#### An International Journal of Research in AYUSH and Allied Systems

#### **Review Article**

## A BIRD'S EYE VIEW ON AHARAJA NIDANAS IN GRIDHRASI Namrata P Gharge<sup>1\*</sup>, Rashmi. B.M.<sup>2</sup>

\*¹Final year PG scholar, ²Assistant Professor, Department of Roga Nidana, GAMC Bangalore, Karnataka, India.

**KEYWORDS:** *Gridhrasi, Sciatica, Vata Vaigunyata, Vataja Gridhrasi, Vatakaphaja Gridhrasi.* 

## **ABSTRACT**

Gridhrasi (Sciatica) is one among the Natamaja vata vyadhis. It is most commonly seen in the society as an eminent problem. The patient is unable to perform his daily routine activity easily. Symptoms seen are Toda (pain), initially affects Sphik (gluteal region) as well as the posterior aspects of the Uru (thigh), Janu (knee), Jangha (calf) and Pada (foot). Though Gridhrasi (Sciatica) is the Vata Vyadhi but Kapha is the Anugata Dosha. So it is classified into 2 types, Vataja and Vata-Kaphaja. Gridhrasi (Sciatica) is one among the severe debilitating disease. Acharaya Sushruta mentioned most of the Hetus (etiology) for Gridhrasi (Sciatica) from which Vata Vaigunya is important to cause disease. Vata is the main culprit in this disease and other *Dosha* may be involved. *Gridhrasi* is more common among 30 to 50 years of age group. Gridhrasi (Sciatica) can be correlated with Sciatica in contemporary science. Sciatica is the name given to pain caused by irritation of the sciatic nerve. The sciatic nerve is the longest and widest nerve in the human body. It runs from the lower back, through the buttocks, and down the legs, ending just below the knee. In the present article it's been highlighted regarding the disease Gridhrasi and its Aharaja Nidanas (dietetic causative factors) as per the scattered references available in the various classical texts.

#### \*Address for correspondence Dr. Namrata P

Final year PG scholar, Department of Roga Nidana, GAMC Bangalore-09 Email:

namratagharge8@gmail.com Mobile: 7204339322

#### **INTRODUCTION**

Ayurveda is the oldest and traditional medicine. Ayurveda gives equal importance to preventive and curative aspects of the disease. According to Ayurveda, physical, mental, social and spiritual well-being can be considered as *Arogya* (Health).

The name Gridhrasi (Sciatica) is given because gait of the patient resembles like gait of "Vulture"[1]. Gridhrasi (Sciatica) is nanatamaja vyadhi and the main culprit behind this is Vata Dosha. Acharva Charaka in Chikitsa Sthana describes Gridhrasi (Sciatica) as mainly of 2 types Vataja and Vatakaphaja. The cardinal features are Ruk (pain), Toda (pricking sensation), Muhurspandana (twitching) and Sthambha (stiffness) in Sphik (buttocks), Kati (lumbar), Uru (thigh), Janu (knee), Jangha (calf) and Pada (foot) in order and Sakthna Ksepha Nighrahat<sup>[2]</sup> i.e., restricted lifting of the leg.

In modern parlance the above condition is described in which pain is experienced along the course and in distribution of Sciatic nerve. It is known as Sciatica. Sciatic nerve runs from the lower back, through the buttocks, and down the legs, ending just below the knee.<sup>[3]</sup> Radicular pain in the distribution of the sciatic nerve, resulting from herniation of one or more lumbar intervertebral discs, is a frequent and often debilitating event. The lifetime incidence of this condition is estimated to be between 13% to 14%.<sup>[4]</sup> It is a common condition affecting over 3% of the population at any one time.

#### **Aims and Objectives**

- 1. To understand the *Nidana panchakas* of *Gridhrasi* (Sciatica).
- 2. Detailed understanding of the possible *Aharaja Nidanas* (Dietetic factors) of the disease, *Gridhrasi* (Sciatica) as per various classical references.

