

EFFECT OF RAKTAMOKSHANA KARMA IN THE MANAGEMENT OF GRIDHRASI

Manorma Singh¹, Suman Sharma², Anil Sharma³, Sanjeev Sharma⁴

1. Manorma Singh P.G.Scholar,P.G.Deptt.Of Shalya Tantra P.G.Department Of Shalya Tantra,Rajiv Gandhi Govt. P.G. Ayurvedic College, Paprola - 176115 H. P. (India)

2. Suman Sharma Sr. Lecturer, P.G. Deptt. Of Shalya Tantra P.G. Department Of Shalya Tantra,Rajiv Gandhi Govt. P.G. Ayurvedic College, Paprola - 176115 H. P. (India).

3. Dr. Anil Sharma Reader, P.G. Deptt. Of Shalya Tantra P.G. Department Of Shalya Tantra,Rajiv Gandhi Govt. P.G. Ayurvedic College, Paprola - 176115 H. P. (India).

4. Sanjeev Sharma Professor, P.G. Deptt. Of Shalya Tantra P.G. Department Of Shalya Tantra,Rajiv Gandhi Govt. P.G. Ayurvedic College, Paprola - 176115 H. P. (India)

ABSTRACT

Gridhrasi is a *Nanatamaja Vata Vyadhi*, the clinical features simulate with *Sciatica*. For its management various treatment modalities are employed with variable outcomes. Present clinical study was a prospective and unicentral work designed to assess the efficacy of *Raktamokshana Karma* in the management of *Gridhrasi* and to provide a cheap, safe and effective *Ayurvedic* modality of treatment to the patients of *Gridhrasi*. It was carried out on a single group with a sample size of 30 patients out of which 7 were dropouts. Ethical clearance from IEC was obtained. In this randomized clinical trial, patients with age ranged from 25-60 years of either sex were selected strictly following the inclusion and exclusion criteria set for the same. Total 90ml blood was withdrawn in three sittings at an interval of 10days (30ml in each sitting). *Raktamokshana karma* from the Great Saphenous vein of the affected side above the ankle was done by using sterile disposable syringe and needle. Following the standard set criteria for evaluation, the analysis revealed the results to be statistically highly significant on all the variables of assessment criteria, both subjective and objective. Aggregate percentage relief observed after the third sitting was 35.11%. It reveals that *Raktamokshana karma* has a role in the management of *Gridhrasi*. However, this therapy should be combined with other measures like oral medication, *Kati basti* and *Matra Basti*.

Key words: Gridhrasi, *Sciatica*, *Raktamokshana Karma*, Great Saphenous Vein.

INTRODUCTION: *Gridhrasi* is a well known disease since *Samhita* Period. The name '*Gridhrasi*' denotes a peculiar type of gait (simulating with the gait of a vulture called as *Gridhra*)¹ that victim of the disease shows due to extreme pain with a particular pattern of radiation in his lower limb. It has been enumerated under 80 types of *Nanatmaja Vata Vyadhis* described in *Charaka Samhita*² and its clinical features simulate with *Sciatica*. *Sciatica* is the syndrome characterised by a distinct nature of pain distribution along the course of sciatic nerve. The radiation

of pain is from the low back region into the buttock, down into the lower extremity along its posterior or lateral aspect. *Acharya Charaka*³ has also described a peculiar radiation pattern of the pain. Owing to the gravity of pain and disability associated with the disease- '*Gridhrasi*' (*Sciatica*), its immediate management is necessary. Various conservative measures viz. rest, immobilisation, physiotherapy, analgesics etc. are employed with varying success rates. In recalcitrant cases surgery may be advisable. Despite of intensive management, the recurrence of its

symptoms takes place; necessitating a better, safer, economic and more efficacious approach towards the cure. *Raktamokshana Karma* (therapeutic bloodletting) by *Sira Vyadha* has been enumerated as the first *chikitsa karma* in the management of *Gridhrasi* by Acharya *Sushruta*⁴ and Acharya *Charaka*⁵. According to *Sushrut Samhita*, the main seat of *Gridhrasi Vyadhi* is '*Kandra*'. *Kandra* along with *Sira* is considered as the *Updhatu* of *Rakta Dhatu*⁶. By way of *Rakta Mokshana Karma*, the vitiated *dosha* can be directly turned out of the body, thereby providing immediate relief.

AIMS AND OBJECTIVES:

- To assess the efficacy of *Raktamokshana Karma* in the management of *Gridhrasi*.
- To assess the tolerability and acceptability of *Raktamokshana Karma* by the patients.

