Clinical Research

A comparative clinical study of *Siravedha* and *Agnikarma* in management of *Gridhrasi* (sciatica)

Vaneet Kumar J., Tukaram S. Dudhamal¹, Sanjay Kumar Gupta¹, Vyasadev Mahanta¹

Govt. Ayurvedic Dispensary, Giddarbaha, Sri Muktsar Sahib, Punjab, ¹Department of Shalya Tantra, Institute for Post Graduate Teaching and Research in Ayurveda, Gujarat Ayurved University, Jamnagar, Gujarat, India

Abstract

Access this article online Website: www.ayujournal.org DOI: 10.4103/0974-8520.153743 Quick Response Code:



Background: Lifetime incidence of low back pain is 50-70% and incidence of clinically significant sciatica due to lumbar disc prolapse occurs in 4-6% of the population. Low back pain and sciatica is major cause of morbidity throughout the world. There is only conservative treatment giving short-term relief in pain or surgical intervention with side-effect. There is need to find out quick relief from pain in today's era as it affects physical as well as mental and social life of patients. In Ayurveda, various modalities are given but Agnikarma and Siravedha are supposed to give instant relief from pain. Aims: To compare the efficacy of Agnikarma and Siravedha in the management of Griidhrasi. Materials and Methods: It's an open randomized parallel group trial. A total of 30 patients, divided randomly in two groups, were treated by Agnikarma in 19 patients and Siravedha in 11 patients. Agnikarama was done at lumbosacral spine and Achilles tendon region by Panchadhatu Shalaka. Siravedha was done from four Angulas below Janu Sandhi (Knee joint). Placebo starch capsules were given to all patients. Paired t-test applied for efficacy within the group and Chi-square test to compare the efficacy of two groups. Results: Individually both groups had given relief in cardinal symptoms of Gridhrasi. 68.42% patients showed marked improvement and 21.05% had complete relief after Agnikarma. In Siravedha, 72.73% patients had moderate improvement whereas 27.27% patient had marked improvement. Conclusion: Agnikarma gives better effect than Siravedha in management of Gridhrasi.

Key words: Agnikarma, Gridhrasi, Raktamokshana, sciatica, Siravedha

Introduction

Pain is the chief cause of visiting a doctor in most patients. It is known as *Ruja* which is one of the synonyms of disease. It disturbs physical and mental status of a patient. Pain is cardinal symptom in most of the *Vatavyadhis*. *Gridhrasi* is such a *Ruja Pradhaana Vatavyadhi*. In *Gridhrasi* intense shooting pain characteristically radiates from *Sphika* (gluteal region) to *Pada* (foot). On the basis of symptoms of *Gridhrasi*; it can be equated with the disease sciatica in modern science. It occurs due to spinal nerve irritation and is characterized by pain in distribution of sciatic nerve. Low back pain and radiating pain due to lumbar disc prolapse are the major cause of morbidity throughout the world. Lifetime incidence of low back pain is 50-70% with incidence of sciatica more than 40%. However

Address for correspondence: Dr. Tukaram S. Dudhamal, Assistant Professor, Department of Shalya Tantra, I.P.G.T. and R.A., Gujarat Ayurved University, Jamnagar - 361 008, Gujarat, India. E-mail: drtsdudhamal@gmail.com sciatica due to lumbar disc prolapse occurs only in 4-6% of the population.^[1] Hence this is a significant threat to working population. It disturbs daily routine and overall life of the patients because of continuous and stretching type of pain. In reference to sciatica treatment; medical science has only symptomatic management with analgesic like non-steroidal anti-inflammatory drugs. In some cases if nerve compression is more; surgical procedures like laminectomy, discectomy are indicated but these surgical procedures are expensive with their limitations. In Ayurveda, various methods used in the treatment of Gridhrasi are; Bheshaja, Snehana, Swedana, Siravedha, Agnikarma and Basti.^[2] In today's era quick pain relief is of prime importance to resume normal activities. Hence Agnikarma (therapeutic intentional burn) and Siravedha (therapeutic bloodletting by vein puncture) are considered as instant healers of pain. Agnikarma and Siravedha have been proved to be effective in Ruja Pradhaan Vatavyadhis.[3-5] Sushruta has mentioned Agnikarma and Siravedha as para-surgical procedures in Gridhrasi as superior to other treatment modalities.^[6,7] The role of Siravedha and Agnikarma have not been studied so far in the management of Vata Vyadhies like Gridhrasi. The common indications of thermotherapy include pain relief, stiffness, muscle spasm and inflammatory conditions. These symptoms are observed in the patients of sciatica. Hence considering above facts this study has been planned with aim and objective to evaluate and compare the effect of *Agnikarma* and *Siravedha* in the management of *Gridhrasi* (sciatica).

