDM Hospital at OPD & IPD level, patients were registered for study after taking written informed consent. 30 cases present with classical features of Gridhrasi as given in text were selected from OPD & IPD of SDMAH Bangalore, and were managed by procedure of Snigdha Agnikarma. Data was collected & observations were made before treatment, daily basis (Seven Days), on 14th day, & 21st day of treatment. There was a highly significant reduction in the parameters like pain, stiffness and increased in walking distance. **Visual Pain Analogue Scale was used for analysis of overall effect of treatment.**

KEYWORDS: Snigdha Agnikarma, Gridhrasi, Sciatica.**INTRODUCTION**

According to Acharya Charaka, *Gridhrasi* is one among the 80 types of *Vataja Nanatmaja Vikaras*.^[1] The name *Gridhrasi* is due to typical gait of the patients which resembles with the bird '*Gridhra*' (Vulture).^[2] It happens because patient tends to limp on affected side during walking. According to Acharya Charaka, Stamba, Vedana, Toda, Spandana are the lakshanas of *Vataja Gridhrasi*^[3], Aruchi, Tandra, Gaurav are the additional symptoms of *Vata- kaphaja Gridhrasi*.^[3] Based on signs and symptoms, we can correlate it to Sciatica.

Sciatica is painful condition in which the pain begins in lumbar region and radiates along the course of sciatic nerve. Low Backache is a global problem with 80% of the world population suffering from it. According to Survey, the lifetime incidence of Sciatica varies from 30-40% and has an annual incidence of 5% in the world.^[4] As per the treatment of Sciatica is concern, in the conventional medical practice only the symptomatic management and a few surgical procedures are done. All

these are having their own complications and adverse reactions. In *Ayurvedic* science^[5] various modalities of treatment are explained for the management of *Gridhrasi*, *Agnikarma chikitsa* is said to be superior. According to *Sushrut Samhita*, patients treated with *Agnikarma* procedure never suffers from the same disease again, i.e., never reoccurs. The procedure of *Agnikarma* does not have side effect, it is cost effective, can be managed with patients as ambulatory and procedure can be done in the OPD itself.

NEED FOR STUDY

If drugs such as non-steroidal anti-inflammatory drugs are used for longer duration in chronic musculoskeletal disorders, they can cause potential side effects on the body, and to bring back the normalcy in locomotory system without any surgical intervention, also we can avoid longer Hospital stay during treatments like Panchakarma and other Procedures at IPD level; hence, there is an emerging need to search for non-surgical, effective, safe, and economic treatment option which will

reduces the longer hospital stay and has quick relief from pain.

Agnikarma treatment itself is difficult to explain and execute because of non-availability of Instruments, very less utilized in daily routine by Ayurvedic doctors and post procedure management of Agnikarma Dhagda vrana (Cautery wound) at multiple areas in Sciatica cases. It is an effort to use the safe drugs which has properties of Vedana shamaka (Analgesic) and Vata-Kapha hara and Agnikarma Dhagda vrana (Cautery wound) will not be seen after the procedure; hence it is an effort to bring a safe modified Snigdha Agnikarma procedure which will not produce post procedure Agnikarma Dhagda vrana (Cautery wound) and also gives quick relief in short duration of treatment in sciatica.

PROPERTIES OF ERAND (*Ricinus communis*)

According to Rasa Raj Nighanthu *Ricinus communis* is well-known drug used in many disorders in different form or in combination with other drugs. The main action of this drug is Vatahara (controlling Vata), Shothahara (Anti-inflammatory) and Vedana shamaka (Analgesic). The *Ricinus communis* drug is commonly used in Amavata (Rheumatoid Arthritis), Arsha (Hemorrhoids), Gridhrasi (Sciatica), Vibandha (constipation), Yakrut Roga (Liver Diseases), Plihodara (Spleen Disorders), Kati Shula (Back Pain) etc.^[8]

Fresh leaves

- Rasa (Taste): Katu (pungent), kashaya/Astringent, Madhura/Sweet
- Guna (Characteristics): Sukshma, Snigdha/Unctuous, Tikshna/Sharp
- Virya (Potency): Ushna/Hot
- Vipaka (Post Digestive Effect): Madhura/Sweet
- Effects on Tridoshas (Humor): Pacifies Vata and Kapha.^[8]

AIM

The present research work is aimed at analyzing the role of Snigdha Agnikarma in pain management in Sciatica.