## Materials and Methods Source of Data

- Literary source
- Classical text books of Ayurveda
- Text books of contemporary science
- Authenticated website
- Research journals

#### **Review of Literature**

# Etymological Derivation of *Gridhrasi Vyutpatti*

The word *Gridhrasi* (Sciatica) is in feminine gender which is derived from the *Dhatu "Gridhu*" that means to covet, desire, and strive after greedily or eager for.

The word *Gridhrasi* (Sciatica) indicates typical character of pain and also gait of patient. The patient walks like the bird "*Gridhra*" (Vulture) and patient legs become tense and slightly curved as that of vulture. So the term *Gridhrasi* (Sciatica) might be given to the disease.

#### Nirukti According to Different Acharayas

Following derivations are taken from different text books in Sanskrit literature substantiates the same.

- Gridhramapisyati, 'Syati'-as- 'Kshepana'
- "Urusandhau Vatarogah" [5]
- "Gridhramiva Syati Gacchati"

The disease *Gridhrasi* (Sciatica) is said to cause an abnormal throwing action of affected leg. In Sanskrit word *Syaati* in *Gridhrasi* (Sciatica) means throwing action.

The reference from *Shabdha Kalpa Druma* states that, the word *Grudhra*<sup>[6]</sup> refers to desiring, greedily, eager for, great desire for.

In Monier Williams, Sanskrit-English dictionary it is said that, *Gridhrasi* (Sciatica) is

Rheumatism affecting the loins. Similar reference is also found in "Vaidyaka Shabha Sindhu."

#### Synonyms According to Different Acharyas

Following are the synonyms of *Gridhrasi* (Sciatica)

## • Ringhini<sup>[7]</sup> (Vachaspathi)

The word *Ringhini* means the disease that cause to creep or crawl or that makes a person to move slowly.

## • Randhrini [8] (Dalhana)

The word *Randhrinee* indicates point or rupture.

## • Radhina [9] (Aadmalla and Kaashirama)

The word *Radhina* indicates pressing, compressing or destroying.

## Views on *Gridhrasi* by Different *Acharyas*

- Acharya Charak: In Gridhrasi (Sciatica) pain starts in Kati (Lumbar) and descends to Nitamba (gluteal region), Uru (posterior aspect of thigh), Janu (knee), Jangha (calf), Padam (foot) in order of sequence.[10]
- Acharya Sushruta: It is described that Kandara (tendons) Dusti of leg occurs due to vitiated Vata and involves from the part of Vankshansandhi (hip joint) to leg, unilateral or bilateral.[11]
- Acharya Vagbhata: Describes same as that of Acharya Sushruta.[12]
- Acharya Madhava: Describes same as that of Acharya Charaka but has given additional symptoms like Dehasyapravakrata (increase in normal curvature of spine), Bhaktadvesha (aversion towards food) and Mukhapraseka (Excessive salivation).[13]
- Yogaratnakar: Follows Acharya Charaka's description.

Table 1: Types According to Different Acharyas

Gridhrasi type	Charaka	Vangasena				
Vataja	Stambha (stiffness), Ruk (pain), Toda (pricking sensation), Spandana (tingling sensation)	Dehavakrata (increase in normal curvature of spine), Sandhispuran (throbbing pain in joints) Stabhdata (stiffness)				
Vata kaphaja	Tandra (drowsiness), Gaurava (heaviness), Arochaka (anorexia)	Staimitya (freezing sensation), (Mukhapraseka (excessive salivation) Vahnimardava (sluggishness of Jataragni), Bhuktadwesha (aversion towards food)				

#### Nidana Panchakas of Gridhrasi

#### (Vata Vyadhi) According to Acharya Charaka

*Nidana*: The *Nidana* (etiology) can be classified into 2 types i.e.,

Aharaja Nidana (dietetic factors) and Viharaja Nidana (behavioral causes).[14]

*Aharaja Nidana*: The food which we consume like *Sheeta* (cold), *Ruksha* (dry) etc.

