

A CRITICAL REVIEW ON GRIDHRASI (SCIATICA)

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ABSTRACT

The most common ailment which affects the quality of life particularly in the most productive period of life, is low back pain, out of which 60% of patients suffer from severe pain and it comes under the umbrella of Sciatica-syndrome. The signs and symptoms found in "Sciatica" in modern contemporary medicine are similar to the condition *Gridhrasi* mentioned in *Ayurveda*. *Gridhrasi*, is one among the eighty *Nanatamaja Vyadhi*. The general principle of treatment and procedures for the management of *Gridhrasi* (Sciatica) according to various *Ayurvedic* classics have been discussed here.^[1]

INTRODUCTION

स्पिकपूर्वाकटीपृष्ठोरुजानूजंघापदक्रमात्
गृध्रसीस्तम्भरुकोदेगृहान्तिस्पन्दतेमुहुः ।
वताद्वात्कफातन्द्रागौरवारोचकान्विता ॥
(च०चि० 28/56)

Gridhrasi (Sciatica) is one of the eight *Vatavyadhi* mentioned in various *Ayurvedic* texts, which is caused by aggravated *Vata Dosha*. It is a *Ruja Pradhana Vyadhi*. On the basis of *Rupa* (Symptoms) of *Gridhrasi*, *Toda* (Pain), *Spandana* (Pulsation), *Graha*, *Stambha* (Stiffness) from *Kati-Pradesha* to *Padanguli* (Radiating pain from Lower back to Foot), it can be correlate with the disorder *Sciatica* in Modern.^[2]

पार्श्विणीप्रत्यङ्गुलिनाम्तुकण्डरायाअनिलादिता
सक्थन :क्षेपम्निगृहीयाद्गृध्रसीतिहिसास्मृता॥(सु० नि० 1/74)

Sciatica is a set of symptoms including pain due to general compression of Spinal nerve roots /Sciatic nerves. Patients notices pain in the Lower back, Hip, which radiates to Thigh.^[3] In Modern medication uses NSAID,^[5] Botulinum toxin injection, Steroids, Anticonvulsant, etc are commonly used for management.^[4] But there is no permanent treatment for Sciatica. Hence *Ayurveda*, has various methods used for management of *Gridhrasi*, viz; *Bheshaja* (Oral medication in the form of, *Vati* (Tablet), *Churna* (Fine powder of herbs), *Kwath* (Decoction of herbs), *Snehana* (Oleation), *Swedana* (Fomentation), *Siravedha* (Venepuncture), *Agnikarma* (Application of heat in the direct or indirect form) and *Basti* (Medicated Enema).^[3]

गृध्रसीलक्षणः-

स्पिकपूर्वाकटीपृष्ठोरुजानूजंघापदक्रमात्
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Rupa of *Gridhrasi* are *Ruk* (Pain), *Suhuspandan* (Pulsation), *Stambha* (Stiffness), in *Spik- kati* (Hip region), *Uru*, *janu*, *Jangha*, and *Pada Suptata* (Numbness & Tingling sensation), and *Gaurava* (Heaviness).^[4]

According to acharya sushruta

पार्श्विणीप्रत्यङ्गुलीनांतुकण्डरायाअनिलादिता
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Acharya Sushruta have mentioned *Saktanakshepam nigrhniyat*, finds restriction in extending the leg due to severe pain.^[5]

According to acharya vagbhatt – *Acharya Vagbhatta* has mentioned *Gridhrasi* (*Sciatica*) to resembles with *Viswachi* (Brachial neuritis), and here the only difference is site of pain.^[6]

Modern review

Sciatica (or Sciatic neuritis) is a set of symptoms including pain due to general compression / irritation of Spinal nerve roots/Sciatic nerves. The pain is felt in the Lower back, Hip and radiates to thigh. In addition to pain and radiation to thigh, there might be numbness, Muscular Weakness, Tingling sensation and difficulty in moving of the leg.^[7]

Definition

Irritation of the fourth and fifth lumbar and first sacral roots, which form the Sciatic nerve, lead to pain that extends mainly down the Posterior and Antero-Lateral aspects of leg and into the foot known as Sciatica.^[8]

Predisposing factors of sciatica**Age:**

Sciatica is most common in the 3rd to 6th decade of life. The maximum incidence is found in 4th to 6th decade.

