

A Review Article on Gridhrasi W.S.R. To Sciatica

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Abstract

Gridhrasi, commonly known as sciatica, is a condition characterized by pain that radiates along the sciatic nerve, typically from the lower back through the hips and down each leg. In *Ayurveda*, *Gridhrasi* is understood as a *Vatadosha* disorder, often caused by the aggravation of *Vata* due to improper diet, lifestyle, or injury. In India, low back pain is one of the most common new health problems, significantly impacting individuals' physical and psychological well-being. It is the second leading cause of disability, with sciatica being one of the most prevalent underlying causes. The condition is marked by symptoms such as severe pain, stiffness, and restricted movement. This article explores the pathophysiology of *Gridhrasi* from both an *Ayurvedic* and modern medical perspective, highlighting the role of *Vatadosha* and nerve compression in the development of symptoms. At its core, *Ayurveda* emphasizes the pursuit of a balanced, happy, and comfortable life. However, in today's world, achieving this balance is becoming increasingly challenging due to various factors, including environmental changes and lifestyle shifts.

Keywords - Ayurveda, Gridhrasi, Sciatica

Introduction :

Gridhrasi is one of the *Vataja Nanatmaja Vikaras*—specific disorders that arise due to the vitiation of *Vatadosha*, as classified in *Ayurvedic* texts. The name "*Gridhrasi*" has various interpretations, often related to the way the condition impacts the patient's gait or the nature of the pain experienced. The pain is likened to the intense agony a prey might feel when pierced by a vulture's sharp claws, reflecting the severe and gripping nature of the discomfort.

Acharya Sushruta describes *Gridhrasi* as a disorder where the *Kandara* (ligament) of the *Parshani* (heel) and all *Pratyanguli* (toes) are affected by vitiated *Vatadosha*. This condition results in restricted movement of the lower limb, which is a hallmark of *Gridhrasi*. The term "*Gridhrasi*" itself indicates the nature of the disease—painful and debilitating, similar to the discomfort a vulture might inflict.^{[1][2]}

Acharya Charaka further elaborates on *Gridhrasi* as a type of *Vatavyadhi* (disease caused by *Vata* imbalance). The condition is characterized by *Stambh* (Stiffness in the affected areas), *Ruka* (Pain that is often severe and radiates along the path of the sciatic nerve), *Toda* (A pricking or

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sharp pain sensation), *Spandana* (Frequent twitching or spasms in the muscles)

Initially, *Gridhrasi* affects the *Sphik* (buttock) and the posterior aspect of the *Kati* (waist), gradually radiating down to the posterior aspects of the *Uru* (thigh), *Janu* (knee), *Jangha* (calf), and *Pada* (foot). This progressive radiating pain and associated symptoms contribute to the significant discomfort and mobility issues experienced by those affected.^[3]

Sciatica is a medical condition that refers to pain radiating along the path of the sciatic nerve, the longest nerve in the human body. This nerve runs from the lower back, through the hips and buttocks, and down each leg. Sciatica typically affects only one side of the body, causing a distinct and often severe pain that can significantly impact mobility and quality of life.

Sciatica is a common condition, especially in adults aged 30 to 50, and is often linked to lifestyle factors such as prolonged sitting, poor posture, or physical activities that strain the lower back. Despite its prevalence, sciatica can usually be managed effectively through a combination of self-care measures, physical therapy, and, in some cases, medical or surgical interventions.

The sciatic nerve is essential for the hamstrings and lower extremity adductors, as well as for the calf, anterior lower leg, and certain intrinsic foot muscles. It also provides indirect motor function to these muscles. Moreover, the plantar aspect of the foot and the posterior and lateral lower legs are indirectly sensed by its terminal branches. Crucially, inflammation is the primary cause of sciatica, which irritates the sciatic nerve. On the other hand, if there is direct nerve compression, there will be a more noticeable motor dysfunction, which calls for an immediate and comprehensive diagnostic assessment.^{[4][5]}

Sciatic Nerve :

The sciatic nerve is a branch of the sacral plexus (formed by the nerve roots L4, L5, S1, S2, and S3) and starts with a diameter of approximately 2 cm. It descends between the greater trochanter of the femur (the bony prominence on the upper thigh) and the ischial tuberosity (a bony part of the pelvis), passing through the greater sciatic foramen below the piriformis muscle. It continues down the back of the thigh until about its lower third, where it divides into two major branches: the tibial nerve and the common peroneal nerve. These branches further extend to the toes, ankle, foot, thigh, and knee.

