

Role of Agnikarmain Management of Gridhrasi: A Case Study

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ABSTRACT

Sciatica is a nerve pain that starts in the lower back and spreads downwards to the buttocks, back of the thigh, calf and outer edge of the foot. Approximately 90% of sciatica cases are caused by a herniated disk with compression of the nerve root, but it can also be caused by lumbar canal stenosis or, rarely, tumors. Personal and occupational risk factors for sciatica include age, height, psychological stress, smoking and exposure to vehicle vibrations. Sciatica is primarily diagnosed based on intake history and physical examination. The highest incidence is in middle age and is higher in men than women. The most commonly used clinical assessment is leg elevation or Lasègue's sign. The main goal of conservative treatment of sciatica is to minimize discomfort by reducing pressure on the nerve roots or with analgesics. Patients with acute sciatica may benefit from nonsteroidal anti-inflammatory drugs, muscle relaxants, and epidural steroid injections. In Ayurveda, the symptoms and etiology are similar to those of Gridhrashi. Treatment includes the sequential administration of Snehana, Swedana, Basti, Sira Vyadha, Agni Karma, and certain Shamanic Yoga practices. The patient was treated with Agnikarma therapy done using innovative Agnikarma probe by Panchadhatu. After Agnikarma procedure, there was significant improvement in all sciatica symptoms and various clinical tests like SLR, SNT, Lasague sign etc. within few days.

Key-words –Ayurveda, Sciatica, Agnikarma, Gridhrasi.

I. INTRODUCTION

Sciatica is a significant cause of disease in the working population of the developed countries. This is the most prevalent condition that affects the mobility of the legs, especially in the most active time of life, with low back pain, also people with radicular pain, which is covered by Sciatica Syndrome. It is a neuralgic pain referred to the muscles supplied by the sciatic nerve. It is a more common cause of pain and disability.

Pain in the distribution of the lumbar or sacral root is often due to disc protrusion. Pain and limitation on SLR is a feature of prolapsed intervertebral disc, when there is irritation or compression of one of the roots of sciatic nerve. A symptomatic lumbar disc herniation occurs during the lifetime of approximately 2 % of population. Risk factor includes male gender, middle-old age, heavy lifting or twisting, stressful occupation, smoking and mental stress. Symptoms typically commence with a period of back pain followed by radiating down to buttock, thigh, calf and antero-lateral aspects of foot. There may be paresthesia, motor weakness, loss of reflexes and reduction in SLR. Pain is exacerbated by coughing or straining. Sciatica hinders day-to-day life and the patient needs to struggle a lot. Hospital care and management includes bed rest, mobility maintenance, analgesics or NSAIDs, epidural steroid treatments, spinal manipulation, traction therapy, physical therapy, multidisciplinary treatment or surgery in later course of the disease.

Gridhrasi is a Shulpradhana Nanatmaja Vatavyadhi which affects the daily routine of patients. Patients suffering from Gridhrasi are not able to walk properly. According to Acharya Charaka, Stambha (stiffness), Ruka (pain),

Toda (pricking sensation) and Spandana (twitching) are the signs and symptoms of VatajaGridhrasi. Aruchi (anorexia), Tandra (drowsiness) and Gaurava (heaviness) are the additional symptoms of VatakaphajaGridhrasi. Gridhrasi is one of the VataVyadhi. It begins from the hip and eventually descends to the waist, back, leg, knee, shank and foot, impacting these sections with stiffness, distress, stabbing pain and irregular trembling.

Ancient Acharyas given the name Gridhrasi as a disease, it may be because of patient's gait becomes similar to the gait of the Gridhra (Vulture). This change in the gait is because of the pain in the back and the lower limbs and the patient starts limping towards the affected side. In Ayurveda science, various modalities of treatment are explained for the management of Gridhrasi. Agnikarma Chikitsa is said to be superior. Several researches have shown that Agnikarma Chikitsa is more effective compared to the other treatments such as oral drugs or even surgeries etc.

The approach of Agnikarma has been mentioned in the context of diseases like Arsha, Arbuda, Bhagandar, Sira, Snayu, Asthi, Sandhigata Vata Vikaras and Gridhrasi. Gridhrasi is seen as a panic condition in the society as it is one of the burning problems. On the basis of symptomatology, Gridhrasi may be simulated with the disease sciatica in modern parlance. In modern medicine, the disease sciatica is managed only with potent analgesics, epidural steroid injection, periradicular infiltration or some sort of surgical interventions which have their own limitations and adverse effects. Whereas in Ayurveda, various treatment modalities like Siravedha, Agni karma, Basti Chikitsa and palliative medicines are used successfully. All these management tools are cost effective, easy to perform and result oriented treatment of sciatica. Among these, the Agnikarma technique tends to be more successful by offering timely relief. It is a classic fact that this suffering is easily cured by Agnikarma, and there is no fear of putrefaction and bleeding.