OBJECTIVE

1. To evaluate efficacy of Snigdha Agnikarma with Erand patra in Gridhrasi
2. To simplify the procedure of Agnikarma
3. To give quick Pain relief to Sciatica patients
4. To perform Agnikarma without making Dhagda Vrana
5. To minimize the follow up dates

MATERIAL AND METHODS

The study was performed in the Department of Shalya Tantra, SDMIAH, Bangalore. We have selected 30 patients of clinically diagnosed Gridhrasi (Sciatica) on the basis of signs & symptoms as mentioned in our Samhita.

INCLUSION

- Patients with classical features of Gridhrasi, namely pain over the Sphik (waist), Kati (back), Prushta (hip), Uru (thigh), Janu (knee), Jangha (calf region), extending up to Pada (foot), Stambh (stiffness), Toda (pricking pain), tingling and numbness of limbs, difficulty in walking etc. were included.
- Patients with straight leg rising test positive at 20 to 40 degrees
- Age group between 25-55 years.
- Patients fit for Agnikarma.

EXCLUSION

- Cases of Spondylolisthesis, Sacroiliac arthritis, Herpes simplex infection causing radiating pain
- Tuberculoma, or any cyst compressing the nerve root, diabetic neuropathies are excluded
- People of Paittik Prakriti, where Agnikarma is contraindicated.

INVESTIGATIONS

- Routine Hematology & Biochemical investigations Including FBS PPBS, Uric acid, RA factor, Urine routine will be conducted
- Digital X-ray of Lumbo Sacral Spine AP and Lateral view

ASSESSMENT PARAMETERS

Ruk (Pain), Toda (Pricking Pain), Sthambha (Stiffness), Spandana (Twitching), Degree of straight leg raising (SLR).

CLINICAL STUDY

The study outcome variables (assessment criteria) were recorded before treatment. Each patient was undergone to Snigdha Agnikarma procedure daily for 7 Days.

The study was assessed and recorded on every day. And follow up was done on 14th day and on 21st day and recorded the improvement.

The improvement was measured on the basis of relief in the cardinal symptoms of the disease.

DURATION OF TREATMENT

Snigdha Agnikarma treatment was given daily on selected painful areas for a week.

MATERIALS USED

For Snigdha Agnikarma: Eranda Patra, Moorchita Taila.

METHOD OF AGNIKARMA PROCEDURE

Poorva Karma (Pre-operative procedure)- Patient subjected for Snigdha Agnikarma were treated with Sarvanga Abhyanga (Generalized oleation) with Moorchita Taila followed by Sarvanga Bashpa Sweda (Generalized steam) for 30 mins. After the Abhyanga and Sweda the tender points on affected limb were identified and marked.

Pradhana Karma (Main procedure)- Eranda Patra, is chopped into small pieces, and then fried over a pan with mild flame using Moorchita Taila. The fried (hot) material was wrapped with another large sized Erandapatra and a pottali is made.

This Hot pottali is applied with required minimum pressure at selected, marked tender points (painful area) for 30 seconds; the application is continued till the temperature of pottali falls down.

Paschat Karma (Post-operative procedure)- The area is cleaned and covered with Erand Patra-advised to remove the Erand patra after 2 hours.

PARAMETERS FOR ASSESSMENT

Subjective Parameters

The assessment of relief of sign and symptoms was done after completion of treatment by following graded subjective parameters. The grade of Ruk-pain, Toda-pricking, Sthamba- stiffness and Spandana-twitching were noted before and after treatment.

Objective Parameter

Straight Leg Raising Test, the goniometric reading of degree of Straight Leg Raise was measured with the Goniometer before and after treatment.

Table No 1: Grade for Pain.

Sl.No	Ruk- Pain	Grade
1	No Pain	0
2	Mild Pain aggravation of pain with movement	1
3	Moderate Pain aggravation of pain (Tolerable) with movement	2
4	Severe Pain aggravation of pain without tolerance even in short movement	3

Grade Description

- **0** No Pain during walking and movement
- **1** Mild Pain- aggravation of pain with movement for few minutes but relieved itself
- **2** Moderate Pain- aggravation of pain (Tolerable) with movement
- **3** Severe Pain- aggravation of pain without tolerance even in short movement

Grade Description

- **0** No stiffness
- **1** Stiffness for few minutes after sitting for long duration but relieved by mild movements
- **2** Stiffness more than 1 hour or more than once in a day but routine works are not disturbed
- **3** Stiffness lasting for more than 1 hour or many times a day severely affecting the daily routine

Table No 2: Grade for Toda – Pricking.