Sciatica refers to the condition where the sciatic nerve becomes inflamed or irritated, often due to pressure from adjacent soft tissues. This inflammation can lead to symptoms such as pain, tingling, numbness, or weakness along the path of the nerve, affecting the lower back, buttocks, and down the legs.

Paryaya of Gridhrasi :

Ringhinee, by *Vachaspatimishra*

Randhrinee, by *Dalhana*

Radhina, by *Aadhamalla & Kaashirama*.

Purvarupa :

Acharya Charaka, in the *Vatavyadhi Chikitsa* chapter, mentions that the *Purvarupa* (early symptoms) of *Vatavyadhi* (*Vata*-related disorders) like *Gridhrasi* (sciatica) are often subtle and unclear, described as "*avyaktamlaksha namteshampurva rupamitismritam*," meaning the symptoms are mild and indistinct^[6]

Lakshana of Gridhrasi ^[7]

➤ *Samanya Lakshanas*

1. *Ruka* (Pain)
2. *Toda* (pricking sensation)
3. *Mhuspandhana* (tingling sensation)
4. *Stambha* (Stiffness)

These symptoms collectively impact the quality of life, causing discomfort and difficulty in performing routine activities.

➤ **Vishesha Lakshanas**

A. Vataja Gridhrasi

1. Dehpravakrata
2. Janu, Kati, UruSandhiSphurana
3. Janu, Kati, UruSandhiStabata

B. Kaphaja Gridhrasi

1. Tandra
2. Mukhpraseka
3. Bhaktadwesh
4. Agnimandya

Causes of Sciatica

Sciatica is characterized by pain radiating along the path of the sciatic nerve, which runs from the lower back through the buttocks and down each leg. Common causes include:

1. Herniated Disc
2. Degenerative Disc Disease
3. Spinal Stenosis
4. Spondylolisthesis
5. CaudaEquina syndrome
6. Lumbar spinal tumors
7. Infections
8. Trauma or Injury
9. Sciatic Nerve Injury

These conditions can either directly compress the sciatic nerve or cause inflammation that affects its function, leading to the characteristic pain and symptoms of sciatica.

Samprapti

The primary cause of all *Vata* disorders (*Vatavyadhi*) is the aggravation of *Vatadosha* (*Vataprakopa*). *Vataprakopa* occurs due to two

main factors: *Dhatukshaya* (depletion of tissues) or *Margavarana* (obstruction of channels). Specific causes (*nidanas*) like trauma to the lower back or hips due to excessive walking, riding animals like elephants or camels, jerking or jolting movements, and carrying heavy loads can lead to *srotodushti* (vitiation of channels) in the lower back region (*katipradesha*), resulting in *Gridhrasi* (sciatica). The pathogenesis (*samprapti*) of *Gridhrasi* can occur through two pathways: *Apatarpana* and *Santarpananidanas*.

1. Apatarpanajanya (due to depletion): Factors like *dhatukshaya* (tissue depletion) and *rogaatkarshana* (severe emaciation due to disease) lead to the aggravation of *Vata* (*Vataprakopa*). This aggravated *Vata* fills the empty spaces in the *srotas* (body channels), leading to various *Vata* disorders (*Vatavyadhi*).

2. Santarpanajanya (due to obstruction): This occurs due to the blockage of channels (*margavarana*) by *Kaphadosha*. Factors like daytime sleep (*Divaswapna*) and accumulation of toxins (*ama*) cause the aggravation of *Kapha* (*Kaphaprakopa*), which then obstructs the normal movement of *Vata* (*gatinirodha*), leading to its aggravation.

Among the five types of *Vata*, *ApanaVata* and *VyanaVata* are primarily involved in the pathogenesis of *Gridhrasi*. *Saktiutkshepanigrahana* (difficulty in lifting the leg) is a symptom in *Gridhrasi* that clearly indicates the involvement of *VyanaVata*, as its function includes movements like *gati* (locomotion) and *utkshepana* (elevation).

Sushruta Acharya and *Vagbhatacharya* describe the involvement of the tendons (*kandara*) from the heel (*parshni*) to the toes (*pratyanguli*) in the pathogenesis of *Gridhrasi*.

