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# Management of *Gridhrasi* (Sciatica) using *Panchakarma* Therapies - A Review

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#### **ABSTRACT**

Severe low back pain radiating to the toes of one or both of the lower limbs is one of the commonest problems in society today. It is an epidemic in most industrialized countries and it is estimated that most of the population will have some type of back related pain in their lifetime. Radiating back pain is the single commonest cause of time lost from work in many countries worldwide. Ayurveda acknowledges the gravity of the problem since ancient times and has mentioned it as *Gridhrasi Roga* which can be correlated on the basis of symptoms experienced, as sciatica. It is described as one among the *Vataja Nanatmaja Vyadhi* (diseases caused by vitiation of *Vata Dosha* only) where the vitiated *Vata Dosha* manifests as low back pain which radiates to the lower limbs, accompanied by stiffness and a pricking type of pain. In this article an attempt has been made to review the Ayurvedic classical texts and present the various treatment modalities available.

Keywords: Ayurveda, Gridhrasi, Panchakarma, Sciatica.

# **INTRODUCTION**

In today's modern day, fast-paced lifestyle, low back pain is a common musculoskeletal complaint in most age groups. It affects men slightly more than women and is observed mostly in the working population. Some aggravating factors that contribute to this are improper sitting positions, over-exertion, sedentary lifestyle, jerky movements while travelling, sudden falls, and lifting heavy objects with the wrong posture. Sciatica does not only cause pain but causes difficulty in walking as well and impacts the quality of life in a negative manner<sup>1</sup>. It is a very painful condition where the pain emanates from the lumbar region and then radiates along the posterior lateral aspect of the thigh region, right down to the toes. It can be unilateral or bilateral based on the severity of the condition. This is what causes the difficulty in walking. Not all lower back pain is sciatica, but if not managed in a proper and timely manner will surely lead to it.

Ayurveda has identified this condition since ancient times and has uniquely named it as *Gridhrasi Roga*. The word itself is remarkable, as *Gridhrasi* indicates the gait that the patient presents with, due to the extreme pain experienced; which is similar to the gait of the *Gridha* (vulture). The gait is described as one slightly tilted towards the affected side with the affected lower limb in a flexed position and the other lower limb extended, which resembles that of a vulture <sup>2</sup>.

According to *Acharya Charaka*, *Gridhrasi* is mentioned as one of the most obstinate amongst the eighty types of *Vataja Nanatmaja Vyadhi* <sup>3</sup>. The cardinal signs and symptoms of *Vataja Gridhrasi* are *Ruka* (pain), *Toda* (pricking sensation), *Muhuspandana* (tingling sensation), *Stambha* (stiffness). *Acharya Susruta* has also mentioned Sakthishepana Nigrahanti <sup>4</sup>

(restricted movement of lower limb) as one additional symptom of *Gridhrasi*. In *Vata-Kaphaj Gridhrasi*; *Tandra* (drowsiness), *Gaurav* (heaviness) and *Aruchi* (anorexia) may also be present.

## MATERIALS AND METHODS

Various literatures about *Gridhrasi*, from various *Samhita*, medical texts, journals and published literary material, were collected, studied, discussed at length and conclusions drawn are presented here.

# Purvaroopa (Prodromal Symptoms)

Gridhrasi is a Vatavyadhi and a defined Purvaroopa is not mentioned in the classical texts, and as such, Vatavyadhi Purvaroopa can be considered for this as well. The Purvaroopa for all Vatavyadhi is Avyakta Laksana <sup>5</sup>. Acharya Vijay Rakshita, the commentator of Madhava Nidana has given the clear meaning of the term

Avyakta, according to which symptoms not exhibited clearly are *Purvaroopa* and they are due to the following factors: 1) Weak causative factors, 2) Very less or mild symptoms and 3) Less Avarana of Doshas.

Thus the symptom of *Gridhrasi* exhibited in mild form and with lesser intensity before the actual manifestation of disease can be considered as the *Purvaroopa* of *Gridhrasi*. Mild pricking pain, mild radiation in the lower extremities, heaviness in the legs and similar other symptoms of *Gridhrasi* in its minimal severity may be considered as *Purvaroopa*.

# Roopa (Signs and Symptoms)

Acharya Caraka described Ruka (pain), Toda (pricking sensation), Muhuspandana (tingling sensation), Stambha (stiffness) as the cardinal symptoms as mentioned before.

Table 1: Samprapti Ghataka of Gridhrasi

Nidana (Causative Factors),	Vataprakopa Nidana
Dosha	Vata (mainly Apana and Vyana Vayu), Kapha
Dushya	Rasa, Rakta, Mamsa, Asthi, Majja, Kandara, Sira, Snayu.
Agni	Jatharagni and Dhatwagni.
Ama	Jathatagnimandyajanita and Dhatwagnijanita
Udbhavasthana	Pakvasaya
Sancharasthana	Rasayani
Adhisthana	Prstha, Kati, Sphik
Srotas	Rasa, Rakta, Mamsa, Meda, Asthi, Majjavaha
Srotodusti	Sanga, Margavarodha
Rogamarga	Madhyama
Vyakti	Sphik, Kati, Prstha, Uruh, Janu, Jangha, Pada
Bheda	Vataja and Vatakaphaja
Swabhava	Chirkari
Vyakta Rupa	Ruka, Toda, Stambha in Adhosakthi, Uruh, Janu, Jangha, Pada, Arochaka, Tandra, Gaurava.

