



ETIOPATHOLOGICAL STUDY OF GRIDHRASI W.S.R. SCIATICA: A REVIEW

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ARTICLE INFO

Article History:

Received 13th December, 2021

Received in revised form 11th

January, 2022

Accepted 8th February, 2022

Published online 28th March, 2022

Key words:

Gridhrasi, Nidanpanchak, Samprapti, Sadhyaasadya, Sapekshanidan

ABSTRACT

Gridhrasi has been considered as a major problem to the physicians since long. The chance of occurrence is expected to be increasing through the coming years. *Gridhrasi* comes under 80 types of *Nanatmaja Vatavyadhi*. *Vyana Vayu* is an essential factor for manifestation of the disease *Gridhrasi*. There is no direct reference regarding *Nidana* and *Samprapti*. The chief pathological phenomenon in the manifestation of *Gridhrasi* is *margaavarana* and *Dhatukshaya*. It occurs mainly due to vitiation of *vata* and provoked *vata* seated in the *kandaras* of lower extremities. Impairment of *Utkshepanadikarma* (Restricted movement) is the main feature along with *Ruka* (Pain), *Stambha* (Stiffness) and *Toda* (Pricking Sensation). In *Ayurvedic* classics Mainly *Vatavyadhi Chikitsa* has been advocated in *Gridhrasi*. It can be equated with *Sciatica* or *Sciatic syndrome* in modern parlance. The main cause of *Sciatica* is degenerative changes in the lumbar vertebrae which can be compared with *Dhatukshayajanyanidana* of *Gridhrasi*.

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INTRODUCTION

Now a day the whole world is hopefully looking toward the *Ayurveda* for its safe and cheap medication from the ancient period to the modern era, human being is always concerned firstly for wellbeing of his body and curing the diseases which he felt. But in present era, due to busy social and professional life, improper sitting posture in professional work, continuous and over- strained, jerk movement during travelling, industrial work, sports and unavoidable circumstances which predominant under pressure to spinal cord and plays an important role in producing neurological pain. Among such condition, *Ayurveda* classical have explained a severe debilitation condition in the name of *Gridhrasi* (*Sciatica*). The name itself indicates the way of *gatishown* by the patient due to extreme pain like a *Gridhrasi*. *Gridhrasi* is a condition where *vata* affects the *Gridhrasinadi* characterized by *Ruka* (pain), *Stambha* (stiffness), *Toda* (pin prickling sensation) starting from *sphik, kati, pristha* (buttock, lumbar and spinal column) radiating down to posterior border of *Uru* (thigh), *Janu* (knee), *Jangha* (calf muscles), *Pada* and impair the lifting of thigh^{1,2}. *Acharya Sushruta* has described pain as the main symptom of the disease and more over he also says that due to vitiated *Vata* the movement of *adhosakha* (lower limb) get restricted (*Sakthikshepanigraha*), this condition can be correlated with specific Straight Leg Raising Test in modern science.³

Aims and Objectives

- Study of *Nidanpanchak* of *Gridhrasi*.
- Establishment of *Samprapti* of *Gridhrasi*.
- Study of *Sapekshanidan* and *Sadyaasadya* of *Gridhrasi*.

DISCUSSION

Acharya Shushruta opines that there are two *kandara* in the leg that gets afflicted. The two *kandara* include the one extending distally from the *parshni* to the toes and other extending above from *parshni* to the *vitapa*. These two *kandara* when gets afflicted with the *vatadosha*, limits the extension of the leg. And this disease is known as *Gridhrasi*

Synonyms of Gridhrasi

Ringhinee, Randhrinee This term is used by *Dalhanawhile* commenting on *Sushrutaa*, meaning weak point or rupture.

Types of Gridhrasi

- *Acharya charak*⁴ *Haarita*⁵, *Madhava*⁶ and *Bhava Prakasha*⁷ have mentioned 2 types of *Gridhrasi* i.e. *Vataja* and *VataKaphaja*.
- *Acharya Sushrut* and *Vagbhata* have not mentioned any classification of *Gridhrasi*.

Nidana Panchaka of Gridhrasi

Nidana Panchaka is the combination of parameters, which are used in the diagnosis of the disease they are –

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1. *Nidana*
2. *Purvarupa*
3. *Rupa*
4. *Upashaya-Anupashaya*
5. *Samprapti*

Nidana

The first principle of treatment is to avoid, the *nidana* so that knowledge of *nidana* is most important then treat according to the characters.