Materials and Methods

Total 38 patients suffering from *Gridhrasi*, attending the outpatient and inpatient Department of *Shalya Tantra*, IPGT and RA, Gujarat Ayurved University, Jamnagar were registered randomly irrespective of their age, sex, religion, caste, occupation etc., This is an open randomized parallel group trial. Study was approved by Institutional Ethics Committee, wide letter no. PGT/7-A/Ethics/2011-12/2087 dated 5/9/2010 - S. No. 35. This clinical trial is registered under CTRI and is under review stage. (Reference No. REF/2013/03/004716).

Inclusion criteria

- Diagnosed cases of Gridhrasi with symptoms like Ruja, Stambha, Suptata, Spandana, Tandra, Gaurav, Arochaka
- Sign like Sakthi nikshepa nigraha (SLR, i.e., straight leg rising test positive)
- Patients of age group between 25 and 65 years.

Exclusion criteria

- Uncontrolled diabetes mellitus, hypertension, tuberculosis of spine and hip joint, malignancy of spine or other organs
- Fracture related to spine
- Cardiac diseases (ischemic heart disease, coronary artery disease, myocardial infarction etc.)
- Anemia (hemoglobin % <07.00 mg/dl)
- Pregnancy.

Grouping

Patients were divided into following two therapeutic groups.

Group A

In this group (n = 19), Agnikarma was done with Panchdhatu Shalaka and Bindu type of Dahana. Total 5-30 Bindu Dahan at lumbo sacral region and 5-15 Bindu Dahan at ankle region of Achilles tendon were made. After Agnikarma, Haridra powder was sprinkled on wounds and advised to apply Madhu and Ghrita from next day. The same procedure was adopted at 7 days interval for 4 times.

Components of Pancha Dhatu Shalaka are Tamra (copper), Loha (iron), Yashada (zinc), Rajata (silver), Vanga (tin).

Group S

In this group (n = 11), Siravedha type of Raktamokshana with the help of disposable scalp vein no. 20 was done under all aseptic conditions. A total volume of 30-60 ml bloodletting according to condition and severity of disease was done from 4 Angula below Janu Sandhi (Knee joint). The tight bandaging was done after procedure. The similar procedure was adopted at 7 days interval for 4 times.

Follow-up

After 1 month.

Assessment criteria

The assessment was carried out on the basis of relief found in the cardinal signs and symptoms of the disease adopting scoring, depending upon their severity. Assessment of pain was done with visual anolog scale (VAS) [Table 1]. Assessment was carried out on weekly interval, i.e. on 7th day, 14th day and 21st day and on 28th day to find out the efficacy of Agnikarma/ Siravedha in Gridhrasi.

A. Gradation for Stambha (stiffness)

- 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 mildly affecting the daily routine
 - 4 Episodes of stiffness lasting for 2-6 hours \ Daily routines are hampered severely.

B. Gradation for Suptata (numbness)

- Grade Description
 - 0 No numbness
 - 1 Occasionally once in a day for few minutes
 - 2 Daily once in a day for few minutes
 - 3 Daily for 2 or more times/30-60 minutes
 - 4 Daily more than 1 hour/Many times a day.