MATERIALS AND METHODS

Ethical Clearance: Before beginning the trial, the proposed clinical study was approved by the Institutional Ethical Committee.

Selection of the Patients: This trial was conducted in the Deptt. of *Shalya Tantra* and its associated OPD and IPD at R.G.G.P.G .Ayu. College and Hospital, Paprola, Dist. Kangra (H.P) -176115. Patients from 25-60 yrs. age of either sex were selected for the trial.

Study Design and Sample size: This study was unicentral, Open and prospective clinical trial. This study has been carried out on a single group with sample size of 30 Patients.

Consent of the patient and Registration: After counselling; informed, written and witnessed consent was received from the patients. Willing patients then were registered as a trial subject and a

trial code was given to each subject. Consent for the procedure of *Raktamokshana* from the patient was received separately prior to each sitting of the procedure.

INCLUSION CRITERIA: Patients willing for trial of age group 25-60 years of either sex with the features of *Gridhrasi* (*Sciatica*) like Pain (*Ruka*) started in the back, gluteal region and radiated down one or both of the lower limbs, Pricking sensation(*Toda*), Stiffness(*Stambha*), Twitching (*Spandana*), Anorexia(*Aruchi*), Torpor (*Tandra*), Heaviness(*Gaurava*), (+ve) SLRT (20⁰– 60⁰), (+ve) Fajersztajn's test.

EXCLUSION CRITERIA: Patients not willing for trial, below age of 25 yrs. and above 60 yrs, with the evidence of malignancy and co-agulopathy, recent history of trauma, fracture and surgery of the affected lower limb, history of spine injuries, diseases of spine e.g. Pott's spine, malignancies (both primary and secondary), severe spinal canal stenosis, peripheral vascular disease or peripheral neuropathy or varicose veins or deep venous thrombosis. Intervention delayed for more than 3 days due to any reason or failure of the patients to come for the follow up on the successive visits.

Subject withdrawal Criteria : Voluntary withdrawal by the research subject, gross side effects or complications of the procedure or appearance of any ailment/s during the trial requiring medical or surgical intervention.

Follow-Up:

On the completion of trial, patients were followed up for one month (after every 10 days) in the OPD. During follow-up proper examination of the patient based on the criteria of assessment in terms of relief and recurrence was done. Site of *Raktamokshana Karma* for swelling,

discoloration, inflammation and infection was also examined.

METHODOLOGY: Purva - Karma (Pre-procedure measures)

Local *Snehana* with *Murchhit Til Taila*⁷ for 15 minutes and local *Swedana* with *Patt Swedana* for 5-7 minutes was done. Application of Tourniquet around thigh with pressure a little greater than the systolic Blood Pressure of the patient. Site of Venepuncture: Within the range of 2.5 - 5cm area, in front and proximal to medial malleolus in the Great Saphenous Vein⁸.

Pradhana Karma (Main procedure) Patient was positioned supine in the bed. Venepuncture with sterile 24 gauge hypodermic needle loaded on 50 ml capacity syringe was done. Total 30 ml blood was withdrawn in one sitting. Pashchata Karma. The patient was relaxed and in general haematogenic food materials⁹ were advised to be given to the patient. The patient was called after ten days for the next sitting. Before going for the next sitting of *Rakta Mokshana Karma* in the same manner, patient was re-examined on all the assessment criteria and all the findings regarding the effect of therapy were noted down.

ASSESSMENT CRITERIA: Assessment was done on Subjective (*Pain, Radiation of pain, Stiffness, Pricking Sensations, Visual Analogue Scale (VAS), Verbal*

Descriptive Scale - VDS) as well as Objective criteria (*Passive straight leg raising test and Fajersztajn's test*)¹⁰. Each variable of the criteria was graded according to the severity.

OBSERVATIONS : In this clinical study, total 30 patients were registered. Only 23 patients completed the trial which were analyzed statistically to obtain the result of therapy, while 7 patients were drop-outs due to various reasons. Maximum patients were in 36 – 40 yrs age group (11 pts.), males 53.33% (16 pts.), *Hindus* 100% (30pts.), married 96.67% (29 pts.), educated up to Middle or Matriculation level 46.66% (14 pts.), house wives 43.33% (13 pts.), belonging to lower middle class 83.33% (25 pts.), mixed dietary habits 83.33% (25 pts.), having moderate / active life styles 56.66% (17). Maximum patients were having habit of taking tea / coffee daily 90% (27 pts.), normal sleep 43.33% (13), normal appetite 63.33% (19), *Pitta Pradhana Prakriti* 36.66% (11 pts.), normal mental status 53.33% (16 pts.), chronicity 1-8 months 83.33% (25 pts.), *Madhyama Sara* 53.33% (16 pts.), *Madhyama Samhanana* 80% (24 pts.), *Madhyama Satva* 83.33% (25 pts.), *Madhyama Satmya* 63.33% (19 pts.), *Madhyama Ahara Shakti* 66.66% (20 pts.) and *Rajas Manas Prakriti* 86.66% (26 pts.).

