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Review Article

Conceptual Study On The Management Of Gridhrasi : A Review Article

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Present day lifestyle has resulted in several health related problems. Musculo-skeletal disorders are rising and one among them is Sciatica. Based on sign and symptoms, Sciatica can be correlated with *Gridhrasi* in *Ayurveda* which is considered as *Shoolpradhan Vatavayadhi*. As the patient walks in this disease like the bird gridhra and his legs are rigid and slightly bent, so the name Gridhrasi could have been given to this disease due to the similarity to a vulture's gait. Sushruta suggests that the vitiated Vata dosha affects the kandara of Gridhrasi, where it is hard to stretch the patient's leg. Sciatica is very painful condition in which pain begins in lumbar region and radiate along the posterio-lateral aspect of the thigh and leg. Low back pain affects the

quality of life particularly in most productive period of life. The incidence rate of low back pain is significant as more than three quarters of the world's population experience low back pain at some or other time during their life time. It is most common cause of sickness which results in

absence from work. The person who suffers from this disease is partially handicapped, as the patient may not be able to walk, stand or sit comfortably. In modern medicine mainly treatment is concerned about pain management or surgical correction of the pathology. Treatment in Ayurveda is aimed at restoring the equilibrium through correction of the underlying functional in-equilibrium. Ayurvedic Gridhrasi remedies are focused on bringing the stressed Vata or Vata Kapha back to the state of equilibrium and thus to the state of health.

Keywords: *Gridhrasi; Sciatica; Vata; Kapha; Ayurveda; Sushrut*

INTRODUCTION

Present day lifestyle has resulted in several health related problems. Musculo-skeletal disorders are rising and one among them is *Gridhrasi* i.e. *Sciatica*. Based on sign and symptoms *Sciatica* can be correlated with *Gridhrasi* in *Ayurveda* which is considered as *Shoolpradhan Vatavayadhi*. The cardinal sign and symptoms of *Gridhrasi* are *Ruka* (pain), *Toda* (pricking type of pain), *Stambha* (stiffness) and *Spandan* (twitching) in the *Sphika, Kati, Uru, Janu, Jangha and Pada* in order and *Sakthishhepanigraha* i.e. restricted lifting of the leg¹. *Sushruta* opines that the vitiated Vata dosha afflicts the kandara producing *Gridhrasi*, where in the patient finds difficulty in extending the leg².

Sciatica is very painful condition in which pain begins in lumbar region and radiate along the postero-lateral aspect of the thigh and leg. In the most productive period of life, low back pain affects the quality of life. The incidence rate of low back pain is important because during their lifespan more than three quarters of the world's population experience low back pain at some time or other. Low back pain affects men slightly more than women and is most common in the working population with the highest

incidence of 25-64 years of age. The person who suffers from this disease is partially handicapped, as the patient may not be able to walk, stand or sit comfortably.

As in this disease the patient walks like the bird *gridhra* and his 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. Ayurvedic treatments for *Gridhrasi* concentrate on bringing back the aggravated Vata or Vata Kapha to the state of equilibrium and thereby to the state of health. So present study has been taken to understand the concept of disease *gridhrasi* and to achieve a treatment protocol accordingly

NIDANA (Etiology) of Gridhrasi

In Gridhrasi specific nidana has not been mentioned. So the causative factors mentioned producing Vata vyadhi are considered as nidana and it has been tried to understand the manner in which they produce the disease. The difference is only in samprapti of all vatavyadhi Vata-prakopakara are almost the same and therefore difference such as Gridhrasi, pakshaghata etc. is due only to the vitiated dosha samprapti vishesa[1]. Charaka[2] and Bhavaprakasha[3] specifically referred to the causative factors of Vata vyadhi, but the causes of Vata vyadhi were not clearly described in Sushruta samhita, Astanga Sangraha and Astanga Hridaya etc. However, in these texts the causative factors of provoked Vata dosha are available. Since Gridhrasi is considered as nanatmaja type of disease of Vata, the provocative factors of pitta and kapha can also be taken as the causes of Gridhrasi. In addition to this, the specific causes of Vata Vyadhi i.e. dhatukshaya and avarana have also been mentioned in Charaka Samhita, Astanga Sangraha and Ashtanga Hridaya, [4].

Purvarupa of Gridhrasi

Minor symptoms present before the manifestations of Gridhrasi may be taken as purvarupa.

As it is one of the 80 types of Vatavyadhi.