C. Gradation for Spandana (throbbing/pulsating)

Grade Description

- 0 No Throbbing/Pulsation at all
- 1 For few minutes occasionally which is relieved spontaneously
- 2 Daily once in a day for few minutes
- 3 Many times in a day affecting daily routine
- 4 Daily for many times severely hampering daily routine.
- D. Gradation for Aruchi (anorexia)
- Grade Description
 - 0 Normal taste in food, feeling to eat food in time
 - 1 Feeling to take food but not having taste
 - 2 Anannabhilasha not feeling to take food even if hungry
 - 3 *Bhktadvesha* irritability to touch, smell, seeing and listening about food
 - 4 Abhaktachchanda- Aversion to food because of anger, stress etc.

E. Gradation for *Tandra* (drowsiness)

Grade Description

- 0 No drowsiness
- 1 Mild drowsiness occasionaly but does not affect daily routine
- 2 Moderate drowsiness frequently many times in a day that hamper daily routine
- 3 Moderate drowsiness whole day and need to take rest so can't work
- 4 Severe drowsiness whole day also at mental level reduced alertness etc.

Types of pain	Description	Grade	Description
None		0	No pain
Mild	Does not interfere with most activities. Able to adapt to pain	1	Very light, barely noticeable pain. Most of the times patient never think about pain
	psychologically and with medications or devices such as cushions	2	Mild pain which is discomforting
		3	Very noticeable pain, but patient got used to it
Moderate	Interfere with many activities, Requires lifestyle changes, but patient remained independent, unable to adapt to pain	4	Strong deep pain and distressing to patient. Patient notice the pain all the time and cannot completely adapt
		5	Strong deep piercing pain. Very Distressing to patient. Patient notice the pain all the time and it affects normal lifestyle
		6	Very strong, deep piercing pain partially dominating the senses and causing trouble holding a job
Sever	Unable to engage in normal activities. Patient is disabled and	7	Very strong, deep piercing pain completely dominating the senses Patient effectively disabled and frequently cannot live alone
	unable to function independently	8	Very strong, deep piercing pain with severe personality changes if the pain is present for long time
		9	Patient can't tolerate it and demand pain killers or surgery whatever be the side effects or risks
		10	Unimaginable, unspeakable, unbearable pain

Gradation for Gaurava (heaviness) E

Grade Description

- 0 No feeling of heaviness
- Occasional feeling of heaviness not affecting the 1 normal movements
- Frequent feeling of heaviness affecting the normal 2 movements
- 3 Feeling of heaviness throughout the day severely affecting the normal movements
- 4 Feeling of heaviness throughout the day totally hampering normal movements.

G. Gradation for Muscle power

Grade Description

- Active movement against full 0 gravity and resistance (normal power)
- Active movement against gravity and mild resistance 1
- 2 Active movement against gravity without resistance
- 3 Active movement with gravity eliminated
- 4 No contraction.

H. Gradation for SLR

Grade Description

- Equal to or greater than 90° 0
- $71^{\circ} <90^{\circ}$ 1
- $51^{0}-70^{0}$ 2
- 3 31º-50º No contraction
- 4 $< 30^{\circ}$.

Assessment of overall effect

- Complete remission: 100% relief
- Marked improvement: 75-99% relief
- Moderate improvement: 50-74% relief
- Mild improvement: 25-49% relief
- Unchanged: Up to 25% relief in the complaints of the patients.

Observations

A total of 38 patients were registered in this work among them 30 patients completed the treatment and 8 patients dropped out. So observations were made on 38 patients and the assessment and results were drawn on 30 patients. Among 38 patients maximum patients belonged to 41-50 years of age group (36.84%), females (60.53%), in post-menopausal stage (39.13%) and from middle economic class (71.05%). The maximum patients in this study were having Katu Rasa (71.05%) and Ruksha Guna (52.63%) dominant Ahara and having habit of Vishama Cheshta (unpleasant posture-50.00%) and Diwaswapna (day sleep-68.42%). Maximum patients had irregular bowel habit and passing hard stool (50%). In maximum patients there was 1-5 years chronicity (36.84%) but no history of injury (78.95%). The symptoms of Gridhrasi observed among 38 patients of both groups were Ruja (pain) in 100% patients, Stambha (stiffness) in 73.68% of patients, Suptata (tingling sensation) in 81.58% patients, Gaurava (heaviness in legs) in 50% of patients and positive SLR in 89.47% of patients. Bending forward position (63.16%) aggravated pain in maximum patients whereas pain was relieved in lying supine position (71.05%) in maximum patients. In case of type of Gridhrasi 50% each were having Vataja and Vata-Kaphaja type of Gridhrasi [Table 2].