*Viharaja Nidana*: The improper activities like *ati* plavana (excessive swimming), *Ativyayama* (excessive exercise), and *Ativyayama* (excessive sexual intercourse).

**Poorvarupa:** The premonitory symptoms are *Avakata Lakshanas* (not seen).<sup>[15]</sup>

Rupa: The symptoms along are Sphik (gluteal region) Purva Kati (lumbar) Prushta (back), Uru (thigh) Janu (knee) Jangha (calf) Padam (foot) Kramata (in order) i.e., Stambha (stiffness), Ruk (pain), Toda (pricking Sensation), Gruhanati spanadata muhur muhur (feeling tingling sensation on and off).<sup>[16]</sup>

#### Samprapti<sup>[17]</sup>

Nidana Sevana [Ruksha (dry), Sheeta (cold)]



Dosha Dushya Sammurchana occurs (Vata and Kapha Dosha) [Rasa[liquid], Asthi (bone), Dushya]



Sroto Dushti occurs due to Sneha Guna Abhava and Vata gets accumulated in Srotas



Gridhrasi

*Upasaya*: The one which elevates the disease like *Sarpi* (ghee), *Vasa* (muscle fat) and *Majja* (bone marrow) etc.<sup>[18]</sup>

#### Aharaja Hetu in Gridhrasi

The word 'Nidana' (etiology) is used in Ayurveda classics in a broad sense. This word is derived from Sanskrit Dhatu 'Ni' which carries the meaning to determine (Ni-Nishchaya Deeyate Jnanam). This word either refers to

eitopathogenesis of disease in general or the aetiology of the illness in the particular.

Since *Gridhrasi* is regarded as *Vatyavyadhi* of *Nanatmaja* type, the factors that precipitate *Prakopa* of *Vata* can also be taken as the *Nidana* (aetiology) for *Gridhrasi* (Sciatica).

Dietetic factors play major role as causative factors for the pathogenicity of various diseases. Henceforth will be explaining in detail regarding possible *Aharaja nidanas* (dietetic factors) responsible for the pathogenicity of the disease *Gridhrasi* (Sciatica).

*Aharaja hetu*: The causative dietetic factors included under this group have been again subdivided into the following 8 groups:

- *Dravyatah*: In this group all the *Aharaja Dravyas* (dietetic factors) responsible for *Vata Prakopa* has been included.
- *Gunatah*: This group includes the *Ahara Dravyas* (dietetic factors) possessing *Gunas* (quality) like *Ruksha* (dry), *Sheeta* (cold) etc.
- Rasatah: The Ahara Dravyas (dietetic factors) possessing various tastes like Katu (pungent), Tikta (bitter) and Kashaya (astringent) responsible for Vata Dosha Prakopa.
- *Karmatah*: Excessive use of *Vishtambhi Ahara* (food which is cause for constipation) leads to a *Prakopa* of *Vata*.
- *Veeryatah*: or instances, *Ahara Dravyas* (dietetic factors) possessing *Sheeta Veerya* (cold potency) cause *Prakopa* of *Vata*.
- *Matratah*: The quantity of *Ahara* (food) can be considered.
- *Kalatah*: The *Vata Prakopa* occurs at the end of digestion (*Bhukte Jeeryati Bhojane Cha*).

