

**CRITICAL REVIEW OF NIDANPANCHAKA OF GRIDHRASEE  
VYADHI WITH SPECIAL REFERENCE TO SCIATICA SYNDROME****<sup>1</sup>Dr. Krishna Namdeo Kadam and <sup>2</sup>Dr. Viraj V. Jadhav**<sup>1</sup>Assistant Prof. Dept. of Rog Nidan Vikruti Vigyan, Government Ayurved College, Nanded.<sup>2</sup>Prof., Dept. of Rachna Sharir, Principal, SAHMC, Gharuan, Mohali.Article Received on  
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Nidan Vikruti Vigyan,  
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College, Nanded.**INTRODUCTION**

Change in lifestyle in present day has created several disharmonies in the biological system of human being. Though technology has advanced miles ahead still various professions continue to create undue pressure on spinal cord because of improper sitting postures in offices, continuous and over excessive jerky movements during travelling, sports. Ultimately it plays a chief role in producing low back ache and sciatica syndrome. Progressive disorders affecting the pelvis and nearer structures are also precipitating this condition. Thus the disease is now becoming a significant threat to the working population.

Gridhrasee, one of the type of Nanatmaja vatavyadhi, though there is occasional anubandha of kapha. The name Gridhrasee itself explains

the gait of the patients in this disease, which is due to extreme pain and stimulates gridhra (vulture). This disease not only inflicts pain but also causes difficulty in walking of patient, which is highly frustrating and some times even pushes the patient to the limit of dependency. Though the disease is present in legs, it disturbs the daily routine and overall life of the patient.

The cardinal symptom of Gridhrasee is pain in the posterior aspect of the leg, starting from the Kati, sphik to pada. Other symptoms like toda (pricking sensation), stambha (stiffness) and muhuspandana in the sphika, kati, uru, janu, jangha and pada and sakthishepa nigraha that is restricted lifting of the leg present as associated symptoms. In Kaphabubandha Gridhrasee symptoms like tandra, gaurav, arochaka are also present.

On the basis of symptoms, Gridhrasee can be equated with the disease sciatica syndrome in modern parlance, which occurs because of spinal nerve irritation and is characterised by pain in the distribution of sciatica nerve which begins from buttock and radiates downwards to the posterior aspect of thigh, calf and to the outer border of foot. Herniation and or degenerative changes in intervertebral disc is the most common cause for this disease and often there is history of trauma or lifting of heavy objects.

## OBJECTIVES

1. Etiopathological study on the concept of nidana, dosha, dushyas giving rise to Gridhrasee with respect to sciatica syndrome.
2. Conceptual study of Gridhrasee w.s.r to Sciatica.

## MATERIALS AND METHODS

Ayurvedic literature on the present topic will be compiled from all grantha and textbook having its references. Modern literature will be compiled from different modern textbooks, google search references.

## Gridhrasee

Gridhrasee is derived from 'Gridhu' dhatu that means to covet, desire, strive after greedily to be eager for gridhra is a bird referred to vulture. This bird is fond of meat and it eats flesh of an animal such a fashion that it deeply pierce its beak in the flesh and then draws it but forcefully, exactly such type of pain occurs in Gridhrasee and hence the name. In the disease, the patient walks like the bird, Gridhra and his legs become tense and tightly curved so due to the resemblance with the gait of a vulture, Gridhrasee term, might have been given to the disease.

## Nidana (Hetu)

In case of Gridhrasee, specific nidana has not been mentioned. Causative factors mentioned for producing vatavyadhi are thus being explained here to understand the manner of production of the disease Gridhrasee. In Gridhrasee, ratri, dina, bhuktamsha, rutu are said to be the factors responsible for the immediate vitiation of vata and kapha dosha, so are considered under sannikrushta nidana. Besides these, abhighata, marmabhighata, apatomsana, bhara vahana, ati langhana, atiprapatana, ati plavana, ativyama, ati-vicheshtana are also responsible responsible for Gridhrasee.

