Original Research Paper



SCIATICA - AN AYURVEDIC APPROACH

Dr. Aishwarya Sunil Shinde	MD Kayachikitsa (Scholar) College of Ayurved Bharati Vidyapeeth (Deemed to be University) Pune (India) Pune Satara Road, Pune - 41 1043.
Dr. Sunanda Ramkrishna Pedhekar*	MD, PhD Kayachikitsa, Asso.Prof. College of Ayurved Bharati Vidyapeeth (Deemed to be University) Pune (India) Pune Satara Road, Pune -411043.*Corresponding Author

ABSTRACT
In today's era the changing lifestyle like improper posture, excessive two-wheeler travelling, sedentary life style, lifting heavy loads for long period produces stress on spine and responsible for Gridhrasi (Sciatica). Gridhrasi is one among eighty Nanatmaja Vatavyadhi. As etiopathology of Gridhrasi, Khavaigunya is important. It plays a role in over stimulation of nerve as experienced by severe pain in course of affected part. According to Sushrutacharya, two Kandaras when gets afflicted with the Vata Dosha limits extension of the leg. In Gridhrasi, there is difficulty in walking for patient. Patient has pain in leg posteriorly so he is unable to do any kind of work. Sciatica refers to pain that radiates along the path of sciatic nerve, which branches from lower back through hips and buttocks and down each leg. Typically, sciatica affects only one side of body. It occurs when a herniated disc, bone spur on the spine or narrowing of the spine compresses part of the nerve. This causes inflammation, pain and often numbness in the affected leg. Thus, Gridhrasi may be correlated with Sciatica, which are the conditions of Vatavyadhi as explained in Ayurvedic classics. Also, there are different treatment modalities available in Ayurveda for such conditions.

KEYWORDS: Sciatica, Gridhrasi, Vatavyadhi.

INTRODUCTION

Gridhrasi is one of the Vatavyadhi among Eighty Nanatmaja Vatavyadhi. Two Kandaras when gets afflicted with the Vata Dosha limits extension of the leg. In Gridhrasi, Patient has pain in leg posteriorly so he is unable to do any kind of work.

Sciatica is defined as pain that radiates along the track of the sciatic nerve, felt in the buttocks and down the back of the leg to the foot caused by pressure on the sciatic nerve. Sciatica most commonly occurs when a herniated disc, bone spur on the spine or narrowing of the spine (spinal stenosis) compresses part of the nerve. This causes inflammation, pain and often some numbness in the affected leg.

Epidemiology

Depending on how it is defined, less than 1% to 40% of people have Sciatica at some point in time.

Prevalence

The prevalence of Sciatica symptoms reported in the literature varies considerably ranging from 1.6% in general population to 43% in selected working

population.

Need of study-

- In Sciatica, commonly used drugs are NSAIDs, analgesics, muscle relaxants, steroids, nerve pain medication and epidural injection which have many side effects like drug dependence, Hepato-renal toxicity, gastric irregulating etc.
- A medication which relieves the pain, improves functional ability, restore from functional disability and controls condition with effectiveness is the need of study.

LITERATURE REVIEW REVIEW OF GRIDHRASI

- In Ayurveda, Gridhrasi is given as a Vatavyadhi and it is also believed that any type of pain cannot be without presence of Vata.
- Gridhrasi is a severely painful condition so, Vata Pradhanya in its pathogenesis is clear.
- In this disease the patient walks like the bird Gridhra.
 Legs become tense and slightly curved so due to the resemblance with the gait of a vulture, Gridhrasi term might have been given to this disease.

Table No. 1. SIGNS AND SYMPTOMS:

Symptoms	Charak Samhita	Sushrut. Samhita	Vaga- bhata	Harit Samhita		Madhav Nidan	Yoga- ratnakar
	Sammia	Sammia	bnata	Sammia	prakasn	Maan	ramakar
General							
Radiating pain from kati to	+	-	-	+	+	+	+
pada							
Sthambha	+	-	-	-	+	+	+
Ruka	+	-	-	-	+	+	+
Toda	+	-	-	-	+	+	+
Muhurspandan	+	-	-	-	+	+	+
Sakhanha kshepam	-	+	+	-	-	-	-
nigriharniyat							
Janu Madhya vedana	-	-	-	+	-	-	-
Uru Madhya vedana	-	-	-	+	-	-	-
Kati Madhya vedana	-	-	-	+	-	-	-
1. Vataja							