Samprapti Ghatak

Dosha	<i>Vata, Kapha</i>
Dushya	<i>Rakta, MamsaMeda, NadiSansthaan</i>
Adhithana	<i>Kati, Uru, Janu, Jangha, Pada</i>
Srotas	<i>Raktavaha, Mamsavaha, Medovaha, Asthivaha</i>
Srotodushti	<i>Sanga, SiraGranthi</i>
Agni	<i>Vishamagni, Mandagni</i>
VyadhiSwabhava	<i>Ashukari/Chirakari</i>
Sadhyasadhyata	<i>Krichhrasadhyata</i>

Chikitsa :

Acharya Sushruta has mentioned general *Vatavyadhi Chikitsa* and *Siravedha* in *Gridhrasi* after *Sankochana* (flexion)^[8]. *Acharya Charaka Basti, Sira Vedha* and *Agnikarma* (between *Kandara* and *Gulfa*) have mentioned as line of treatment^[9]. While *Chakrapani* has mentioned as surgical procedure for *Gridhrasi*. *Siravedha* was also advised by *Ashtanga Sangraha and Ashtanga Hridaya* to perform four *Angula* above and below the *Janu*. They also mentioned *Agnikarma* and *Anuvasana Basti* Along with all these *Snehasvedna* and *Virechana* are also indicated for the management of disease *Gridhrasi* based on symptom complex the disease^[10]. In various *Samhita* of *Ayurveda* there are lots of references regarding *Gridhrasi* and elaborated as a separate disease with specific management.

Different *Acharyas* generally recommend

- *Snehana*
- *Swedana*
- *Vamana*
- *Virechana*
- *Niruha, and Anuvasana Basti*
- *Siravedha*
- *Raktamokshana*
- *Agnikarma*
- *Shastrkarma*

Discussion

Gridhrasi is a condition that primarily affects the lower half of the body, particularly the locomotor system, leading to significant disruption in daily activities. Factors contributing to *Gridhrasi* include trauma to the lower back, excessive travel, and jerky movements. These are similar to the causes of *Vata* aggravation (*Vatakopa*) in *Ayurveda*, which are linked to activities like prolonged walking (*atyadhwa*), excessive exercise (*ativyayama*), uncomfortable postures (*dukhasayyasana*), and long journeys (*yana*).

In both *sciatica* and *gridhrasi*, the primary symptom is low back pain that radiates down the lower limb along the course of the sciatic nerve. Although there isn't a detailed explanation of the pathogenesis (*samprapti*) of *Gridhrasi* in *Ayurvedic* texts, the *samprapti* of *Vatavyadhi* (*Vata* disorders) is typically applied. This involves a combination of over-nourishment (*Santharpana*) and under-nourishment (*Apatarpanaja*) processes, which is analogous to the complex interplay of inflammatory, immunological, and nerve root pressure-related mechanisms in *Sciatica*.

In *Ayurveda*, two types of *Gridhrasi* are recognized: *Vataja* (primarily *Vatadosha* involvement) and *Vata-Kaphaja* (involving both *Vata* and *Kaphadoshas*). Similarly, *Sciatica* has various classifications, though detailed

explanations of these are not commonly found. Both conditions share similar symptomatology and causative factors, making them closely related in terms of their clinical presentation.

Conclusion :

Gridhrasi, or sciatica, is a prominent health issue recognized for its significant impact on society. It is classified as one of the eighty varieties of *NanatmajaVatavyadhi in Ayurveda*, with its development closely associated with the *VyanaVayu*. Despite its painful nature, there is no universally proven treatment for *Gridhrasi*. *Acharya Sushruta* has highlighted the importance of *AntaraKandaraGulpha* in the pathogenesis of *Gridhrasi*. *Ayurvedic* treatments for this condition include *Agnikarma* (cauterization) and *MarmaChikitsa* (treatment of vital points). *Acharya Charaka* also recommends *Siravyadha* (venesection), *Basti Karma* (therapeutic enemas), and *Agnikarma* for managing *Gridhrasi*. In Western medicine, the approach typically involves conservative management, such as physical therapy, and surgical options for severe cases. The sciatic nerve, which extends from the lower back through the buttocks and down the legs, is the primary source of discomfort in sciatica. Clinical signs include low back pain and radiculopathy, affecting the nerve's distribution. The lumbar spine, related to *Gridhrasi*, is a major source of orthopedic issues globally, often presenting as a costly and complex problem.

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