The following *Aharaja Hetus* (dietetic causes) from various classical texts are taken *Charaka* (C.S), *Sushruta uttartantra* (S.U), *Astanga Sangraha* (A.S), *Astanga Hrudaya* (A.H), *Bhava Prakasha* (B.P)

Table 2: Aharaja Hetu (Dietetic causes)

	C.S.	S.U.	A.S.	A.H.	B.P.
Adhaki (Cajanus cajan)	-	+	-	-	-
Bisa (Nelumbo nucifera)	-	+	+	-	-
Chanaka (Cicer arietinum)	-	-	+	-	-
Chirabhata (Cuccumus melo)	-	-	+	-	-
Harenu (Pisum sativum)	-	+	-	-	-
Jambava (Eugenia jambolena)	-	-	+	-	-
Kalaya (Lathyrus sativus)	-	+	+	-	-
Karira (Capparis decidua)	-	-	+	-	-
Kalinga (Holarrhena antidysentrica)	-	-	+	-	-
Koradusha (Paspalum scorbiculatum)	-	+	-	-	-

	AYU	24171	IAKA,	2018	s;5(4):.	1833-	1838				
-	Masoora (Lens culinaris)			-	+		-	-		-	
	Mudga (Phaseolus mungo)		-	-	+		-	-		-	
	Nishpava (Dolichos lablab)		-	-	+		-	-		-	
	Neevara (Hygroryza aristata)		-	-	+		-	-		-	
	Shaluka (Nelumbium speciosum)		-	-	-		+	-		-	
	Shushka shaka (Dry vegetables)		-		+	+ -		-		-	
	Shymaka (Setaria italic)		-		+ -		-	-		-	
	Tinduka (Diospyros tomentos)		-		-		+	-		-	
	Trunadhanya (Grassy grain sp.)	-		-	-		+	-		-	
	Tumba (Lagenaria valgaris)		-	-	-		+	-		-	
	Uddalaka (A Variety of Paspalum scrobiculatum)		-		+		-	-		-	
	Varaka (Carthamus tinctorius)		-	-	+		-	-		-	
	Viroodhaka (Germinated seeds)		_	-	-		+	-		-	
Guna	taha					•					
	Rukshana (Ununctous diet)		+	+			+	+		+	
	Laghvanna (Light diet)	-			+		+	-		+	
	Gurvanna (Heavy diet)	-			-		+	+		-	
	Sheetanna (Cold diet)	+			-		+	-		-	
Rasat	aha										
	Kashayanna (Astringent taste)	- 1		+ -		+		+		+	
	Katvanna (Acidic taste)	8		+		+		+		+	
	Tiktanna (Bitter taste)		100 第		+			+		+	
Kalat	aha	3	E E	980							
	Adyashana (Eating before digestion of previous food)		+			3/3		-		-	
	Jeernanta (After digestion)		1	SHO	HAI	+		+		+	
	Pramitashana (Taking food at		-			+		+		+	
	improper time)										
Matro	ıtaha							r			
	Abhojana (Fasting)			+		+	-	-		+	
	Alpashana (less intake of food)			+		-	+	+		-	
	Vishamashana (intake of food in improper time irrespective of quantity		7)	- +		+	-	-		-	
Karm	ataha										
	Vishtambhi (diet cause for constipation)				+			-		-	
Veerayataha											
	Sheeta (cold potency) -			-		-		-		-	
	Table 2.	C		<b>01</b>	CAI		a Nidan	1			

Table 3: Summary Chart of *Aharaja Nidanas* 

Table 3. Summary Chart of Amaraga Madahas									
Ayurveda Samhita	Dravyatah	Gunatah	Rasath	Karmath	Veeryath	Matrath	Kalatah		
Charaka	0	2	0	0	0	2	0		
Sushruta	13	2	3	0	0	2	2		
Astanga Sangraha	12	4	3	1	0	1	2		
Astanga Hridaya	0	2	3	0	0	1	2		
Bhava prakash	0	2	3	0	0	1	2		

#### DISCUSSION

Now a day's younger and elder people population is falling prey to *Vatika* diseases. *Gridhrasi* (Sciatica) is one among the *Vataja Nanatamaja Vyadhi. Vatadosha* plays vital role in *Gridhrasi* (Sciatica). Among five types of *Vata, Apana* and *Vyana Vata* play a vital role in causing *Gridhrasi* (Sciatica). *Apana Vayu* resides in the lower part of the body especially *Kati* (low back), *Basti* etc. Because of various *Hetus* (causes), *Vyana Vayu* gets vitiated. *Gridhrasi* is a painful condition; it hampers normal activity of the person, to both lower extremities and any one extremity. Almost all signs and symptoms of *Gridhrasi* can be correlated with Sciatica.