Gridhrasi and vata⁸

In case of *gridhrasinidana* has not been mentioned *acharyacharak* has been described an one of eighty *nanatmajvyadhi* and also described in *vatarogaadhyay* hence *vataprakopaklakshana* like *shoola*, *sput*, *stambha* etc. are found as the cardinal symptoms in the disease so the causative factor mentioned producing *vatavyadhi* are given here.

Harit has mentioned it is *vataprakopak* disease

Gunaso Vata⁹

The important characters or properties of *vata* are *Ruksa* (dryness), *laghu* (lightness), *khara*(roughness), *shita* (coldness), *suksma* (penetratingpower) and *chala* (pulsatile or moving or fluctuating)

Function of vata¹⁰

The *vayu* as represented by its five type maintains the body by virtue of its function viz, to move to carry to fill to separate and control. All the life activities of the body are performed by the normal *vata* which is said to be the very life of living beings. Diseases are caused by that very *vata* when morbidised and even cessation of life is caused by such *vata*.

Pathological Aspect

The *vayu* gets vitiated due to prolonged use of measures having similar properties substance and effects because prolonged use of similar properties in the causes of increase in *dhatu*s

Causative factor of vata¹¹

The causative factors of *vatavyadhi* have been explained by *acharyacharak* and by *Acharya Bhavamishra* in *Bhavaprakash* (B.P.U.2/1-2) in detailed while in other *samhita* they have not been clearly described.

AharajNidan

DhatukshayakarakHetu

Factors	Ch. Chi. 28/15-18 ¹²	Su. Su. 21/19-20 ¹³	A.Hi. Ni. 15/5 ¹⁴	M. Ni. 22/1-4 ¹⁵	S.S. purvkand 2/325 ¹⁶	Bh. P. purvkhand 7/43 ¹⁷
Laghuanna	+	+	-	+	+	+
Shushkashaka	-	+	-	-	-	-
Alpa/parimitanna	+	-	+	+	+	+
Sheetaanna	+	+	-	+	+	+
Abhoajna/Anashan	+	+	-	+	-	-
Shushkamansa	-	+	-	-	-	-
Mudganishpav	-	+	-	-	+	+
Rukshaanna	+	+	+	+	+	+

Margavarana Hetu

Factors	Ch. Chi. 28/15-18	Su. Su. 21/19-20	A.H. Ni. 15/5	M. Ni. 22/1-4	S.S. purvkand 2/325	Bh. P. purvkhand 7/43
Viruddhabhojan	-	-	-	-	-	+
Kashaya rasa	-	+	+	-	-	+
Bhuktamjeernataram	-	-	-	-	-	+
Adhyashana	-	+	-	-	-	+
Kalaya, chanamasura	-	+	-	-	-	+
Vishamashana	-	+	-	-	-	-

ViharajNidana

DhatukshayakarakHetu

Factors	Ch. Chi. 28/15-18	Su. Su. 21/19-20	A.H. Ni. 15/5	M. Ni. 22/1-4	S.S. purkand 2/325	Bh. P. purvkhand 7/43
Atiplavana	-	+	-	-	-	-
Atipradhaavan	+	+	-	+	-	+
Vishamupachara	+	-	-	+	-	-
Atiprajagara	+	+	+	+	+	+
Abhigata	+	+	-	+	+	+
Vega udirana	-	-	+	-	-	-
Padaticharya	-	-	+	-	-	-
Dukhashayya	+	-	-	-	-	-
Ativyayam	+	+	+	+	-	-
Ativyavaya	+	+	+	+	-	+

MargavaranaHetu

Factors	Ch. Chi. 28/15-18	Su. Su. 21/19-20	A.H. Ni. 15/5	M. Ni. 22/1-4	S.S. purkand 2/325	Bh. P. purvkhand 7/43
Vegarodha	+	+	+	+	-	+

MansikaNidana

Factors	Ch.Chi.28/1 5-18	Su.Su.21/1 9-20	A.H.Ni.15/ 5	M.Ni.22/ 1-4	S.S.purvaka nd	Bh.P.purvka nd 7/43
Atyantakamauda ya	-	-	-	-	+	+
Shoka	+	-	+	+	+	+
Krodha	+	-	-	-	-	-
Bhutabhishanga	-	-	-	-	-	-
Bhaya	+	-	+	-	+	+
Chinta	+	-	+	+	+	+

Purvarupa¹⁸

Unmanifested symptoms are the *purvarupa* of *vatavyadhi*. Specific *purvarupa* of *Gridhrasi* are not available in any *samhita*, therefore the *purvarupa* of *vatavyadhi* can be assumed as that of *Gridhrasi* also. *Gridhrasi* such as *stambha*, *ruka*, *toda*, *spandana*, *stabdhatta*, when manifested slightly can be called as *purvarupa* of *Gridhrasi*.