Table No. 1 Signs and symptoms wise distribution of Gridhrasi

Sr.no.	Signs and Symptoms	Total	Percentage
1.	Ruka (pain)	30	100%
2.	Toda (pricking sensation)	27	90%
3.	Radiation of pain	30	100%
4.	Stambha (stiffness)	27	90%
5.	Visual analogue scale	30	100%
6.	Verbal descriptive scale	30	100%
7.	Passive SLRT	30	100%
8.	Fajersztajn's test	25	83.33%

RESULTS: Paired T test¹¹ was used for the statistical analysis of the observations.

Table No. 2 Effect of Raktamokshana karma after completion of the trial i.e. after 10 days of 3rd sitting in Gridhrasi

S. No	Name of the feature	N	Mean		M.D.	+ SD	+ SE	't'	'P'	%age Relief
			BT	AT						
1.	Ruka (pain)	23	2.60	2.00	0.60	0.58	0.12	5.00	<0.0001	23.31%
2.	Toda (pricking sensation)	23	1.60	1.13	0.47	0.51	0.10	4.49	<0.0001	29.72%
3.	Radiation of pain	23	3.52	2.69	0.82	0.83	0.17	4.75	<0.0001	23.45%
4.	Stambha (stiffness)	23	2.39	1.65	0.73	0.86	0.18	4.10	<0.0001	21.76%
5.	Visual analogue scale	23	6.39	5.00	1.39	1.26	0.26	5.25	<0.0001	21.76%
6.	Verbal descriptive scale	23	2.26	1.65	0.60	0.72	0.15	4.04	<0.0001	26.92%
7.	Passive SLRT	23	3.04	1.56	1.47	0.66	0.13	10.6	<0.0001	48.57%
8.	Fajersztajn's Test	23	2.00	0.47	1.52	0.79	0.16	9.23	<0.0001	76.05%

Completely Cured-0, markedly Improved-1, Improved-14, No relief-8 patients.

DISCUSSION: Gridhrasi is a Vata number one impairment in occupational predominant disease and is mentioned under Nanatmaja Vatika¹² disorders. It has been observed that in all the Vata Vyadhies, some kind of nerve disorder is usually present. Though Vata is the prominent Dosha, sometimes Kapha is an Anubandhi Dosha¹³, but independently cannot produce Gridhrasi. Pitta is the least involved Dosha. The symptoms of Gridhrasi appear after vitiation of Gridhrasi Nadi (Sciatic Nerve). The clinical features simulate with the syndrome termed as 'Sciatica' in the modern medical science. Sciatica (si-at'i - ka) [L] is a syndrome characterized by pain radiating from the back into buttock upto the lower extremity along its posterior or lateral aspect¹⁴. Low back pain is the second most common cause of missed work days. It is leading cause of disability between ages of 19-45 years and

Raktamokshana is a type of Shodhan Chikitsa¹⁵ that aims at elimination of the vitiated Dosha out of the body. Gridhrasi is a Vata predominant disorder and its management is described under Mahavata Vyadhies by Acharya Sushruta¹⁶, owing to the intense pain and crippling associated and difficulty to get immediate relief. According to Sushrut Samhita the diseases that are not cured by other measures, should be treated by Sira Vyadha to get immediate relief¹⁷. Also the disease is not localised, as it involves a large area of the body; so Raktamokshana by Sira is preferred as per Sushrut Samhita¹⁸.

Probable Mode of Action: Chikitsa (management) of an ailment aims at breaking the chain of its aetiopathogenesis (Samprapti-Vighatana). As a main treatment modality of the disease,

Raktamokshana Karma may be having the same mode of action.

Gridhrasi is a Nanatmaja Vata Vyadhi, the main Dosha involved is Vata. According to Ch. Chi.28/88, like other Nanatmaja Vata Vyadhis¹⁹, although there is predominance of Vata Dosha, yet Pitta and Kapha Dosha are also involved as Anubandhi Dosha²⁰. All the Siras (veins) due to their 'Sarva-vaha' property are said to carry all the three Doshas²¹. Thus by applying a single modality of treatment i.e. Raktamokshana Karma by Sira Vyadha (Vene-puncture) alone alleviates the vitiation of all the three Doshas.