Results

Effect of Agnikarma

In patients of Group A, highly significant results were seen in Ruja (64.91%), Stambha (75.42%), Suptata (65.38%), Spandana (pulsatile feeling-42.85%), Tandra (drowsiness-50%), Gaurava (66.68%) and Sakthinikshepanigraha (restricted movement of thigh-66.09%). Agnikarma had provided highly significant results in increasing muscle power of hip

flexion (75.02%), ankle dorsiflexion (100%) and great toe extension (75.02%). Lab investigations showed insignificant changes after Agnikarma [Table 3].

Effect of Siravedha

In Group S, highly significant results were seen in Ruka (33.32%), Stambha (45.82%), Suptata (58.62%), Gaurava (57.15%) and Sakthinikshepanigraha (46.14%) whereas insignificant results were seen in Spandana and Tandra. Siravedha had no significant effect on muscle power. In lab investigations significant decrease was seen in only Hb% after Siravedha (4.67%) [Table 4]. In plain X-ray of lumbo-sacral spine in both groups no significant changes were observed after treatment.

On comparison between two groups, Agnikarma was found more effective than Siravedha in Ruka, Stambha and SLR. In symptoms such as Suptata, Spandana, Tandra, Gaurava and Arochaka, statistically similar effect was seen on comparison between two groups [Table 5]. There was no significant difference in effect on muscle power between two groups.

In overall effect in Group A, 5.26% patient got mild improvement, 05.26% patient got moderate improvement and 68.42% patients got marked improvement. There was complete remission of disease in 21.05% patients. In Group S, 72.73% patients got moderate improvement, 27.27% patients got marked improvement. No patient was under mild improvement, complete remission and unchanged category after completion of therapy [Table 6].

Post-AgnikarmaVrana

The wound made by Agnikarma completely healed within a week without any complications and the scar disappeared within 15 days of post-Agnikarma period.

Discussion

In this study, maximum (36.84%) patients were in age group of 41-50 years. This age group is Parihani Kala of Madhyam Avastha in which gradual decline of Sharira Bala and Dhatus occur and provokes Vata Dosha.^[8] There is progressive decrease in degree

Table 2: General observations							
Observation maximum	Number o	of patients	Total	Percentage			
	Group A	Group S					
Age (41-50 years)	9	5	14	36.84			
Sex (female)	13	11	23	60.53			
Economic status (middle class)	13	14	27	71.05			
Menstrual history (menopause)	4	5	9	39.13			
Aharaja Nidana (Katu Dravya Atisevana)	15	12	27	71.05			
Aharaja Nidana (Ruksha Dravya Atisevana)	11	9	20	52.63			
Viharaja Nidana (Diwaswapna)	14	12	26	68.42			
Viharaja Nidana (Visama Cheshta)	13	6	19	50.00			
Mansika Nidana (Chinta)	6	10	16	42.11			
Bowel habit (constipated)	11	8	19	50.00			
Chronicity (1-5 years)	5	9	14	36.84			
History of injury (absent)	14	16	30	78.95			
Aggravation factor (bending forward)	10	14	24	63.16			
Relieving factor (lying supine)	12	15	27	71.05			
Type of <i>Gridhrasi (Vataja)</i>	11	8	19	50.00			
Type of <i>Gridhrasi (Vata-Kaphaja)</i>	9	10	19	50.00			

Table 3: Effect of <i>Agnikarma</i> therapy on signs and symptoms								
Symptoms	N	Mean	score	Percentage	SD	SE	t	Р
		BT	AT					
Ruka	19	6.000	2.105	64.91	1.197	0.275	14.183	<0.001
Stambha	14	4.357	1.071	75.42	2.268	0.606	5.421	<0.001
Suptata	17	3.059	1.059	65.38	0.707	0.171	11.662	<0.001
Spandana	3	1.167	0.667	42.85	0.000	0.000	Infinite	<0.001
Tandra	2	2.000	1.000	50.00	0.000	0.000	Infinite	<0.001
Gaurav	11	2.182	0.727	66.68	0.820	0.247	5.882	<0.001
Arochaka	2	1.500	0.000	100	0.707	0.500	3.000	>0.05
Sakthi Nikshepa Nigraha (SLR)	18	3.111	1.056	66.09	0.873	0.206	9.994	<0.001