Rupa

*Vyaktapoorvaroo*pa are known as *Roopa*. This is the unique stage of the illness wherein it is clearly recognizable as all its characteristic symptoms and signs manifest. *Roopa* plays the most important role in the proper diagnosis of the disease. In *Ayurvedic* classics, the *roopa* of *Gridhrasid* described are as follows.

Samanya Lakshana

Factors	Ch. Chi.28/56- 57 ¹⁹	Su. Ni. 1/73 ²⁰	A.H. Ni. 15/54 ²¹	M. Ni. 22/54	B.P. Chi. 24/129- 131 ²²	Y.R. purv. H.S.20/31- P- 32 ²⁴ 515 ²³
SphikapurvakatipristhaUruJanu						
Janghapada, kramatvedana	+	-	-	+	+	+
Ruka	+	-	-	+	+	+
Toda	+	-	-	+	+	+
Stambha	+	-	-	+	+	+
Muhuspandana	+	-	-	+	+	+
Sakthikshepanigraha	-	+	-	-	-	-
Sakthiutscepianigrahs	-	-	+	-	-	-
Janu Madhya vedanas	-	-	-	-	-	+
Uru Madhya vedna	-	-	-	-	-	+
Kati Madhya vedna	-	-	-	-	-	+

Vishesha Lakshana

Vataja symptoms

Symptom	B.P. chi 24/129-131	M.Ni. 22/54	Y.R. purva. P.515
Kati sandhisphurna	+	+	+
Janusandhisphura	+	+	+
Urusandhisphurana	+	-	-
Dehasyapravakrata	+	+	+
Suptata	+	-	+
Janghasphurana	-	+	-

Vatakaphajsymtoms

Symptom	Ch.Chi 28/56-57	B.P.Chi.24/ 129- 131	M.Ni. 22/54	Y.R. Purv.P.515	H.S. 20/31- 32
Vahnimardav	-	+	+	+	-
Gaurav	+	+	+	+	-
Arochak	+	-	-	+	-
Tandra	+	+	+	+	-
Staimitya	-	-	-	-	+
Bhaktadwasha	-	+	+	+	-
Mukhapraseka	-	+	+	+	-

Samprapti

Samyakprapti of Roga is samprapti. It is nothing but the proper understanding of the disease producing process. Jaati and Agati are the two synonyms of samprapti. Vata especially Vyana Vata is found vitiated. Gati (movement), Prasarana (extension), Akunchana (flexion), Utkshepana (lifting) etc. All are function of Prakrut Vyana Vayu. Hence, the hampered Sakthikshepa Karma indicates Dushti of Vyana Vayu. Thus the functions ascribed to Sharira Vayu in the ancient medical classics are exactly those which modern physiology ascribed to the nervous system. It has been observed that in all Vatavyadhissome nervous disorder present. As in Gridhrasispinal nerves of the lumbo-sacral plexus and mainly sciatic nerve is hampered.