Vata-vardhaka ahara vihara sevana with consistent and for long duration results in Gridhrasee, these comes under viprakrishta nidana. Some of these factors includes shooka dhanya varga, kudhanya, shimbidhanya, mamsa, shaka and kanda varga etc. Viharja nidana includes – vegadharana, bharavahana, shilavikshepa, diwaswapa, balvat vighraha, dukhasana, ashamchalana, kriyatiyoga, atilanghana, atihasya, atiplavana, atiprajagarana, atishrama, vishamopchara atigamana etc.

**Manas Hetu:** Bhaya, chinta, krodha, mada, shoka, utkantha etc.

**Seasonal Hetu:** Sheetkala, pravata, abhra aparatra, Grishma etc.

**Agantuka Hetu:** Abhighata, gaja-ushtara-ashva apatamasana.

**Anyā Hetu-** Ama, asrikshaya, dhatukshaya, doshakshaya, rogatīkarshana, gadkrita mamskshaya.

**Vyabhihari hetu** – Diwaswapa, alpabhojana, abhojana, adhyashana, vishamashana, bharharana, ratrijagarana, pratarana, parepeedana etc.

**Utpadaka hetu** – Katurasa, tikta rasa, kashaya rasa sevana Dhatu kshaya, asruk kshaya.

Rogatīkarshana- In reference with Gridhrasee, it is considered as anyā vyadhijanya nidana. Here arbuda shosha, etc may be considered as anyā vyadhijanya nidana for the disease Gridhrasee.

Tuberculosis of the lumbar spine and cancers of the prostate, kidneys, breasts and lungs the most primary cancer of the spine is multiple myeloma etc. are secondary causes to sciatica.

**Vishama upacharaja nidana** like shodhana atiyoga e.g. continuous and improper administration of niruha basti in excess without anuvasana, results in vata prakopa.

### According to Modern Science

Sciatica syndrome can occur due to variety of pathological lesions. The vast majority of cases of sciatica syndrome are due to herniation or degenerative changes in lumbar intervertebral disc, spondylosis or sacroiliac diseases. But there are some predisposing causes towards herniation and degenerative changes such as there is often history of trauma as twisting of spine, lifting heavy objects or exposure to cold. Motor vehicle driving is also positively

associated with sciatica. Age, sex, body weight, occupation, environmental factor etc. also plays an important role in producing such type of conditions. In female, instrumental delivery may be cause of sciatica. There are many such diseases of spinal cord, cord space, vertebral column, pelvis etc. which exert mechanical pressure on the nerve root and presents sciatica.

1. **Intraspinal causes-** Prolapsed intervertebral disc, Intraspinal tumor, OA, TB of lumbar spine, osteomyelitis, Development/ narrowing of the lumbar canal, Malformation of lumbar root.
2. **Pressure or irritation at intervertebral foramina-** Osteoarthritis, Spondylolisthesis, Ankylosing spondylitis, Pagets disease
3. **Pressure or irritation in course of nerve -** Inflammation or malignanat disease of pelvic viscera, Injury to nerve itself, Tumour of nerve sheath, Peripheral neuritis
4. **True sciatic Neuritis -**Leprosy, Polyarteritis nodosa, Nerve injury due to injection, Post hepatic neuralgia
5. **Traumatic causes**
6. **Iatrogenic causes-** Spinal anaesthesia, Gluteal injections
7. **Metabolic disorders**
8. **Genetic causes**

**Poorvaroopa:** In this stage, laxanas are not manifested, patients presented with the symptoms like katiruja, toda etc. In this condition, laxanas are not identified or neglected to treat or if the patient continues nidana, these laxanas may be continues as a pratyatma laxana of Gridhrasee. In case of Gridhrasee, poorvaroopas have not be explained. But still some of the laxanas seen in conditions like gudagata vata, pakwashayagata vata, kaphavritta vyana may be considered as poorvaroopas of Gridhrasee.

