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Clinical Evaluation of Agnikarma In Management of Gridhrasi

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ABSTRACT

Gridhrasi(Sciatica) is one of the *Vatavyadhi* caused by aggravated *Vatadoshas*. This disease is characterised by cardinal symptom i.e. Radiating pain (*Ruja*), which makes the patient difficult to walk; hampering the daily routine of the individual. No specific remedy is given in modern medical science, patients depends on painkillers which has temporary action. *Agnikarma* is the procedure indicated by *Aacharya* in *Vatavyadhi*. Sushrut mentions *Agnikarma* as superior most than other therapeutic procedures as it gives instant relief in pain. Thus the objective of present study was to evaluate the efficacy of *Agnikarma* in case of *Gridhrasi* & thus improve the daily routine of affected individual. Open study was performed in NIA, Jaipur at OPD & IPD level, patient 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 NIA, Jaipur & management by procedure of *Agnikarma* was conducted. Data was collected & observation were made before treatment, on 7thday, on 14thday, & 21stday of treatment There was a highly significant reduction in the parameters like pain, walking distance, stiffness, SLR test seen in the study gp. Visual Pain Analogue Scale was used for analysis of overall effect of treatment. Management of *Gridhrasi* by *Agnikarma* gives instant relief in pain but oral *Shaman* medicine has to use to break the *Samprapti* of the disease & to check the recurrence.

Keywords: Agnikarma, Gridhrasi, Sciatica

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INTRODUCTION

Chronic Low Back Pain (CLBP) is the most common cause contributing to a large no. of lost work days & disabilities claims. Backache is a global problem with 80% of the world population suffering from it. 8 out of 10 people are affected with backache at some stage of their life¹. Functional disabilities, sleep disturbances, fatigue & medication abuse are seen in people suffering from CLBP. Backache is the 2nd most common reason for people all over the world to seek a doctor². According to Survey, the lifetime incidence of Sciatica varies from 30-40% & has an annual incidence of 5% in the world³. In some studies, it is found that lumbar disc herniation is the commoner cause of sciatica & early surgery provided faster recovery than prolonged conservative care but in some other studies it is also observed that, 40% of back surgeries fail & even in successful surgeries, pain & subsequent disabilities have returned after a variable period of 6 month to 20 yrs. Due to fear, high cost, or complications of surgical treatment, patients avoid surgeries & continue with analgesics for timely pain relief which produce Gastrointestinal side effect.

In *Ayurvedic* science⁴, various modalities of treatment are explained for the management of *Gridhrasi*, *Agnikarma chikitsa* is said to be superior. Various painful conditions⁵ like joint pain, headache, abdominal cramps/discomfort & few convulsive disorders like epilepsy, schizophrenia & psychosomatic disorders can be treated with this intentional heat burn therapy. In *Chakradatta*⁶ & *Yogratnakara*⁷, we find direct reference of *Agnikarma* indicated for *Gridhrasi* which is to be done over the *Paadakanistakam* (little toe). According the *Sushrut Samhita*⁸, patients treated with *Agni karma* procedure never suffers from the same disease again, i.e. it never reoccurs. Several researches have shown that *Agnikarma Chikitsa* is more effective compared to the other treatments such as oral drugs, *kshar karma*, *siravyadha* or even surgeries etc. The process of *Agnikarma* is normally done by using gold, silver, *Pancha Dhatu*, Iron shalaka or even with metal coins, ring or with seeds of bhallatak, pippali etc⁹. The procedure of *Agnikarma* does not have side effect, it is cost effective, can be managed with patients as ambulatory & can be done in OPD itself.

MATERIALS AND METHODS

The study was performed in the Kaychikitsa department, Madhav Vilas, Hospital, NIA, Jaipur. We have selected 30 patients of clinically diagnosed *Gridhrasi* on the basis of signs & symptoms as given in *Ayurvedic* text.

Inclusion Criteria:

- Patients with classical features of Gridhrasi , namely pain over the Sphik (waist), Kati (back), Prisht (thigh) , Uru (hip) , Janu (knee) , Jangha (calf region) , extending upto Pada (foot) , Stambh (stiffness) , Toda (pricking pain) , tigling & numbness of limbs, difficulty in walking etc. were included .
- Patients with SLR test +ve, patients with chronicity of disease over at least 6month.