Sampraptighataka

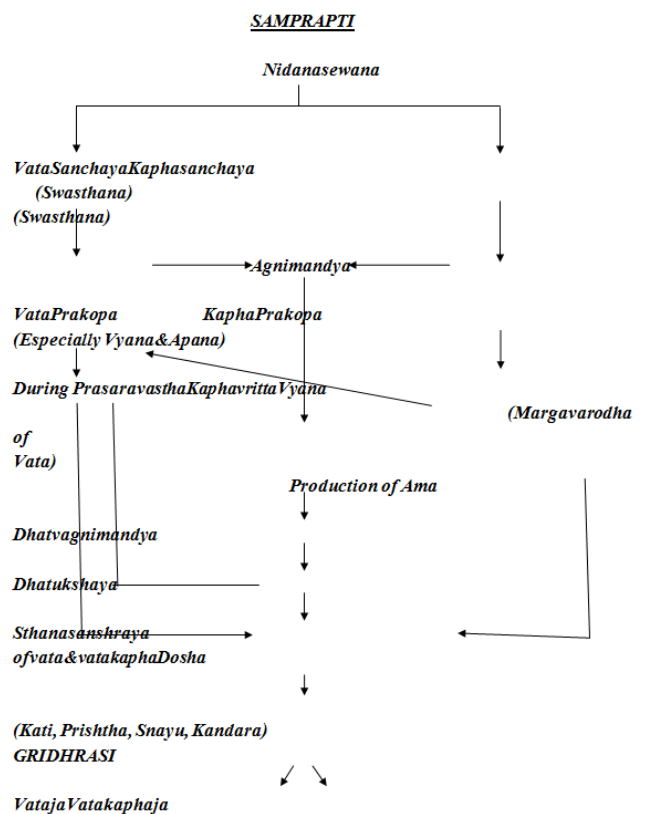
- **Dosha** Vata , Kapha
- **Dushya** Rasa, Rakta, Mamsa, Meda, Asthi, Majja, Sira,
- **Kandara, Snayu**
- **Srotasa** Rasavaha, Raktavaha, Mamsavaha, Medovaha, Asthivaha, Majjavaha
- **Srotodushti** Prakara Sanga, Margavarodha
- **Agni** Jatharagni and Dhatvagni
- **Ama** Jatharagnijanya and Dhatvagnijanya
- **Udbhavasthana** Pakvashaya
- **Adhithana** Kandaras of Parsani and Pratyanguli and
- **Sphika, Kati, Uru, Janu, Jangham, Pada.**

Sapeksha Nidan

The Nidana which keeps a close resembles with the actual Nidanais called Sapeksha Nidana. Gridhrasi shows a very clear cut Lakshana Samucchaya of radiating pain in the lower extremities, but there are some diseases which resembles with Gridhrasi. Diseases like Urustambha, Khalli, Kalaykhanja, Amavata, Padaharsha, Vatarakta, and Gudagata Vatacan make confusion with Gridhrasi.

Sadhya Asadhyata

The Sadhyata-Asadhyata of a disease depends on many factors such as the Bala of Hetu, sakti of Dosha Prakopa, and Sthana of the roga, Harshness of signs and symptoms. It also depends upon the Vay, Ling, Rogamarga, Dhatudushti etc. Gridhrasi is a Vatavyadhi and Acharya Sushrutahas counted Vatavyadhias Mahavyadhi which is cured with difficulty. He also says that if the patient of Vatavyadhi develops the complication like Sunam (edema/ inflammatory), Suptatvachan (tactile senselessness), Bhagna (Fracture), Kampa (tremors), Adhamana (distention of abdomen with tenderness) and pain in internal organs, then it become asadhyata.



Factors	Gridhrasi	Vatarakta	Urusta -mbha	Aamvata	Khalli	Kalaykhanja
Sphikpurvakatiprithaurujanujanghapadamkramat	+	-	-	-	-	-
Gaurav	+	-	+	+	-	-
Arochak	+	-	+	-	-	-
Stabhdha	+	-	+	-	-	-
Sotha	-	-	-	+	-	-
Padajangharukmulam	-	-	-	-	+	-
Khanjanitva cha gachati	-	-	-	-	-	+
Chhardi	-	-	+	-	-	-
Jwara	-	-	-	-	-	-
Padyurmulam.Asthaya	-	+	-	-	-	-
Katya hasthapadaNistoda	-	+	-	-	-	-
Sakthisathiyam	-	+	-	-	-	+

CONCLUSION

Gridhrasi has been considered as a major problem to the physicians since long. The chance of occurrence is expected to be increasing through the coming years. Gridhrasi comes under 80 types of Nanatmaja Vatavyadhi. Vyana Vayu is an essential factor for manifestation of the disease Gridhrasi. There is no direct reference regarding Nidana and Samprapti. The chief pathological phenomenon in the manifestation of Gridhrasi is margaavarana and Dhatukshaya. Gridhrasi occurs mainly due to vitiation of vata and provoked vata seated in the kandaras of lower extremities. Impairment of Utkshepanadikarma (Restricted movement) is the main feature along with Ruka (Pain), Stambha (Stiffness) and Toda (Pricking Sensation).

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How to cite this article:

Kamna Singh *et al* (2022) 'Etiopathological Study of Gridhrasi W.S.R. Sciatica: A Review', *International Journal of Current Advanced Research*, 11(03), pp. 524-527. DOI: <http://dx.doi.org/10.24327/ijcar.2022.527.0116>