SE: Standard error, SD: Standard deviation, SLR: Straight leg rising

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able 4: Effect of Siravedna therapy on signs and symptoms								
Symptoms	N	Mean score		Percentage	SD	SE	t	Р
		BT	AT					
Ruka	11	6.545	4.364	33.32	1.168	0.352	6.197	<0.001
Stambha	9	2.667	1.444	45.82	0.441	0.147	8.315	<0.001
Suptata	10	2.900	1.200	58.62	0.949	0.300	5.667	<0.001
Spandana	3	2.333	1.000	57.13	0.557	0.333	4.000	>0.05
Tandra	3	1.333	1.000	24.98	0.557	0.333	1.000	>0.05
Gaurav	8	2.000	0.857	57.15	0.690	0.261	4.382	<0.01
Arochaka	3	2.000	1.000	50	0.000	0.000	Infinite	<0.001
Sakthi Nikshepa Nigraha (SLR)	11	3.545	1.909	46.14	0.505	0.152	10.757	<0.001

SE: Standard error, SD: Standard deviation, SLR: Straight leg rising

Table 5: Comparison of effect of Siravedha and Agnikarma								
Symptom	Perce improv	ntage rement	Chi-square value	Р				
	Agnikarma	Siravedha						
Ruka	64.91	33.32	10.054	<0.01				
Stambha	75.42	45.82	3.527	>0.05				
Suptata	65.38	58.62	1.500	>0.05				
Spandana	42.85	57.13	0.750	>0.05				
SLR	66.09	46.14	9.413	<0.01				
Tandra	50.00	24.98	0.0521	>0.05				
Gaurava	66.68	57.15	0.354	>0.05				
Arochaka	100.00	50.00	1.701	>0.05				

SLR: Straight leg rising

Table 6: Overall effect of therapy in groups A and S							
Improvement		Group A	Group S				
	Ν	Percentage	Ν	Percentage			
Unchanged	0	0.00	0	0.00			
Mild improvement	1	5.26	0	0.00			
Moderate improvement	1	5.26	8	72.73			
Marked improvement	13	68.42	3	27.27			
Complete remission	4	21.05	0	0.00			

of hydration of the inter-vertebral disc with advancement of age which is part of degeneration resulting in disc problems.^[9] Maximum (60.53%) patients were female might be frequently involvement in postural stress such as bending, lifting and sustained non-neutral postures in their routine household works. Other causes such as osteoporosis, multiple pregnancies etc., may also be responsible for sciatica. Maximum (71.05%) patients from middle economical class showed stressful and hard working life of middle class might have caused this disease. The 50% patients had constipated and irregular bowel habit enlightening the role of Apana Vata in the Samprapti of Gridhrasi. 39.13% females were post-menopausal as there is a direct relationship between the lack of estrogen and development of osteoporosis after menopause.^[10] In this condition, bone resorption (breakdown) becomes faster than building of new bone. 1-5 years chronicity of sciatica in maximum patients (36.84%) highlights chronic nature of the disease as Vatavyadhis are Kricchrasadhya (difficult to treat).^[11] Excess use of Katu, Ruksha Ahara Dravya in maximum patients vitiated Vata Dosha in body due to their Saman Guna to Vata. Vishama Cheshta and Vishamasana were responsible for bad postural habits whereas Diwasvapna (day sleep) like factors show vitiation of Kapha Dosha and Marga Avrodhajanya Samprapti (obstructive pathogenesis) of the disease. In 78.95% of patients sciatica manifested without any history of injury as sciatica chiefly occurs due to age related degenerative process and lesion in the intervertebral disc. In maximum patients forward bending of body (63.16%) aggravated pain. The reason can be understood due to anatomical consideration of the spine because forward flexion is chiefly function of the lumbar spine. The most frequent type of disc prolapse is posterocentral and posterolateral. When patients bend forward, part of prolapsed disc comes more in contact with posterior longitudinal ligament that has rich nerve supply.

