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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 orbilateral 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 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) and *Stambha* (stiffness).

स्फिक्पूर्वा कटिपृष्ठोरुजानुजङ्घापदं क्रमात् । गृधसी स्तम्भरुक्तोदैर्गृहणाति स्पन्दते मुहुः ॥56॥ वाताद्वातकफात्तन्द्रागौरवारोचकान्विता । (च.चि.28/56,57)

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.

पार्ष्णिप्रत्यङ्गुलीनां तु कण्डरा याऽनिलार्दिता सन्क्थः क्षेपं निगृहणीयाद्गृध्रसीति हि सा स्मृता। (स्. नि.1/74)

#### MATERIALSANDMETHODS

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.

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#### 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.

Nidana (CausativeFactors),	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, Stambhain Adhosakthi, Uruh, Janu, Jangha, Pada,				
	Arochaka, Tandra, Gaurava.				

#### Table 1: Samprapti Ghataka of Gridhrasi.

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 viz: *Snehana* (oleation therapy), *Swedana* (sweating therapy), *Vamana* (emesis therapy), *Virechana* (purgation therapy), *Niruha* and *Anuvasana Basti* (medicated enema), *Siravedhana, Raktamokshana* (blood letting), *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	-	-	-	+	+
NiruhaBasti	+	-	-	-	-
AnuvasanaBasti	+	-	+	+	+
Siravedha	+	+	+	-	+
Raktamokshana	-	-	-	-	-
Agnikarma	+	-	+	-	+
Shastrakarma	-	-	-	-	+
Key: Ch:Charaka; Su:Sushruta; A.H.; Ashtanga Hrydaya; B.P.; Bhavprakasha; C.D.; Chakradutta					

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#### 1. Charaka

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

अन्तराकण्डरागुल्फं सिरा बस्त्यग्निकर्म च । गृधसीषु प्रयुञ्जीत ।। (च. चि. २८/101)

#### 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* at *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 Trvrta Ghrta (Operculina turpenthum Linn.), Rasnadi Guggulu, Trayodasanga Guggulu, Chagaladya Ghrta, Saindhavadya Taila, Kubjaprasarani Taila. Also recipes like Erandaphala Peya and Vartaku 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, Tṛkaand 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 Gridhrasi patients who cannot walk. Specific treatment for Vata-Kaphaja 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* (brihat nimba) is useful for chronic /*Asadhya Gridhrasi*. Beside decoction of *Sephalika* leaves, *Rasna Guggulu*, *Pathyadi Guggulu* is also advised in *Gridhrasi*.

गृधस्यार्त्तं नरं सभ्यग्रेकेण वमनेन वा। ज्ञात्वा निरामं दीप्ताग्निं बास्तिभिः समुपाचरेत् ।। नादौ बस्तिविधिं कुर्याद्यावदूर्ध्वं न शुध्यति । स्नेहो निरर्थकः स स्याद् भस्मन्येव हुतं यथा ।। (भा.प्र. मध्यम खण्ड 24/133-134)

#### 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 this, 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 (Pre-treatment) to Pradhan Karma (Main treatment) to Paschat Karma (Post-treatment) is very comprehensive in the management 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 Ashava. 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 hardwork, 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 micro-channels (*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 when administered forcefully through rectal route may reach upto 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 thebody.

In Vata-Kaphaja Gridhrasi Vamana plays important role in subsiding the Kaphaja symptoms such as Aruci, Tandra etc. Vitiated Kapha is eliminated from the body through upper channel. After 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 causing inflammatory changes in body especially invertebral 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. Forth is 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 tail or 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 fastpaced world.

#### Conflict of Interest : None.

#### REFERENCES

- 1. MeucciRD, FassaAG, FariaNM. Prevalence of Chronic Low Back Pain: A Systematic Review. Rev Saude Public, 2015; 49. Pubmed PMID: 26487293.
- Raja Radha Kanta Deva edited Shabda Kalpadruma, 2<sup>nd</sup> volume, Edition: 1988, Pub: Nag publishers, Delhi, pp 55, p. 345.
- Agnivesha, Charaka Samhita with Charaka Chandrika Hindi Commentary by Dr.Brahmanand Tripathi, Part1, Sutrasthana 20/11, 1<sup>st</sup> Edition (reprint), Varanasi: Chaukhambha Krishnadas Academy; 2009: p. 389.
- Sharma PV, editor. Nidanasthana; Vatavyadhi Nidana Adhyaya. Sushruta, Sushruta Samhita. Chapter 1, Verse 74. Varanasi, India: Chaukhambha Visvabharati; 2005. p.15.
- Priyavratsharma, 2005, Charak Samhita, Chiktsa Sthana, Seventh Edition, Vol2, 28/19, Chaukhambha Orientalia, Varanasi, India, p. 460.
- Vaidya Jadvji, Trikamji Acharya (2010) Susruta Samhita of Susruta, Uttara Sthana, Reprint edition, 2010, 1/25, Chaukhambha Sanskrit Sansthan, Varanasi, India, p. 158.
- TripathiB, editor. Sutrasthana; Doshopakramaniya Adhyaya. Vagbhata, Ashatang Hrudaya. Chapter 13, Verse 1–3. Delhi, India: Chaukhamaba Sanskrit Pratishthan; 2015. p. 185.

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