Sex:

Males are affected more than females.

Profession:

History of trauma or repeated stress such as lifting heavy weight may induce Sciatica. Continued pressure on the nerve, due to long driving lead to Sciatica.

Weather:

Exposure to cold weather often leads to Sciatica.^[9]

Causes of sciatic**1. Degenerative disease of intervertebral discs**

- Disc Degeneration
- Disc Prolapse or Herniation

2. Osteoarthritis of Lumbo-Sacral spine

- Osteophytes leading spinal canal stenosis.
- Ankylosing spondylitis

3. Subluxation or dislocation of the Lumbo-Sacral spine

- Spondylolisthesis
- Fracture-dislocation

4. Inflammation or Infection

- Osteomyelitis - Pyogenic
- Tubercular (Pott's Spine)

5. Neoplasms

- Intraspinous tumors (Ependymoma, Neurofibroma, etc.)
- Lymphoma or Myeloma of the vertebra

6. Miscellaneous.

- Developmental narrowing of the spinal canal (Lumbar canal stenosis)
- Pagets disease.

Symptoms**Pain**

Pain is the cardinal symptom of Sciatica

1. Pain in the back, aching in character.
2. Pain deep in the Hip and thigh.
3. Pain radiating to the leg and foot increased by coughing and sneezing.

Aggravation of pain

The pain is aggravated by general and specific activities and relieved by rest.

Relief of pain

Most patients get some relief from lying in the Hip – Knee flexed position.^[10]

Investigations**Routine investigations**

- Routine blood examination- Hb%, T.L.C., D.L.C., E.S.R.
- Urine examination- Routine and microscopic examination.
- Biochemical Blood investigations for- Blood sugar, Serum uric acid, Serum calcium,
- HIV, VDRL, HBsAg and RA factor.

Radiological examination

- X-ray- Lumbo-Sacral spine (Antero-posterior & Lateral / Oblique view)
- MRI.

Specific test for Sciatica

1. SLR – Straight leg raising test
2. Lasegue's Sign
3. Bragardis Sign
4. Sicard's Sign
5. Gower's Sign.^[10]

Management of sciatica in modern science

The aim is not only a diagnose the disease but also to analyse the etiological factors because the treatment of sciatica is directly related to the cause.

(A) Conservative treatment**1. Acute stage**

- (a) Rest in bed with necessary support to the back
- (b) Analgesics as required
- (c) Heat
- (d) Injection of 2% procaine or of lignocaine in the sciatica nerve or epidural space to give dramatic relief.

2. Chronic stage

- (a) Injection with 5% procaine
- (b) Counter irritation, heat, massage

(B) Operative treatment

- (a) If not relieved by conservative treatment.
- (b) Quick recurrence of symptoms.
- (c) Evidence of large prolapse causing pressure on cauda equina.
- (d) Operation consists of hemilaminectomy, removal of the protrusion and curetting out nucleus material from the central part of the disc.^[10]

Line of treatment in ayurvedic literature**General line of management of vatavyadhi**

1. *Nidan parivarjana*
2. *Samshamana*

3. Samshodhana

Nidana parivarjana

Nidana of *Vata* and *Kapha Dosha prakopka* should be strictly prohibited.

Samshamana

Among the *Shad Upakramas*, *Swedana*, *Snehana* and *Brimhana* can be approved accordingly. If *Dosha Prakopa* is very less, *Langhana Chikitsa* is sufficient, if the intensity of *Dosha Prakopa* is moderate *Langhana* and *Pachana* treatment is considered. If *Dosha Prakopa* is severe, *Shodhana* treatment is decided.^[11]

Samshodhana

Vamana, *Virechana* and *Vasti* are advised in *Gridhrasi*. *Raktamokshana* is also indicated in *Gridhrasi*.