In maximum patients (71.05%) pain relieved during lying supine position may be understood due to release of some pressure on nerve roots. *Ruka, Stambha, Suptata, Gaurava* and *Sakthinikshepanigraha* were found in maximum number of patients as these are cardinal symptoms of *Gridhrasi*.

In this study, the conventional Siravyadha procedure by Kutharika Shastra was modified by utilizing 20 number disposable scalp vein set; which was easily available and there was no problem of septic precaution. Agnikarma is very effective in treating the chief complaint of pain in patients suffering from sciatica. According to Ayurveda, basic humor responsible for causation of Ruka is Vata and pain is cardinal symptom in most of the Vatavyadhis.^[12] Vata Dosha is predominantly having Sheeta Guna which is exactly opposite to Ushna Guna of Agni. So Agni is capable of producing relief in pain by virtue of its Ushna Guna. In Siravedha, expulsion of morbid humors (vitiated Doshas) accumulated due to inflammatory reaction outside body can give relief in pain. Stambha is chiefly due to Sheeta and Ruksha Guna of Vata Dosha.[13] Agnikarma having Ushna Guna acts as antagonist to Vata properties indirectly providing relief in Stambha. The exact cause of muscle stiffness is still unknown, but occurs most commonly due to altered neuromuscular control. In Agnikarma the temperature at the applied site is increased which reduces nerve reflexes resulting in relaxation of muscle. Relief in Suptata after Agnikarma may probably be due to relaxation of the surrounding muscles and ligaments and might be due to release of pressure on sciatic nerve. Suptata is found in Twakagata Vata and in which Raktamokshana is indicated by Sushruta.^[14] Hence, in superficial

nerve involvement, Siravedha was found effective to relieve Suptata. SLR is highly sensitive, but less specific test for sciatica. Restricted SLR in most of patients is due to pain caused by sciatica nerve stretching so after Agnikarma and Siravedha pain was relieved and SLR was improved. Gaurava is developed due to Guru Guna predominantly found in Kapha Dosha. As Agni is having Laghu Guna and its Ushna Guna pacifies the Sheeta Guna of Kapha as well, so Ggaurava is relieved by Agnikarma. Spandana, Tandra and Arochaka symptoms were observed in few patients. Advised diet regimen might be helpful to relieve these symptoms during the treatment. Pathological motor involvement is not characteristically found in sciatica and hence it was seen in very less number of patients. Improvement in muscle power after Agnikarma may be attributed to improvement in specific motor supply of muscles involved by acting on their nerve roots. In Siravedha group, average Hb level fall from 13.027 to 12.418 g% but did not have any adverse effect. The change in Hb% after Siravedha can be attributed to direct letting out of RBCs thus affecting the level of Hb.

Probable mode of action of Agnikarma

Agni possesses Ushna, Tikshna, Sukshma and Aashukari Gunas, which are opposite to Vata and anti Kapha properties. Physical heat from red hot Shalaka is transferred as therapeutic heat to Twakdhatu by producing Samyak Dagdha Vrana. From Twakdhatu this therapeutic heat acts in three ways. First, due to Ushna, Tikshna, Sukshma, Ashukari Guna it removes the Srotavarodha, pacifies the vitiated Vata and Kapha Dosha and maintains their equilibrium. Secondly, it increases the Rasa Rakta Samvahana (blood circulation) to affected site. The excess blood circulation to the affected part flushes away the pain producing substances and patient gets relief from symptoms. Third, therapeutic heat increases the Dhatwagni, so metabolism of Dhatu becomes proper and digests the Amadosha from the affected site and promotes proper nutrition from Purva Dhatu. In this way, Asthi and Majja Dhatu become more stable. Thus result is precipitated in the form of relief from all symptoms of Gridhrasi. Further it can be endorsed that the therapeutic heat goes to the deeper tissue like Mamsa Dhatu and neutralizes the Sheeta Guna of Vata and Kapha Dosha and in this way vitiated Doshas come to the phase of equilibrium and patients got relief from the symptoms.