Trika vedana, krichra mootra purisha, atopa, anaha etc. are the laxanas seen in this condition. They may also be considered as poorvaroopa that may indicate the onset of disease Gridhrasee in future. In present day, as observed in general practice, patients are presenting with following set of symptoms before the onset of disease like shrama, katishoola, angadaurbalya, anga shaithilya, gourava etc. which may also be considered as poorvaroopa in Gridhrasee.

**Samprapti:** Without knowledge of Samprati knowledge of roga/ disease remains incomplete. Through samprapti not only dosha and dushya involved in a particular condition is known but

even it explains the amshamsha of doshas and dushyas involved in the manifestation of the disease.

Vitiation of doshas is not the only factor influencing samprapti, kala, bala, agni, desha, prakriti, vaya, satwa, ahara etc of the purusha also have a say in deciding the course of samprapti.

During sthansamshraya avastha, the vitiated dosha reach kha-vaigunya stitha sthana and get obstructed there and vitiate one or more dushyas present in that though nidana of all the vatavyadhi are same but only due to the samprapti vishesha of the disease, the same vata can produce different disorders. If vitiated vata is accumulated in kati and Sakthi by strotasang, it produces disease, Gridhrasee.

### **Shat- Kriyakaala of Gridhrasee**

The knowledge of kriyakala helps in understanding the diagnosis and prognosis of the disease.

### **Sanchaya and Prakopavastha**

During sanchayavastha, when a person indulges in dosha aggravating nidana, agni gets vitiated. The dosha gets accumulated in its particular site and sanchaya laxana of vata stabdha, poorna koshtata etc are produced in this stage. If continued, the nidana sevana leads to the second avastha ie prakopa. The prakopa laxanas of vata are koshtata toda etc.

### **Prasara Avastha**

Further indulgence in nidana, makes the doshas to attain state of prasara. The prasara laxanas are vayu vimarga gamana, atopa etc. In this stage, the doshas moves in urdhva, adho or tiryaka directions. Thus the vriddha vata and kapha along with ama circulates through our body. The vyana vata is responsible for this circulation.

### **Sthana Samshrayavastha**

The aggravated dosha will be in the prasara state initially and then it reaches a site where there is khavaigunya. It attains sammurchana with the dushya in that site. This kha- vaigunya may be either due to dosha dushti produced by nidana sevana or due to some genetic factors. In this, vitiated vata takes sthana samshraya in kati pradesha produces the prodromal symptoms like kati shola, stambha, shrama etc.

**Vyakta Avastha**

The dosha dushya sammurchana continues in this stage leading to complete manifestation of the disease Gridhrasee. The signs and symptoms of the disease are clearly observed in this stage.

**Bheda Avastha**

This is the sixth avastha of kriyakala, where the disease attain asadhya avastha. The patient does not respond to any type of treatment and exhibits arishta laxanas.

**Samprapti Ghataka**

**Dosha:** Vata – Vyan and apana, Kapha.

**Dushya:** Rakta, sira, snayu, mamsa and Kandara

**Strotasa:** Rakta, Mamsa, medo, Asthi, majjavaha

**Ama:** Jatharagnijanya. Dhatwagnijanya

**Udbhavasthana:** Pakwashaya

**Sanchara sthana:** Kati, Sphik, Uru, Janu, Jangha, Pada, Parshni, Pratyanguli

**Adhishthana:** Kati

**Vyakta sthana:** Adhoshakha

**Vyakta Roopa:** Ruk, toda, stambha in adhoshakhi, uru, janu, jangha and pada. Arochaka, Tandra, Gaurav etc.

**Roopa**

Appears in fifth kriyakala of disease. Roopa gives information about vitiated doshas. Without production of laxanas, it is not possible to establish dosha dushya vaishamya. Laxanas manifested after dosha dushya samurchana are either of vyadhi utpadaka doshas or the dushyas involved.