The general line of management for *Vatavyadhi* is indicated for *Gridhrasi* also. *Upakramas* such as *Snehana*, *Swedana*, *Utsadana*, *Parisheka*, *Asthapana* and *Anuvasana Basti* are indicated. *Basti* is considered as one of the best line of management for *Vata Dosha*.^[12]

Specific treatment of gridhrasi

Shamana chikitsa: Following *Chikitsa* can be included under *Shamana Chikitsa*.

Kaphahara chikitsa

When *Gridhrasi* is caused due to aggravated *Vata Dosha* in association with *Kapha Dosha*, addition of *Kaphahara Chikitsa* forms the complete *Chikitsa*.^[13]

Vatahara chikitsa

As explained earlier, *Vatahara Chikitsa* is the primary line of treatment in *Gridhrasi*. It includes both *Shamana* and *Shodhana* procedures.^[14]

Siravedha

Acharya Charaka explained *Siravedha* at the site of *Antara-Kandara- Gulpha Pradesha*. *Acharya Sushruta* and *Vagbhatta* indicated *Siravedha* four *Angula* above and four *Angula* below at the site of *Jannu Sandhi* (Knee joint). *Acharya Bhela* also mentioned *Raktamokshana* as the best *Chikitsa* for *Gridhrasi*.^[15]

Agnikarma

Various *Acharyas* mentioned *Agnikarma* for the management of *Gridhrasi* (Sciatica).

Site of agnikarma

As per acharaya charak

अन्तराकण्डरागुल्फं सिरा बस्त्यग्निर्कर्म च | गृध्रसीषु प्रयुञ्जीत || (च०चि०101/28)

The site of *Agnikarma* in *Gridhrasi* (Sciatica) as per view *Acharya Charak* is in between Calcaneous tendon and Ankle joint.^[16]

As per acharya sushruta

जानूंसंधेरुपर्यधोवाचतुरंगुलेगृध्रस्याम|| (सु .सू 17/8.)

Acharya Sushruta has mentioned the site of *Agnikarma* for *Gridhrasi* as four fingers above and below the Knee joint.^[17]

Pathya – Apathya

Pathya

Rice, Wheat, *Kulattha*, *Paravala*, *Shigru*, *Phalasa*, Lemon, Grapes, Clarified Butter, etc.

Apathya

Chanaka, *Kalaya*, *Shyamaka*, *Nivara*, *Kangu*, *Rajamashaka*, all *Trina Dhanyas*, *Nishpavabija*, *Bimbi* etc. should be avoided.^[1]

Yoga-Asana for preventing sciatica

Yoga Asana must be performed as per advice of experts-

- *Bhujangasana* (Cobra Pose)
- *Setu-bhandhasana* (Bridge Pose)
- *Pawanmuktasana* (Wind-relieving Pose)
- *Gomukhasana* (Cow Face Pose)

DISCUSSION

Gridhrasi can be correlated with the condition Sciatica syndrome in modern aspect, which occurs because of Spinal nerve compression and is characterized by pain in the distribution of Sciatic nerve which begins from buttock and radiates downwards to the posterior aspect of thigh, calf and to the outer border of foot. Modern science have so many treatments, viz. Conservative treatment, Epidural Steroid Injection, etc. Surgical treatment which are used in Sciatica are very complicated. So *Ayurvedic* approach of treatment is much better as compared to Modern management and improves quality of life of patients. *Nidana Parivarjana*, *Sodhana Chikitsa* (*Snehana*, *Swedana*, *Virechana*, *Basti*, *Raktamokshana*, etc.) and *Shamana Chikitsa* are main route of treatment for this disorder.

CONCLUSION

Gridhrasi is a painful condition and so far there is no established therapy. *Gridhrasi* can be compared with Sciatica in modern medicine. *Abhyanga* with medicated oil followed by *Swedana* may be used as first line of *Chikitsa* for *Gridhrasi*. *Agnikarma* and *Raktamokshana* are also useful in severe painful conditions. *Basti* therapy might be best choice for the *Chikitsa* of *Gridhrasi*. *Nidana parivarjan* might stop the further progression of disorder. It may be concluded that various treatment modalities present in *Ayurveda* are very helpful in providing long term relief to the patients suffering from *Gridhrasi*.

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