# Treatment Modalities Available:

The treatment of sciatica according to the modern medicine and surgery in present times includes the following:

- Conservative treatment.
- Epidural steroid injection.
- Peri-radicular infiltration.
- Surgical treatment.

# Treatment According to Various Acharya of Ayurveda

The first and foremost principle to be adopted in any treatment is, to avoid the *Nidana* (causative factors) of the disease i.e.

Nidana Parivarjana <sup>6</sup>. Ahara (food items) having the following properties should be included in the dietary regimen: Dravya having Madhura, Amla, Lavana, Snigdha, Ushna properties

The general line of treatment includes Panchakarma Therapies Snehana (oleation therapy), Swedana (sweating therapy), Vamana (emesis therapy), Virechana (purgation therapy), Niruha and Anuvasana Basti (medicated Siravedhana. Raktamokshana enema). (bloodletting), Agnikarma (thermal cautery) and Shastrakarma (surgical intervention).

Table 2: Treatment of Gridhrasi According to Various Acharya

Treatment	Ch.	Su.	A.H.	B.P.	C.D.	
Snehana	-	-	-	-	+	
Swedana	-	-	-	-	+	
Vamana	-	-	-	+	+	
Virechana	-	-	-	+	+	
Niruha Basti	+	-	-	-	-	
Anuvasana Basti	+	-	+	+	+	
Siravedha	+	+	+	-	+	
Raktamokshaṇa	-	-	-	-	-	
Agnikarma	+	-	+	-	+	
Shastrakarma	-	-	-	-	+	
Key: Ch: Charaka: Su: Sushruta: A.H.: Ashtanga Hrydaya: B.P.: Bhayprakasha: C.D.: Chakradutta						

#### 1. Charaka

Basti Karma – Niruha and Anuvasana Basti, Siravedha and Agnikarma (between Kandara and Gulfa) has been mentioned in the treatment of Gridhrasi.

#### 2. Sushruta

Sushruta has advised Siravedha at Janu Sandhi (knee joint) after Sankocana (flexion) in Gridhrasi.

# 3. Vagbhatta

Ashtanga Samgraha and Ashtanga Hrydaya have advised Siravedha four Angula above and below the Janu Sandhi. They mentioned Agnikarma and Anuvasana Basti also.

#### 4. Chakradutta

Chakradutta has clearly outlined the treatment of Gridhrasi in detail. He has stressed that Basti should be administered after proper Agni Dipana, Pacana and Urdhva Shodana. He has said that administration of Basti before Urdhvasuddhi (purification by Vamana) is meaningless. He has mentioned a small operation with prior Snehana and Swedana as a Purvakarma to remove Granthi in Gridhrasi and also Siravedha four Angula below *Indrabasti Marma*. If not relieved by this treatment, then Agnikarma Kanisthika Anguli of Pada has been suggested.

He has also suggested a number of formulations like *Churna* (powder) of *Dashmoola*, *Bala* (Sida cordifolia Linn.), *Rasna* (Pluchea lanceolata DC), *Guduchi* (Tinospora cordifolia) and *Sunthi* (Zingiber officinale Roscoe.) along with *Eranda Taila* 

(Ricinus communis Linn.). Decoction of *Sephalika* (Nyctanthes arbor-tristis) or decoction of *Pancamula* with *Eranda Taila* and *Tṛvṛṭa Ghṛṭa* (Operculina turpenthum Linn.), *Rasnadi Guggulu, Trayodasanga Guggulu, Chagaladya Ghṛṭa, Saindhavadya Taila, Kubjaprasarani Taila*. Also recipes like *Erandaphala Peya* and *Varṭaku Prayoga* (vegetable in castor oil) etc. are suggested. He has described decoction of *Sephalika* leaves as best for chronic *Gridhrasi*.

## 5. Bhavprakasha

Bhavprakasha has advised Vamana and Virechana before administration of Basti. The patient should take Gomutra with castor oil for one month. Also Taila, Ghṛta, Matulunga and Adraka Swarasa taken with Cukra and Guda are useful in Sula of Kati, Uruh, Prstha, Trka and Gulma, Gridhrasi and Udavarta. Eranda Churna boiled with milk and the decoction of Erandamula. Bilva, Brihati and Kantakari is mentioned for the chronic Gridhrasi. The decoction of Sinhasya, Danti and Krutamalaka along with Eranda Taila is advised for the who Gridhrasi patients cannot walk. Specific treatment *Vata-Kaphaja* for Gridhrasi has been given. He has advised Gomutra + castor oil + Pippali Churna to be taken for a long period to eliminate Vata-Kaphaja Gridhrasi. The external Twak of Bakana (brihatnimba) is useful for chronic / Asadhya Gridhrasi. Beside decoction of Sephalika leaves, Rasna Guggulu, Pathyadi Guggulu is also advised in Gridhrasi.