In case of Gridhrasee, the laxanas differ according to its variants ie vataja and vata-kaphaja. Radiating pain is the cardinal symptom while stambha, spandana, sphurana, Gaurav etc are the associated symptoms. It is also be noted that these associated symptoms forms the basis for differentiating Gridhrasee as Vataja and Vata kaphaja.

**Samanya Laxanas**

In case of Gridhrasee, ruka, toda, muhu spandana, stambha are considered as samanya laxanas.

**Vishishta Laxans**

Ruk starts from posterior aspect of kati and radiating to the prushtha of the Uru, janu and jangha, pada, stabdhata, sphurana dehpravkrata are the vishishita laxanas of Vataja Gridhrasee where as Agnimandya, Tandra, Mukha praseka, Gaurava, Bhaktadwesha are the vishishta laxanas of vata kaphaja gidhrasee.

**Pratyatma Laxanas**

Ruk and toda starts from the kati prushtha pradesha radiating to uru janu janghapada kramat.

**Dosha Laxanas**

**Vataja Gridhrasee:** Ruk, toda, spandana, sphurana.

**Vatakaphaja Gridhrasee:** Gaurav, Tandra, Agnimandya, Arochaka, Bhaktadwesha.

**Vataja Gridhrasee:** Sphurana, stambha, deha pravakrata (mamsa, snayu).

**Sarvadaihika Laxanas:** Gaurav- It is present in kati, sphik, uru, janu, janghapada.

**Upadravas**

In general, Upadrava is the complication produced in disease. They are produced as a sequel of the disease proper. Emergence of upadrava increases the graveness and complexity of treatment. The upadravas of Gridhrasee are not described in the texts. As seen in medical practice, following may be considered as.

**Khanjata:** On account of the inability of complete extension and lifting the leg, the patient has to keep the leg in a semi -flexed and averted portion. This gives rise to limp while walking.

**Shosha:** Gridhrasee is a vatavyadhi, affecting the kandaradi avayava. On account of pain, all movements are restricted in the affected leg. Continuous pain restricts the patient to make minimum movement because of which mamsa undergoes shosha.

**Dehpravakrata:** or inability to walk and crippling.

**Sadhya- Asadhyata**

The sadhya asadhyata or prognosis of a disease depends upon many factors such as bala of nidan, strength of dosha, prakopa, sthana of disease, severity of signs and symptoms, duration of disease etc.

Gridhrasee is counted under vataja nanatmaja vikara. Acharya Sushrutah as counted Vatavyadhi as Mahavyadhi which is cured with difficulty. He also mentioned that if the patient develops the complications like shoonam (edema, inflammatory), suptatvachan (tactile senselessness), bhagna (fracture), kampa (tremors), adhmana (distension of abdomen) and pain in internal organ, then he does not survive.

When the Gridhrasee is caused by Vata and Kapha dosha, the chances of cure is easier than that when it is caused only by keval Vata dosha.

### **Upashaya- Anupashaya**

The aspect which helps in differentiation and diagnosis of a disease when two diseases present with similar laxanas is upashayas. As being a vatavyadhi, the general upashaya and anupashaya are applicable to Gridhrasee also.

### **Upashaya**

Ahara- Godhuma, masha, puranshali, patola, vartaka, rasona, taila, ghrita, kshira, tila, draksha, amla, dadima etc.

Vihara- Abhyanga, tarpana, swedana, nirvata, sthana, atapa sevana, nasya basti etc.

### **Anupashaya**

Ahara: Kalaya, brihatshali, yava, kodrava, kshara, katu and Kashaya rasa.

Vihara: Chinta, bhaya, shoka, krodha, vegvidharana, chankramana, ativyavaya, ratri jagarana etc.

### **Sapeksha nidana of Gridhrasee**

Sapeksha nidana is the comparison of similar features which are found in many diseases. In case of Gridhrasee, shows clear cut lakshana sammuchhaya of radiating pain in the lower extremity still there are some diseases, resembling in some of symptoms with Gridhrasee.