Sl.No	Toda - Pricking	Grade
1	No Pricking	0
2	Mild Pricking	1
3	Moderate Pricking	2
4	Severe Pricking	3

Grade Description

- **0** No Pricking
- **1** Pricking for few minutes after sitting/walking for long duration but relieved by mild movements
- **2** Pricking more than 1 hour or more than once in a day but routine works are not disturbed
- **3** Pricking lasting for more than 1 hour or many times a day severely affecting the daily routine even during sitting/walking

Table No 4: Grade for Spandana- Twitching.

Sl.No	Spandana- Twitching	Grade
1	No Twitching	0
2	Mild Twitching	1
3	Moderate Twitching	2
4	Severe Twitching	3

Grade Description

- **0** No Twitching at all
- **1** Daily once in a day for few minutes which is relieved spontaneously
- **2** Many times in a day affecting daily routine
- **3** Daily for many times severely hampering daily routine.

Table No 3: Grade for Sthambha- Stiffness.

Sl.No	Sthambha- Stiffness	Grade
1	No Stiffness	0
2	Mild Stiffness	1
3	Moderate Stiffness	2
4	Severe Stiffness	3

Table No 5: Grade for Straight Leg Raising Test.

Sl.No	Straight Leg Raising Test	Score
1	90 degree	0
2	40 -60 degree - Mild	1
3	20 -40 degree Moderate	2
4	< 20 degrees Severe	3

OBSERVATION AND RESULTS

Signs and symptoms	Mean score		X	% of Relief	SD	SE	t	p
	B.T.	A.T.						
<i>Ruka</i> Pain	3.4	0.4	3.0	88.23	0.9428	0.2981	10.06	<0.001
<i>Toda</i> Pricking	3.8	0.4	3.4	89.47	0.8944	0.4	8.5	<0.01
<i>Stambha</i> Stiffness	2.71	0	2.71	100.0	0.488	0.1844	14.71	<0.001
<i>Spandana</i> Twitching	2	0.666	1.333	66.66	0.5164	0.2108	6.324	<0.01
SLR test	3.1	0.4	2.7	87.097	0.9487	0.3	9	<0.001

In this study effect of therapy shows highly significant with p value <0.001 results in *Ruka*, *Stambha*, *Spanadana*. There was improvement in SLR test which also gives highly significant with p value < 0.001. Moderately significant results with p value <0.01 seen in case of *Toda* and *Spandana*. It is found that patients were clinically improved with the treatment of *Agnikarma* with no side effect of the therapy. About 88.23% relief found in case of pain immediately after the treatment which is one of cardinal symptom due to which patient became very comfortable and mentally satisfied by the treatment. 89.47% relief in *Toda*, About 100% relief was seen in case of stiffness after the therapy.

DISCUSSION

Gridhrasi having predominance of vata doshas as it comes under 80 Vataj Nanatmaja vyadhi and have Kapha Anubandha with it. As per Samanya Visesha Siddhanta, being Ushna gunatmaka Snigdha Agnikarma acts against the properties of Vata and Kapha doshas. As Gridhrasi is Stambha and Ruk Pradhana Vyadhi, it is necessary to adopt Stambhahara and Ruja-hara line of treatment.

By using the Dravya like Eranda Patra and Murchita Taila which are having the Vatahara, Kapha- Vatahara Shothahara Guna, UshnaVirya, Tikshna, Sukshma, Vikasi guna, it spreads immediately and reduces Stambha and Ruja.^[7] Hence Snigdha Agnikarma is effective in disorders like Gridhrasi in which there is Vata and Kapha dosha dominance.

CONCLUSION

- The procedure was simple, economical & can be done in OPD level gives instant relief to most of the patient.
- *Snigdha Agnikarma* has significantly reduces symptoms of *Gridhrasi*.
- Number of sittings of *Snigdha Agnikarma* depends upon the chronicity and severity of the disease.
- *Snigdha Agnikarma* has significantly improved SLRT angle and walking time.
- *Snigdha Agnikarma* is tolerable by patients if it is done up to the limit of acceptable temperature (Heat). Main advantage in this procedure is post procedure care of Dagdha vrana can be avoided because this Snigdha Agnikarma will not make any kind of Agnidagdha vrana.

- It is very easy to learn and adopt in beginners (Young Doctors)
- *Snigdha Agnikarma* along with Panchakarma and Shamana chikitsa may yield more fruitful results.
- No adverse effects were observed

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