References indicate that Agnikarma-treated diseases are less recurring. It eventually creates a balancing impact on the vitiated Vata Dosha. Many Dahana Upkaranas (devices) such as Pippali, Ajashakrit, Godant, Shara, Shalaka, Jambavoshtha, Madhu, Guda, Sneha and various types of metals are used to perform this operation. In this way, we have innovated the Agnikarma probe, which mixes five different forms of metals in different amounts, i.e. Copper 40%,

Iron 30%, Zinc 10%, Silver 10%, Tin 10%. This probe can be used for superficial skin burn as well as deep for muscle burn. We have found that the innovated probe is also sustain heat for longer period, so it is easy to handle and perform the procedure with less period of time.

AIM OF THE STUDY

There is no promising management available for Sciatica in modern medicine. They use pain control analgesics, NSAIDs, steroids, surgery, which have more side consequences and high economic costs. On the basis of sign and symptoms this disease can be closely correlated with Gridhrasi. Gridhrasi is Vatakapha dominated disease. In this condition, Vata is localized in the Katipradesh, getting aggravated, dries up the intervertebral discs and produces stiffness. Agnikarma is considered as best therapy to pacify Vatakapha doshas. Due to its Ushna, Sukshma, Ashukariguna. Therefore, Vatakapha pacifying management was planned for the present study.

CASE STUDY

The purpose of this case study is to describe an Agnikarma therapy and long-term outcomes for patient with Sciatica. The researcher utilized information from the historical and physical examination to establish an individualized plan of care for the patient. Subjective and objective criteria are determined by means of an interrogation and the identification of signs and symptoms before and after treatment.

Instrumentation: The score pattern was built depending on the severity of the symptoms.

PAIN

0: No pain

1: Painful, walks without limping

2: Painful, walks with limping but without support

3: Painful, can walk only with support

4: Painful, unable to walk

STIFFNESS

0: No stiffness

1: 20% limitation of normal range of mobility

2: 50% limitation of mobility

3: 75% or more reduction of normal range of movement

PRICKING SENSATION

0: No pricking sensation

1: Mild pricking sensation

2: Moderate pricking sensation

3: Severe pricking sensation

TWITCHING

0: No twitching

1: Mild twitching (sometime for 10-15 minutes)

2: Moderate twitching (daily for 15-30 minutes)

3: Severe twitching (daily more than 1 hour)

ANOREXIA

0: No anorexia

1: Mild anorexia

2: Moderate anorexia

3: Severe anorexia

DROWSINESS

0: No drowsiness

1: Mild drowsiness

2: Moderate drowsiness

3: Severe drowsiness

HEAVINESS

0: No heaviness

1: Mild heaviness

2: Moderate heaviness

3: Severe heaviness

PAIN DURING COUGHING

0: No pain

1: Mild pain

2: Moderate pain

3: Severe pain

STRAIGHT LEG RAISING TEST (SLRT)

Angle below 40° – Intra spinal compression

Angle above 40° – Extra spinal compression

SCIATICA NOTCH TENDERNESS (SNT)

0: No tenderness

1: Mild tenderness

2: Moderate tenderness

3: Severe tenderness

Patient description and historical examination findings:

Case: A 45-year-old visited Shalya OPD of Major S.D. Singh P.G. Ayurvedic Medical College & Hospital, Farrukhabad with complaint of pain and stiffness in low back along with severe restriction of forward bending and upward elevation of right leg. Pain is constant in nature that becomes worse at night and when weather is cold. He is unable to perform even small tasks due to restricted upward movement of leg. He had episodic, worsening low back pain with restricted of right leg movements.

The intermittent numbness, tingling and pain extended along the right leg progressively increased in frequency and intensity. These symptoms, of insidious onset 6 weeks prior, had caused patient to cease his daily activity e.g. driving, forward bending, continuous sitting, household work or sleeping. There was a history of treatment for Sciatica from Orthopaedic surgeon for last 4 weeks with no significant relief. General health issues included mild hypertension, positive smoking history. Past family medical history was non-contributory.

Clinical Examination: Dashvidha Pariksha

1. Prakriti: Vata Pittaja

2. Vikriti: Tridoshaja

3. Sara: Avara

4. Samhana: Avara

5. Satyma: Madhyam

6. Satva: Madhyam

7. Pramana: Madhyam

8. Vyayam Shakti: Avara

9. Ahara Shakti: Madhyam, Abhyarana Shakti:

Avara, Jarana Shakti: Avara

10. Vaya: Madhyam

General Physical Examination:

- B.P.=126/82 mmHg
- P/R = 78/minute
- Weight-74 kg
- Height-5'8"
- Pallor - Negative, Icterus - Negative, Cyanosis - Negative
- Clubbing - Negative, Edema - Negative
- CVS: S1 S2 Normal.
- Chest: Bilateral equal air entry with no added sound
- CNS: Higher function normal, with no loss of memory, no disturbance of speech etc.
- Reflexes: Upper limb-2+, 2+ Lower limb- knee Jerk +, diminished Ankle Jerk - Absent Plantar response – Flexor

Investigations: All routine blood and urine investigations were carried out which seems to be normal. HIV, HBsAg, VDRL were negative. In Plain X-ray of LS Spine shows space diminished between L4 and L5 vertebral bodies. MRI findings confirmed the presence of severe thecal sac compression at L4-L5 and L5-S1 level.