### **1. Uru stambha**

There is affection of one or both legs. The leg becomes painful cold and motionless and the patient is unable to stand, step or walk. There is also supti or numbness. The condition is acute with fever and swelling of the legs. Though the patient is unable to lift the legs and the legs are painful but the pain is neither radiating not restricted to the posterior portion of legs as in Gridhrasee. Jwara and Shotha found in Urustambha are generally not found in



Gridhrasee. In Gridhrasee, sakthikshepa is being restricted, where as in Urustambha, patients feel heaviness in their thigh and difficulty in walking.

## **2. Khalli**

Severity of pain is more than Gridhrasee and generally it is proximal in nature.

## **3. Khanja and pangu**

The cardinal symptoms are shosha(wasting) and deha pravakrata which can be present in Gridhrasee as a late complication.

## **4. Gudagata vata**

In addition to pain in foot, symptoms like shosha, retention of urine, flatus, colic, flatulence and formation of calculi may also present which are not present in Gridhrasee.

## **DISCUSSION**

### **Vataja Gridhrasee (dhatu kshaya janya) Degenerative disc disorders- Lumbar Spondylosis**

Gridhrasee, according to its sign and symptoms can be compared to Sciatica syndrome in modern medical science and numbers of Ayurvedic authors also recently have combined Gridhrasee as sciatica syndrome.

Sciatica is a symptoms of a problem at some point along the sciatic nerve rather than an ailment in and of itself. In sciatica, there is pain, weakness, numbness and other discomfort along the path of sciatic nerve. A herniated disc in the back, spinal stenosis and piriformis syndrome are medical disorders that can cause sciatica.

Sciatica, a syndrome, characterised by pain radiating from the back into the buttock and into the lower extremities along its posterior or lateral aspect and most commonly caused by prolapse of the intervertebral disc, the term is also used to refer to pain anywhere along course of sciatica nerve.

Spondylosis (Spinal osteoarthritis) is a degenerative disorder that causes loss of normal spinal structure and function.

Disc degeneration is the commonest pathological manifestation of lumbar spondylosis. Lumbar spondylosis appears to be a non-specific aging phenomenon. Most studies suggest no

relationship to lifestyle height, weight, body mass, physical activity cigarette and alcohol consumption or reproductive history. Adiposity is seen as a risk factor. The reflects of heavy physical activity are controversial as is a purported relationship to disk degeneration.

### **Vata-Kaphaja Gridhrasee- Lumbar spinal stenosis**

It can be defined as, narrowing of the lumbar canal in its central part, the lateral recess or the intervertebral foramen sufficient to impair one or more roots of the cauda, the impairment resulting in pain, unilateral or bilateral neurological deficit or neurogenic intermittent claudication.

The epidemiology of lumbar spinal stenosis has changed a great deal in the last few decades.

### **Vataja Gridhrasee (dhatu kshayjanya degenerative spondylolisthesis)**

Degenerative anterior vertebral affects older patients but is increasingly seen in middle aged patients, event at the age of 40, the L4/L5 segment being most frequently involved. Due to the Anteriorly oriented facet joint, the L5/S1 segment is rarely involved. Typically the degree of slipping in degenerative spondylolisthesis does not exceed 25%.

Although, a number of patients have permanent symptoms, the majority of patients with lumbar spinal stenosis experience symptoms while standing or walking. Symptoms or signs that occur while walking lead to neurogenic claudication. Over some time of walking distance shortens, sometimes so dramatically as to prevent the patient making more than a few steps.

Permanent symptoms and signs unrelated to posture are caused by a permanent compression of the nerve roots. Leg pain, motor deficit sensory deficit and rarely urinary dysfunction or importance can be found in this order of frequency.

Intermittent symptoms and signs occur while the patient is standing, including low back pain, referred pain or back weakness. These symptoms are related to narrowing of the lateral recess while the spine is extended. Therefore symptoms are triggered or worsened in postures that aggravates lumbar lordosis, including standing, walking especially downhill or down stairs as well while wearing shoes with high heels.