In *Gridhrasi* (Sciatica), *Sakthi Utkshepa Nigrahat*<sup>[19]</sup> is the main sign i.e., lifting of the lower extremity is affected. *Pakwasaya* is the *Udbhava Sthana* as it is *Vataja Nanatamaja Vyadhi*. The vitiated *Dosha* affects the *Khandara* (tendons), there is pain in the leg radiating to *Sphik* (buttocks), *Prushta* (lumbar), *Uru* (thigh), *Janu* (knee), *Jangha* (calf) and *Pada* (foot). *Vata Vyadhi Nidana* should be taken as *Gridhrasi Nidana* (sciatica causes) separate *Nidanas* (*hetus*) are not explained.

Acharya Charak states that for treatment of disease it is important to take proper history of patient and know the Nidanas (aetiology) of the Vyadhi (disease). Gridhrasi (Sciatica) have only Samanaya Nidana (common etiology). Rasa (liquid), Rakta (blood), Meda (muscle fat), Asthi (bone) and Majja (bone marrow) are involved in the development of the disease. [20]

#### **CONCLUSION**

Gridhrasi (Sciatica) is the painful condition in which patient is unable to perform his routine activities properly due to the pain. As due to the predominance of Vata Dosha especially Vyana and Apana, Gridhrasi (Sciatica) is described under Nanatamja Vyadhi by Charaka. Gridhrasi Hetus (Sciatica causes) which are described in various Samhitas are mostly of Vatadosha dominant rather than other two Doshas i.e., Pitta and Kapha. Vata can be aggravated by Swanidana (Intake of dietetic factors which causes disease). Dhatukshava (Decrease of fundamental structures which supports body) and Margaavarodha (Obstruction of pathway).

Acharya Sushruta mentioned most of the Hetu (causes) which causes Gridhrasi (sciatica) Katishula (low back pain) is the main alarming symptom in most of the disease. In contemporary science Gridhrasi can be correlated to Sciatica.

Nowhere in the classics can we find specific *Nidanas* (Causes) mentioned for the disease *Gridhrasi* (Sciatica). Thus it can be concluded that above mentioned *Aharaja Nidanas* (dietetic factors) explained under *Samanya Vatavyadhi Nidana* play main role in causing the disease *Vataja* and *Vata-Kaphaja Gridhrasi* (Sciatica).

Gridhrasi (Sciatica) being a Vata vyadhi, Samanya poorvarupa of Vata vyadhi is been explained as the Poorvarupa of Gridhrasi (Sciatica). Acharya charaka has explained Avyakta Lakshanas as Poorvarupa of Gridhrasi (Sciatica).