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Dehapravakrata	-	-	-	-	+	+	+
Janu kati uru sphuran	-	-	-	-	+	+	+
Suptata	-	-	-	-	-	-	+
2.Vatakaphaja							
Tandra	+	-	-	-	+	+	+
Gaurav	+	-	-	-	-	+	+
Arochaka	+	-	-	-	+	+	+
Vanhi mardava	-	-	-	-	+	+	+
Mukhpraseka	-	-	-	-	+	+	+
Bhaktadvesha	-	-	-	-	+	+	+
Staiymitya	-	-	-	-	-	-	+

SAMPRAPTI GHATAK

Dosha: Vata Pradhan (Vyana and Apana), Kapha Srotas: Raktavaha, Mamsavaha Medovaha, Asthivaha,

Majjavaha

Srotodusti: Sanga and Margavrodha Agni: Asthi and Majja Dhatwagni, Jatharagni

Aama: Jatharagni mandyajanya Udbhavasthana: Pakwashaya

Adhishthana: sphik, Katipradesh, Prushta, Adhoshakha Vyaktastana: Kandaras of Parshni and Pratyanguli and

sphik, kati, uru, janu, jangha, pada. **Rogamarga**: Madhyam Rogamarga

Table No. 2. TREATMENT IN AYURVED

TREATMENT	C.S.	S.S.	A.H.	G.N.	B.P.	Y.R.
Snehan	+	+	-	-	-	+
Swedan	+	+	-	-	-	-
Vaman	-	-	-	-	+	-
Virechana	-	-	-	-	+	-
Basti	+	-	+	-	-	+
Siravedhan	+	+	+	+	Ī-	+
Agnikarma	+	-	+	+	-	+

- Snehan- sahacharadi Taila, Hingutriguna Taila, Saindhavaditaila, Rasna taila.
- Swedan Nadisweda, Nirgundi patrapinda sweda.
- · Shaman

Churna-Aabhadi churna, Krishna churna, Dashamooladi Churna, Ajamodadi Churna, Guggula- Pathyadi Guggula, Trayodashang Guggula, Rasna Guggula,

Aasav- Bhallatakasv,

Kwath- Shephalikapatra kwath, Parijatakpatra kwath, Rasnasaptak kwath, Gridhrasinashak Kwath.

- Katibasti- Sahachar taila,
- Agnikarma- below Indrabasti marma (Between Kandara and Gulpha)
- Shodhan- Dashmuladi Niruha basti, Anuvasan Basti-Nirgundi Taila, Bala taila, Mulak taila
- Siravedha below Indrabasti marma (Between Kandara and Gulpha)

UPADRAVA

- Khanjata As the patient is having intense pain during lifting the leg, keeps it in semiflexed and averted position, results in limping gait.
- Mamsashosha- Because of excessive pain results in restricted movements of the affected leg and with Ruksha, Khara, Vishad guna Vata does mamsashosha.
- 3) Dehapravakrata- It is resulted by limping gait.
- Karyahani Karmendriya gets affected by prakopit Vata, results karyahani of that Indriya. Along with this control over urination or defecation may be lost.

MODERN REVIEW OF SCIATICA CAUSES OF SCIATICA

 Herniated discs. which sometimes can press on the spinal cord and nerve roots. May occur in different levels of lumbosacral vertebrae but most common are L5 or S1.

- Spinal stenosis- It is a narrowing within the vertebrae of spinal column.
- Spondylosis- Degenerative causes of spinal stenosis which is anterior or posterior displacement of vertebra.
- Other causes- Include irritation of nerve from adjacent bone, tumors, muscle, internal bleeding, infection, injury.

RISK FACTORS

- Age. Age-related changes in the spine, such as herniated discs and bone spurs, are the most common causes of sciatica.
- Obesity. By increasing the stress on spine, excess body weight can contribute to the spinal changes that trigger Sciatica.
- Occupation. A job that requires to twist back, carry heavy loads or drive a motor vehicle for long periods might play a role in Sciatica, but there's no conclusive evidence of this link.
- Prolonged sitting. People who sit for prolonged periods or have a sedentary lifestyle are more likely to develop sciatica than active people are.
- Diabetes. This condition, which affects the way body uses blood sugar, increases risk of nerve damage.