**Vataj Gridhrasee- Lumbar Compression Fracture**

The strongest stabilizing muscles of the spine attach the Lumbar vertebrae. End stage osteoporosis often, culminates with bone fracture. Causes are trauma malignancy infections etc. Vertebral compression fractures were associated with significant performance impairments in physical, functional and psychosocial domains in older women.

**Sahaja Gridhrasee: Congenital Scoliosis**

Congenital scoliosis is caused by inborn spinal deformities that may result in the development of absent or fused vertebrae.

**Diagnosis**

**Sciatica syndrome should be evaluated on the basis of-**

**1. Clinical Examination**

**Inspection:** Ask the patient to stand and look at the spine from side. Observe for the normal curvature.

Increase in the lumbar curvature may be normal or be found with prominence of the spine of L5 and the Sacrum.

In Spondylolisthesis, it may be secondary to an increase thoracic curvature or to flexion deformity of the hips.

Observe for the presence of any lateral curvature(scoliosis). The commonest scoliosis is a postural scoliosis or list in the lumbar region secondary to a prolapsed intervertebral disc.

Fixed kyphosis found.

It may be an angular kyphosis with a gibbus or prominent vertebral spine.

Note the Lumbar curvature, flattening or reversal of the normal lumbar lordosis is a common finding in prolapsed intervertebral disc, osteoarthritis of the spine, infections of the vertebrae bodies and ankylosing spondylitis.

**Palpation:** Consists of tenderness and movements.

**Tenderness**

Localised tender infiltrates of the skin and subcutaneous tissues. Palpable tender induration of small intervertebral muscles. Tenderness at the level of posterior articulation of the involved segment and pain on percussion of affected intervertebral space. With the patients standing, slide the fingers down the lumbar spine on to the sacrum. A palpable step at the lumbo sacral junction is a feature of spondylolisthesis.

**Movement: Movement of spine**

To test flexion, instruct the patient to bend forward as much as possible at the waist. Normal flexion is  $80^{\circ}$  or fingertips 3-4 inches from floor.

To test lateral flexion, instruct the patient to bend to the left and to the right as far as possible. Normal range is  $35^{\circ}$  on each side.

To test extension, instruct the patient to bend at the waist as far backward as possible. Normal range  $20-30^{\circ}$ .

To test the rotation, instruct the patient to rotate from the waist to the left and to the right as far as possible. Normal range  $45^{\circ}$  per side.

In all the movements of spine, the neutral position is  $0^{\circ}$

**Percussion**

Ask patient to bend forwards. Lightly percuss the spine in an orderly progression from the root of the neck to the sacrum. Marked pain is a feature of Tuberculosis and other infections.

**Special Tests**

1. Straight Leg Rising Test (SLRT)
2. Modifications of SLR – Lasegue Test, Bickling sign, Sicard's test and Fajerstazan's Test
3. Well leg rising test
4. Bilateral straight leg rising test
5. Femoral Nerve Stretch test
6. Muscle wasting at Thigh, calf and peronei, sole of foot, drop foot.

**CONCLUSION**

- ❖ Gridhrasee is a common prominent problem among the society.
- ❖ Radiating pain in posterior aspect of leg is the pratyatma laxanas of Gridhrasee.
- ❖ Vyan vayu, snayu, kandara are essential factors playing role in manifestation of disease, Gridhrasee.
- ❖ Gridhrasee may be equated with sciatica syndrome in modern medicine.
- ❖ Dhatukshayjanya Gridhrasee may be equated to dehydrated disc herniation with nerve root compression and degenerative disc disorders like spondylosis. Abhighata janya G
- ❖ Gridhrasee may be compared with traumatic conditions of lumbar spine.
- ❖ Margavarana janya Gridhrasee may be equated to spinal canal stenosis with nerve root compression.

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