Exclusion Criteria:

- Cases of Spondylolisthesis, Sacroiliac arthritis, Herpese simplex infection causing radiating pain .
- Tuberculoma, or any cyst compressing the nerve root, diabetic neuropathies are excluded.
- People of Paittik constitution, where Agnikarma is contraindicated.
- Debilitated patients, child patients below 16 yrs of age , patients affected with multiple wounds , cases with destructed vertebral bodies , & fractures of the vertebra were excluded.

Study Design:

In this Open controlled study, 30 patients who satisfied the study criteria included in the study Outcome variables were recorded before treatment, on 7th day, on 14th day, & on 21st day after treatment.

Criteria for Assessment

The improvement in the patient was assessed mainly on the basis of relief in the cardinal symptoms of the disease. To assess the effect of therapy objectively, following scoring pattern was used.

Table.1: Subjective criteria for the assessment.

<p>Ruka(Pain)</p> <ul style="list-style-type: none"> • No pain reported - 0 • Occasional Pain - 1 • Mild pain but no difficulty in walking -2 • moderate pain but slight difficulty in walking -3 • Severe pain but severe difficulty in walking - 4 	<p>Numbness</p> <ul style="list-style-type: none"> • No Numbness -0 • Mild Numbness -1 • Moderate Numbness – 2 • Severe Numbness – 3
<p>Toda (Pricking Sensation)</p> <ul style="list-style-type: none"> • No pricking sensation -0 • Occassionally pricking sensation -1 • Mild pricking sensation -2 • Moderate pricking sensation -3 • Severe pricking sensation -4 	<p>Walking distance</p> <ul style="list-style-type: none"> • Patient can walk upto 1 km without pain -0 • Patient can walk upto 500m without pain -1 • Patient can walk upto 250m without pain -2 • Patient feels pain on standing - 3 • Patient cannot stand - 4

Stambha (Stiffness) <ul style="list-style-type: none"> • No Stiffness – 0 • Sometimes for 5-10 mins - 1 • Daily for 10-30 mins- 2 • Daily for 30- 60 mins- 3 • Daily more than 1hr- 4 	Tingling sensation <ul style="list-style-type: none"> • No Tingling sensation -0 • Occasionally Tingling sensation -1 • Mild Tingling sensation -2 • Moderate Tingling sensation -3 • Severe Tingling sensation -4
Spandana (Twitching) <ul style="list-style-type: none"> • No Twitching – 0 • Sometimes for 5-10 mins - 1 • Daily for 10-30 mins- 2 • Daily for 30- 60 mins- 3 • Daily more than 1hr- 4 	SLR test <ul style="list-style-type: none"> • Above 90 degree -0 • Above 75 & Below 90 -1 • Above 60 & Below 75 -2 • Above 45 & Below 60 -3 • Below 45 -4

Intervention:

The procedure of *Agnikarma* was conducted in the minor OT of Department of Shalya Tantra of the hospital. The material used for *Agnikarma* was Panchloha Shalaka .

Procedure:

First of all the procedure of *Agnikarma* was explained to the patients in detail before conducting the treatment & patient was mentally prepared by giving assurance. As a preoperative measure, patient was advised to consume *Snigdha* (unctuous) & *Picchila* (slimy) food before treatment .On the day of procedure , patient was made to lie in prone position , with leg extended on minor OT table . Patient was instructed to relax.

Preoperative:-

- Patient's consent to undergo *Agnikarma* treatment was taken.
- Routine blood investigation's like CBC. Blood sugar etc done.
- Inj. T.T. 0.5ml over deltoid region given to patient.
- Selected site was cleaned with *Triphala Kwath*.

Main procedure: -

Site for the point of tenderness was chosen. Points at which *Agnikarma* would be done marked with marker. At a distance of about 4 fingers Bindu dagdhas were made by red hot Panchloha shalaka .No. of Bindu dagdhas made depends on the path & Intensity of the pain. During each dagdhas that much pressure was used which gives the *samyak lakshanas like twak sankocha , shabda pradurbhava , daurgandha* .Precaution to avoid the slurring of Shalaka was taken.