#### **DISCUSSION**

As mentioned before, Gridhrasi may be compared with sciatica in modern terms, which occurs because of disturbance to the sciatic nerve and characteristic low back pain radiating on the posterior aspect of the thigh, to one or both of the lower limbs. Modern science has some methods to treat but most of them are having complications. The Ayurvedic treatment modalities are having much better prognosis in such cases. A simple yet effective method is that of Nidana Parivarjana which states to abstain from the initial causative factors. Panchakarma therapies are the chosen line of treatment in Gridhrasi due to the fact that the whole process from Purva Karma (Pretreatment), to Pradhan Karma (Main treatment) to Paschat Karma (Posttreatment) is very comprehensive in the magement of the patient as well as the disease conditions. Purva Karma is the process that is prior to Pradhana Karma, and it helps to bring back the Dosha to their relevant Ashaya. Some prior processes are: -Dipana-Pacana, Snehana and Swedana. As these procedures are to be done before Vamana Karma, Virechana Karma and also Basti Karma.

Since *Abhyanga* is done on the skin, it alleviates Vata. Sushruta has given a calculation of time in which Sneha in Abhyanga reaches different Dhatu. With this reference it can be said that, Sneha applied on skin for 900 Matra Kala (approx. 3-5 minutes) can reach up to Majja Dhatu. Abhyanga increases body capacity to bear trauma and hard work, which is the maximum occurring cause in Gridhrasi. Abhyanga keeps away the aging process. Hence it can slow down the degenerative process occurring in different Dhatu (Especially in the spine the sciatic nerve and the muscles of lower extremities in Gridhrasi).

Swedana pacifies the Vata, which causes rigidity; contracture due to its Ruksha and Sheeta Guna and Swedana removes it by its Ushna Guna. Swedana also increases the Dhatwagni level, thus

digesting *Ama Dosha*. *Swedana* also has an inherent property of decreasing the *Gaurava* and *Stambha*. *Guruta* is caused by both *Prthvi* and *Jala Mahabhuta*. This *Jala Mahabhuta* is discarded in form of sweat during *Swedana*, which also has direct effect on *Vata Dosha* <sup>7</sup>. *Swedana* liquefies the *Doshas* which are present in microchannels (*Auusrotasa*).

Basti administered through the anal route enters into the Pakvashaya & removes the faeces & gases accumulated there. This is the local action of Basti; by which it removes Mala & Apana Vayu. But these are not the only Karma of Basti for which it is called as Ardha Chikitsa (half of the treatment) or sometimes Sampurna Chikitsa (all of the treatment). So, Basti must be performing systemic actions which are possible only when Basti gets absorbed through Pakvashaya. Drugs administered forcefully through rectal route may reach up to Grahani (duodenum), hence absorption may occur in the jejunum. In Ayurvedic classics, Acarya have tried to explain actions of Basti with suitable analogies as follows. As a tree irrigated at its root level attains nourishment for the whole tree, In the same way, Basti drugs given through Guda [Rich of blood vessels, lymphatic & nerves] Nourishes all the limbs & organs of the body.

In Vata-Kaphaja Gridhrasi Vamana plays important role in subsiding the Kaphaja symptoms such as Aruci, Tandra etc. Vitiated Kapha is eliminated from the through upper channel. completion of Vamana karma Jatharagni and Dhatwagni increased in its own places. Increase in Agni results in digestion of Ama and their elimination. Due to Vamana Karma, the antigens which inflammatory changes in body especially in vertebral column region mixed / dissolved with Sneha Dravya and comes in Kostha and finally expelled out during Vamana Karma. When these antigens come out from body, the process of inflammation will be reduced that results in relaxation of nerves which were compressed due to

inflammation. *Vamana Karma* may also work in *Gridhrasi* as during *Vamana Karma* patient exerts upward stretching of upper body parts. It may result in relaxation of vertebral column since after *Snehapana* whole body gets highly *Snigdha*.

For *Raktamokshana* it is a therapeutic blood cleansing and purification procedure. The vitiated blood is expelled out from the body which aids in reducing the toxins present in the blood. For this particular application in *Gridhrasi*, *Charaka* explained that it should be conducted at the site of *Antara-Kandara-Gulpha* and *Sushruta* as well as *Vagbhata* indicated the site at four *Angula* above or below the knee joint.

## **CONCLUSION**

Ayurvedic classics have described various treatment modalities in the management of *Gridhrasi* since ancient times. These have stood the test of time and even today, are useful in bringing relief to the sufferers of this dreadful disease.

Nidana Parivarjan is the first logical step towards the management, followed by the various Panchakarma therapies mentioned before. Abhyanga and Swedana may then be used in the initial phase of management with Basti and Raktamokshana being there as well. With each therapy being tailor made to suit the severity and requirements specific to the patient, the benefit is tremendous. Thus it may be concluded that the Ayurvedic management of Gridhrasi is a gift to society, in today's fast paced world.

Conflict of Interest: None.

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