Thermotherapy

The use of local heat (thermotherapy) may provide relief of pain and painful muscle spasm by acceleration of metabolic processes whereby the concentration of pain inducing toxic metabolites is reduced. This is accomplished primarily by an increase in local circulation. Acceleration of the inflammatory response to resolution may initially exacerbate discomfort, but will shorten the time course to resolution of inflammation. Thermotherapy is generally soothing and psychologically relaxing, there by favorably modifying emotional response to pain and further reducing painful muscle spasm.^[15] Synovial fluid viscosity of joints is known to decrease with increasing temperature. It has been postulated that the joint stiffness may be related to increased synovial fluid viscosity. Relief of joint stiffness may be provided with thermotherapy by a reduction in synovial fluid viscosity.^[16]

Probable mode of action of Siravedha

Siravedha is predominantly indicated in Pitta, Rakta and Kaphaja Vyadhies or when Pitta or Kapha is in Anubandha to

Vata Dosha. In such conditions of Vata Prakopa due to Kapha and Pitta Avarana, Siravedha can help to remove the Avarana of Pitta and Kapha Dosha giving way for Anuloma Gati of vitiated Vata that indirectly cures the Vatika symptoms along with symptoms produced by Kapha dosha. During the procedure, some patients got immediate relief in symptoms but after 3-4 days the symptoms reappeared. It may be because of pure Vataja type of Gridhrasi without Anubandha of Kapha. Hence hypothetically it can be said that the Siravedha is useful in patients when there is Avarana Janya Samprapti of Gridhrasi in Vata Kaphaja Gridhrasi.

Conclusion

Agnikarma and Siravedha are simple, cheap, safe and effective in the management of Gridhrasi but Agnikarma is more effective than Siravedha in relieving the main symptoms of the disease.

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How to cite this article: Vaneet Kumar J, Dudhamal TS, Gupta SK, Mahanta V. A comparative clinical study of *Siravedha* and *Agnikarma* in management of Gridhrasi (sciatica). Ayu 2014;35:270-6.

Source of Support: Nil, Conflict of Interest: None declared.

हिन्दी सारांश

गृध्रसी (साइटिका) रोग में अग्निकर्म एवं सिरावेध अनुशस्त्र चिकित्सा का तुलनात्मक अध्ययन

वनीत कुमार, तुकाराम एस. दुधमल, संजय कुमार गुप्ता, व्यासदेव महन्त

पाश्चात्य रहन सहन की शैली के इस युग में कमर का दर्द एक प्रमुख व्याधि के रूप में उभर रहा है। आज कल प्रचलित विविध दर्दनाशक दवाएँ जहाँ दर्द से कुछ समय तक राहत प्रदान करती हैं, परन्तु इनका वारंवार सेवन अन्य कई रोग उत्पन्न कर सकता है। गृध्रसी में रोगी कमर से लेकर पैर तक फ़ैलते तीव्र दर्द से परेशान होता है जो वर्षों तक चलता है और अन्ततः रोगी को ओपरेशन का सहारा लेना पडता है। आयुर्वेद में गृध्रसी को वातव्याधि के अन्तर्गत रखा गया है। इसके उपचार के लिए विविध औषधियों एवं अनुशस्त्र का वर्णन है, जिसमें अग्निकर्म एवं रक्तमोक्षण प्रमुख हैं। अग्निकर्म एवं रक्तमोक्षण का गृध्रसी में प्रभाव जानने के लिये, कुल ३० रोगियों को १९-११ के दो वर्गों में बांटा गया। तुलना करने पर रुजा, जकड़न इत्यादि लक्षणों में सांख्यिकी दृष्टि से अग्निकर्म की कार्मुकता सिरावेध से अच्छी पाई गयी। इस अध्ययन से यह निष्कर्ष निकाला जा सकता है कि गृध्रसी जैसी वातव्याधि में अग्निकर्म, सिरावेध की तुलना में अत्याधिक फ़लदायक है।