Post operative:

After dagdhas, pulp of Aloe vera was applied over treated part & then powder of Yashtimadhu & Haridra was sprinkled over there. The patient was advised to keep away the part from water for 24 hrs & not to take curd, peas, grams, rice, & cold water.

Observations

Table 2 : Demographic data

Demographic parameters	No. of patients
Age (yrs)	
<30	3
31-40	7
41-50	10
51-60	6
61-70	4
Sex	
M	12
F	18
Limb affected	
R	11
L	19

According to demographic data of this study , it is observed that , maximum patient belongs to age grp of 31-40yrs of age , there were 16 female patients & 14 male patients found in the study. Maximum patients show left sided affected limb, occurrence of If limb involvement may not have specific reason behind .

RESULTS AND DISCUSSION

Table 3: Effect of therapy on Signs & Symptoms

Sign & Symptoms	Mean Score		X	% of relief	SD	SE	t	p
	B.T.	A.T.						
Ruka	3.4	0.4	3.0	88.23	0.9428	0.2981	10.06	<0.001
Toda	3.8	0.4	3.4	89.47	0.8944	0.4	8.5	<0.01
Stambha	2.71	0	2.71	100.0	0.488	0.1844	14.71	<0.001
Spandana	2	0.666	1.333	66.66	0.5164	0.2108	6.324	<0.01
Tingling sensation	3.75	0.625	3.125	83.33	0.991	0.3504	8.9188	<0.001
Numbness	1.875	0.5	1.375	73.33	0.5175	0.183	7.5144	<0.001
Walking distance	1.7	0.6	1.1	64.706	0.3162	0.1	11	<0.001
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*, Tingling sensation of lower limb, numbness. There was improvement in SLR test which also gives highly significant with p value < 0.001 .Moderately significant results with p value <0.01seen in case of *Toda* & *Spandan*. 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 & mentally satisfied by the treatment .89.47% relief in *Toda*, About 100% relief was seen in case of stiffness after the therapy. Gridhrasi is one of painful condition which hampers the daily routine of the patient. This disease having predominancy of

Vata doshas as it comes under eighty vataj nanatmaj vyadhi & may have kapha anubandh with it. Thus radiating pain from lumber region to the lower extremities may show stiffness in the lower limb & patient got difficulty n walking , or continuous standing even for short period. Ayurveda believes that being *ushna* treatment *Agnikarma* acts against the qualities of *vata* and *kapha doshas* and hence *Agni karma* cures all the *vataja* and *kaphaj* disorders . Pain occuring anywhere in the body is due to *vata*, *Agni karma* being *ushna* chikitsa pacifies *vata*, and thus the pain is relieved immediately after *Agnikarma*. Similarly *kaphaj* disorders also get cured by the *ushna* i.e hot qualities of *Agnikarma*. According to *Ayurveda*, every dhatu(tissue) has its own *dhatvagni*(tissue Agni) which is responsible for the nourishment , Increase & decrease of dhatu. When this *dhatvagni* becomes *manda* diseases begin to manifest. Thus in this condition agni karma works by giving external heat there by increasing the *dhatvagni* which helps to digest the aggravated *doshas* and hence cures the disease .While describing the *Gridhrasi*, Aacharya *Sushrut* has given more emphasis on involvement of ligament of heel & toe afflicted with vata dosha which obstruct the movement of leg. In the chapter of *Vaatvyadhi chikitsa Adhyaay* aacharya *Charaka* has mentioned process of *Agnikarma* in case of *Gridhrasi* .So as to discontinue the recurrence & for *Samprapti Vighatan Hetu* , patient should be given Oral *Vatshamak* medication.

CONCLUSION

Agnikarma therapy shows highly significant results in nearly all signs & symptoms, especially in case of pain as it is one of the most uncomfortable factor for patient. The entire patient tolerated the treatment modality well & there were no side effect noticed in any of the patient. The procedure was simple, economical & can be done in OPD level gives instant relief to most of the patient. But still to avoid the recurrence of the disease & to break the *samprapti*, patient has to continue on oral shaman medication.

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