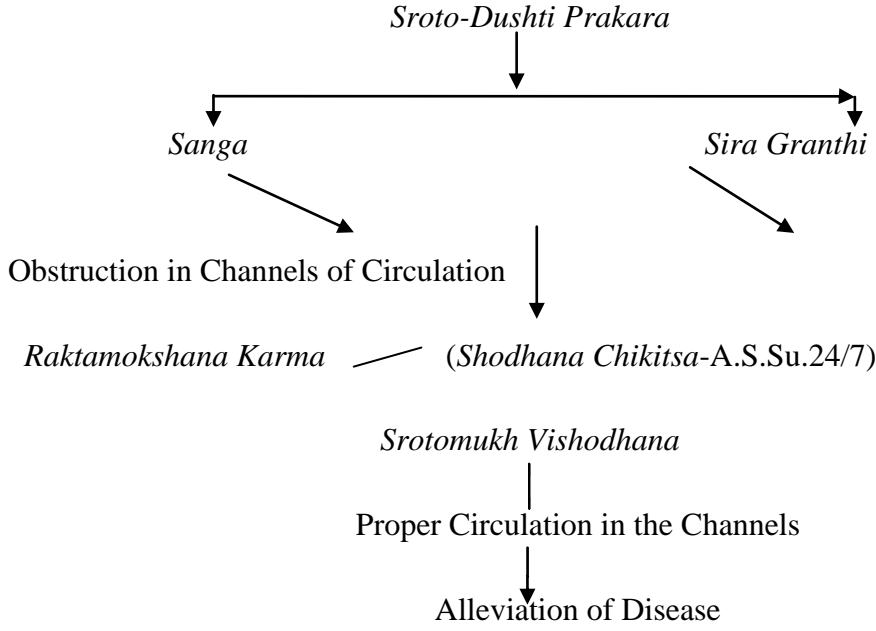
The Dushya involved are Rakta, Mamsa, Meda. Medo-Dhatu is produced from Mamsa Dhatu which in turn is a product of Rakta Dhatu in the sequence of production i.e. 'Uttarottar Dhatu Nirmana Krama'²² (Ch.Chi.15/16). So for the proper production of successive Dhatus, firstly the vitiation of Rakta should be dealt with. According to Sushrut Samhita, the main seat of Gridhrasi Vyadhi is 'Kandra'. (Su.Ni.1/74)²³. Kandra along with Sira is considered as the Updhatu of Rakta Dhatu (Ch.Chi. 15/16)²⁴. By way of Raktamokshana Karma, the vitiated Dosha are directly turned out of the body.

The entire body is nourished by Siras (Su.Sha.7/3)²⁵. To alleviate vitiation of

Dosha involving a large area of body, Raktmokshana from Sira is the only way as it exerts its effects on the entire body Sushrut Samhita (Su.Sha.8/26)²⁶. Though Gridhrasi is not a Vyapaka-Vyadhi, yet considerably large area of the body is affected i.e. Adhishthana (the main seat affected) of Gridhrasi extends from Kati to Pada and thus benefitted by it²⁷.

Raktamokshana Karma provides 'Ashu Vyadhya Shanti'(Su. Sha.8/22)²⁸. As mentioned in the Samprapti of Gridhrasi (Kaya Chikitsa, 3rd Part, Chapter-1, Vata Vyadhi Prakarana- By Prof. Ajay Kumar Sharma), it is mentioned to have Ashukari Swabhava²⁹. The intense pain and crippling requires immediate relief. Raktamokshana Karma provides immediate relief probably due to its Prabhava³⁰ (Achintya Shakti i.e. therapeutic potency that can't be explained). It is rendered as a Dushchikitsiya Vyadhi and Mahagada³¹ i.e. difficult to cure. According to Sushruta Samhita the diseases that are not cured by other measures, should be treated by Sira Vyadha to get immediate relief (Su.Sha.8/22)³².

Two types of Sroto-Dushti is present in Gridhrasi i.e. Sanga and Sira-Granthi³³



CONCLUSION: *Raktamokshana Karma* has shown statistically significant results in all the variables of assessment criteria, both subjective and objective. It reveals that *Raktamokshana karma* has a definitive role in the management of *Gridhrasi*.

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Corresponding Author : Prof. Sanjeev Sharma, Professor, P.G. Deptt. of Shalya Tantra, R.G.G.P.G. Ayu. College, Paprola (Kangra) H.P. - 176115
E-mail: sumanhp2006@gmail.com

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