SIGNS AND SYMPTOMS

- Radiating Pain-pain starts from buttock upto heel.
 Pain is made worse by sneezing coughing, laughing or hard bowel movement.
- Stiffness
- · Walking difficulty
- Twitching in waist, hip, back of the thigh, knee, calf and foot.
- Pricking sensation

COMPLICATIONS

- Loss of sensation in the affected leg
- Weakness in the affected leg
- · Loss of bowel or bladder function

PREVENTION

- Exercise regularly.
- Maintain proper posture when sit.
- Use good body mechanics. If stand for long periods, rest one foot on a stool or small box from time to time. When lift something heavy, let lower extremities do the work. Move straight up and down. Keep back straight and bend only at the knees. Hold the load close to body.

IMAGING TESTS

- · X-ray L.S. spine AP and Lateral
- MRI.
- CT scan.
- Electromyography (EMG). This test can confirm nerve compression caused by herniated discs or narrowing of spinal canal (spinal stenosis).

TREATMENT

- **INTERNAL MEDICINES**
- Anti-inflammatories
- Muscle relaxants
- Narcotics
- Tricyclic antidepressants
- Anti-seizure medications

PHYSICAL THERAPY

Once acute pain improves, there is rehabilitation program to prevent future injuries. This includes exercises to correct posture, strengthen the muscles supporting back and improve flexibility.

STEROID INJECTIONS

Corticosteroids help to reduce pain by suppressing inflammation around the irritated nerve. The effects usually wear off in a few months. The number of steroid Injections receive is limited because the risk of serious side effects increases when the injections occur too frequently.

SURGERY

When the compressed nerve causes significant weakness, loss of bowel or bladder control, or when pain that progressively worsens or doesn't improve with other therapies.

ALTERNATIVE MEDICINE:

- Acupuncture.
- Chiropractic. Spinal adjustment (manipulation) is one form of therapy chiropractors use to treat restricted spinal mobility.

SIMILARITIES BETWEEN SCIATICA AND GRIDHRASI.

According to modern	According to Ayurveda		
1. ETIOLOGICAL F.	ACTORS:		
Age	Vaya		
Trauma	Abhighata		
Improper posture	Vishamasana		
2. CLINICAL FEATURES			
Radiating pain	Sphikpoorvakati prushta uru		
	janu jangha pada kramat		
Stiffness	Stambha		
Pain	Ruka		
Pricking sensation	Toda		
Twitching	Muhurspandan		
3. TREATMENT			
Local application	Bahya snehan		
Hot fomentation	Sthanik swedan		
Internal medicines	Shaman, shodhan		
Rest	Vishram		

DISCUSSION

According to Sushrutacharya and Vagbhatacharya " Sakthanah Kshepanam Nigriharniyat" that means restricted movements of lower extremities. The condition where the Kandara of Parshnee and Angulees are affected by vitiated vata causing Sakthishepanighraha. Also according to Madhavkara Dehapravakrata i.e. scoliosis is symptom of Vataj Gridhrasi.

Sciatica causes disturbance in day to day life due to stiffness, pricking sensation in leg, twitching, severity of pain, difficulty in walking and it augments the quality of life. The compression of Sciatica nerve leads to neurological symptoms like radiating pain in lumbar region, thigh, knee, leg.

The etiological factors of Gridhrasi can cause the Vitiation of Vata, which in turn may lodges into Asthi

Dhatu due to Ashrayashrayi Bhav of Vata Dosha and Asthi Dhatu. The Vitiated Vata lodges into katipradesh, causes Khavaigunya in Asthi of Katipradesh. It plays a role in over stimulation of nerve as experienced by severe pain in course of affected part. It also diminishes Kapha along with Asthikshaya which are main entities found in pathogenesis of Sciatica.

No separate disease in the name of Gridhrasi is described in Charak Samhita but Gridhrasi is mentioned under the Vatavyadhi Chikitsa.

CONCLUSSION

After studying the above comparison of facts, it seems that Sciatica can be considered as Gridhrasi.

It can be conclude that herniated disc with nerve root compression, lumbar canal stenosis, muscle strain, trauma, tumor and some occupational risk factors are triggering factors of disease. Thus approach of Ayurveda in this field is essentially preventive and medicines can be provided permanent and better cure the disease.

Etiological factors, signs and symptoms, treatments mentioned for Gridhrasi are almost similar to Sciatica. Few studies have been conducted to evaluate the effectiveness of Ayurvedic medicine formulae on Sciatica.

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