Musculoskeletal

Gait: limping gait while walking

Posture: shape of the lumbar spine is altered and the mobility is restricted.

Tenderness (SNT): Moderate tenderness present at Lumbar spine, in the back and limb.

Straight leg raising test (SLRT): Positive 45° (Right leg) and 80° on (Left side)

Lasegue's sign: Positive at 45° on right leg

Grading of subjective and objective parameters before treatment

Pain: 3

Stiffness: 3

Pricking sensation: 2

Twitching: 3

Anorexia: 1

Drowsiness: 1

Heaviness: 2

Pain during coughing: 2

Treatment Schedule

After careful assessment and examination, patient was treated with 6 sitting of Agnikarma. Vataprakopakahara-vihar were also restricted during the treatment and follow-up period of 2 months.

Method of Agnikarma

Purvakarma: Agnikarma therapy room should well prepared with all materials and instruments required for the therapy and care of patient in aseptic condition. Freshly prepared Triphala Kwath or Panchvalka Kwath, Aloe vera leaf, innovated Agnikarma probe, Probe stand, High pressure burner for making the probe red hot, Cylinder, tray, bowl, Sponge holding forceps, Gloves, Sterilised plain and hole towel, Cotton, A knife, Lighter etc. Take written informed consent of the patient. Hold the probe on the burner until it's red. It's barely taken two

minutes to get the red probe hot. Ask the patient to lay down on the examination table in a prone posture and relax. Ask the patient when therapeutic burn is made, you just feel like an ant bite for a friction of second and do not move your limbs until the procedure will finish.

Pradhana Karma: Examine the patient carefully and mark the maximum tender points on and around L4 –L5 vertebral bodies and Sciatic notch. Paint the portion by Aseptic solutions like Triphala Kwath, Panchvalka Kwath. With the use of Red hot Agnikarma probe and skilled hands, give 4-6 therapeutic burn marks with a distance of an inch up to skin level on spinous process and transverse process of L4 and L5 body. Also give 2-3 therapeutic burn marks at the level of sciatic notch.

Give 2-3 therapeutic burn marks longitudinally on tendo-Achilles ligament (Antra kandara gulf Madhya) on affected limb. Instantly apply the pulp of Kumari (Aloe vera) leaf hold with swab holding forceps in small piece on the burn marks, as Kumari is working as instant cooling agent.

Pashchat Karma: After a minute, clean the part by cotton and apply 'Shat dhautghritam' advice to the patient twice a day continuous for a week and do not apply water on the agnikarma site for next 24 hours. Effect After a week, the patient experienced a marked change in symptoms such as stiffness and back pain. Patients were improved by stiffness, numbness and tingling feeling. Patients had moderate improvement in multiple clinical examinations of Sciatica.

II. RESULTS

After completion of one-month treatment clinical assessments were made from the interrogation and gradation of scoring pattern. There was a drastic change in the parameters as:

Pain : 1

Stiffness : 0

Pricking sensation : 0

Twitching : 0

Anorexia : 0

Drowsiness : 0

Heaviness : 0

Pain during coughing : 0

SLRT : 70° (Right leg) and 90° (Left leg)

SNT : Mild tenderness is present

Lasegue Sign : 70° right leg.

Examination of right leg Before treatment After treatment

SLR Positive (45°) Positive (70°)

Reverse SLR Positive Negative

Tenderness of sciatic nerve root test Positive Negative

Sitting Test Positive Negative

Popliteal Compression Test Positive Negative

AGNIKARMA

Ushna and Tikshna Guna – Pacifies Vata Dosha
Laghu, Sukshma, Tikshna and Ushna Guna –
Pacifies Kapha Dosha

Agnikarma -Therapeutic heat- Tvakdhātu-
Aamdosha and Shrotovairagunya - Shotha and Shoola

III. DISCUSSION

Gridhrasi is a
shulapradhan vatanaatmajavyadhi affecting
locomotor system and leaving the person

disable from daily routine activity. In the pathogenesis of disease, important components are vata and kapha. The vitiated vata gets lodged in katipradesh. The primary symptom pain which is produced mainly by vataprakopa.

Probable mode of action of Agnikarma

Pain receptors are located in the skin and the motor end plates of the muscles. These pain receptors are stimulated by application of heat at about 45°C. The pathway for the propagation of thermal signals and pain signals is almost parallel, but terminates in the same place. So out of these two, i.e. thermal and pain, only the greater can be felt. Moreover, Heat induces metabolism at muscle fibre cells and removes waste products and releases the stiffness of the muscles.

IV. CONCLUSION

Sciatica is one of the most common problems which effect mostly in middle age group of patients. After Agnikarma there is relief of signs and symptoms of Sciatica especially on local tenderness and stiffness. The treatment applied was simple, economical and required no hospitalization and could be done at OPD level. This case report showed that Agnikarma therapy is potent, safe and effective in the treatment of Sciatica (Gridhrasi). There was no any adverse effect found during and after the whole procedure in this case.

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