#### REFERENCES

- 1. Raja Radha kant deva. Shabhakalpadruma, Vol.IV. Varanasi; Chaukambha Sanskrit Series; 1967. p.348.
- 2. Yadavji Trikamji Acharya edited, Sushruta Samhita with Dalhana commentary, Nidanasthana, vatavyadhi nidana, Chaukambha Prakashana, Varanasi, Reprint 2010.chapter no.1, sholka 'no 74, p.268
- 3. Scaitica: causes, treatment. exercise and symptoms cited on 27/12/18. Available from https://www.medicalnewstoday.com
- 4. Pain Medicine-Oxford University Press cited on 27/12/18. Available from https://academic.oup.com>issue.
- 5. Vaidya Shri Tranathatarka Vachaspati Bhattacharya edited, Vachaspatyama, part IV Chaumkhamba Sanskrit series office Varanasi; 2003. P.2631.
- **6.** Raja Radhakant Bhadhur. Shabhakalpadrum, Vol.II. Naga Publishers, Delhi; 2006, P.348.
- 7. Yadavji Trikamji Acharya edited, Madhava nidanam with Madhukosha vyakha, Prathamkhanda, Vatavyadhinidanam, Chaukambha Prakashna Varanasi; 2010, chapter no.22, sholka no 55-56, p. 483-484.
- 8. Yadavji Trikamji Acharya edited, Sushruta Samhita with Dalhana commentary, Nidanasthana, vatavyadhinidana, Chaukambha Prakashana, Varanasi, Reprint 2010, chapter no.1, sholka no 74, p.268.
- 9. Vaidya Brahmanand Tripathi edited, Sarngadhara samhita, Purvakhanda, Rogabhedaparichaya, Chaukambha Surbharti prakashana, Varanasi, 2011, Chapter no.7 sholka no.108, p.108.
- 10. Charak Samhita Chikitsasthana, Vatavyadhi chikitsa, chapter no.28 shloka no.56-57, P.619.

- 11. Sushruta Samhita, Dalhana commentary, Nidanasthana, Vatavyadhinidana, Chapter no.1 shloka no.74, p.268.
- 12. Vaidya pandit Hari Sadhashiv Shastri Praradakara edited, Vagbhata, Astanga hridaya, Nidanasthana, Vatavyadhinidhana, Chaukambha Prakshana, Varanasi, 2011, chapter no.15 shloka no.54, p.535.
- 13. Yadavji Trikamji Acharya edited, Madhava nidanam with Madhukosha vyakha, Pratham Khanda, Vatavyadhinidanam, Chaukambha Prakashna Varanasi; 2010, chapter no.22, sholka no 55-56, p. 483-484.
- 14. Yadavji Trikamji Acharya edited, Charak Samhita with Ayurveda Deepika commentary, Nidanasthana, Vatavyadhi nidana, Chaukambha Publications, New Delhi, Chapter no 28 Sholka no.15, p.617.
- 15. Yadavji Trikamji Acharya edited, Charak Samhita with Ayurveda Deepika commentary, Nidanasthana, Vatavyadhi nidana, Chaukambha Publications, New Delhi, Chapter no 28 Sholka no.19, p.617.

- 16. Yadavji Trikamji Acharya edited, Charak Samhita with Ayurveda Deepika commentary, Nidanasthana, Vatavyadhi nidana, Chaukambha Publications, New Delhi, Chapter no 28 Sholka no.56. P.618.
- 17. Yadavji Trikamji Acharya edited, Charak Samhita with Ayurveda Deepika commentary, Nidanasthana, Vatavyadhi nidana, Chaukambha Publications, New Delhi, Chapter no 28 Sholka no.56, P.617
- 18. Yadavji Trikamji Acharya edited, Charak Samhita with Ayurveda Deepika commentary, Nidanasthana, Vatavyadhi nidana, Chaukambha Publications, New Delhi, Chapter no 28 Sholka no.76, P.620.
- 19. Yadavji Trikamji Acharya edited, Sushruta Samhita with Dalhana commentary, Nidanasthana, Vatavyadhi nidana, Chaukambha Prakashana, Varanasi, Reprint 2010, chapter no.1, sholka no 74, p.268.
- 20. Jitendra Kumar D Rana. A Critical Review on aetiology of Scaitica in Ayurveda. World Journal of Pharmaceutical and Medical Research.2017;3 (5), 161-165.

#### Cite this article as:

Namrata P Gharge, Rashmi. B.M. A Bird's Eye View on Aharaja Nidanas in Gridhrasi. AYUSHDHARA, 2018;5(4):1833-1838.

Source of support: Nil, Conflict of interest: None Declared

Disclaimer: AYUSHDHARA is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. AYUSHDHARA cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of AYUSHDHARA editor or editorial board members.