Rupa of Gridhrasi

Gridhrasi's cardinal signs and symptoms are Ruka (pain), Toda (pricking form of pain),

Stambha (stiffness) and Spandan (twitching) in order in the Sphika, Kati, Uru, Janu, Jangha and Pada, and Charak identified Stambha and Muhuspanana as well[5]. Sushruta opines that the vitiated Vata dosha afflicts the kandara producing Gridhrasi, where in the patient finds difficulty in extending the leg². Pain starting from Sphik and radiating towards Kati, Pristha, Uru, Janu, Jangha and pada in order, is the cardinal symptoms of Gridhrasi. Ruk and Toda are the two main words used for the descriptions of the pain. Shusruta and Vagbhatta have given Sakthishapanigraha i.e. restricted lifting of the leg [6,7]. Some signs and symptoms such as Dehasyapi pravakrata, Janu uru sandhi spurana etc. have been identified by Bhavaprakash, Madhavnidan and Yogaratnakara in particular as Vatik lakshanas[8-10]. Some lakshanas have been defined by Charka, Madhavnidan, Bhavapraksha and Yogaratnakara as Vatakaphaja, such as Tandra, Gaurava Arochaka, Mukhapraseka, Bhaktdwesa, etc.

Symptoms Of Vataja Gridhrasi

- RUK (Pain): This is an important symptom of Gridhrasi and in fact this typical pain readily opines that this pain starts at sphik (hip) and later on it affects kati (Waist), Pristha (back) Uru (Thigh) Janu (Knee) Jangha (calf) and Pada (foot) respectively. Obviously this pain is present along with the area distributed by sciatic nerve.
- TODA (Pricking pain): Charaka and Madhava have mentioned this symptom.

Toda is pricking like pain felt along the distribution of sciatic nerve.

- STAMBHA (Stiffness): Charaka has mentioned the stambha felt in the affected part of the patient of Gridhrasi. This is a feeling of lightness or rigidity throughout the leg. On account of the pain in the distribution of nerve the person tries to make as little movement as he can. As a result the muscles of the leg become rigid and the stambha is experienced.
- SPANDANA (Twitching): This also occurs as a sensation of something pulsating or throbbing. This is due to muscular twitching. This may be in the buttock region in the thigh, legs or even in the small muscle of the foot and is mostly in the muscle supplied by the sciatic nerve.
- SAKTHIKSHEPANA NIGRAHANTI: *Sushruta* has mentioned this symptom. Commenting upon the above symptom Dalhana opines that the kandara that forbids the movement of the limb is called Gridhrasi. This is an additional manifestation of limited mobility of the affected leg. The word kshepa means prasarana or extension. The patient has to keep the leg in flexed position because in extended position the pain will be more. Vagbhata says this lakshana in a different way by using the word “Utkshepana” in the place of ‘Kshepa’ which means that the patient is unable to lift the leg. Arunadutta very clearly defines it by using the word ‘Pada udharane Ashakti’ means the patient is unable to elevate or lift the leg.

- DEHASYAPI PRAVAKRATA: *Madhava* described the symptom on account of the pain that means the lateral and forward bending of body. The patient of Gridhrasi keeps the leg in flexed position and tries to walk without much extending the leg. Thus this is whole body is tilted on the affected side and gives him a bending posture or limping. The gait is also typical.

Symptoms Of Vatakaphaja Gridhrasi

- TANDRA: Tandra is one of the symptoms of the Gridhrasi caused by Vatakapha. Acharyas opine that Tandra is the outcome of the vitiated vata and kapha.(11) In the case of Gridhrasi also it can be said that domination of Vata and kapha causes Tandra. Charaka gives the causative factor of tandra like food substances having the qualities like madhura, Snigdha, Guru etc. and some mental factors are Chinta, shoka etc. it can be observed that the ultimate result of the above is the vitiation of vata and kapha.
- GAURAVA: Gaurava is the feeling of heaviness of the body. Heaviness is the quality of Kapha. So when the Kapha is vitiated in the Vata kaphaja type of Gridhrasi, Gaurava occurs. Anyway only Charaka has mentioned this symptom and others have not included it.
- AROCHAKA: Charaka, *Madhava* and *Bhavaprakasha* have mentioned Arochaka as a symptom of Gridhrasi. It is a subjective symptom where patient loses the taste but appetites remains intact. Comparing to Vata it seems that

Kapha has the more roles in manifestation of Arochaka because the seat of Bodhaka Kapha is Jiwha (Tongue). So it is clear that this symptom is due to the vitiation of kapha especially Bodhaka Kapha.

- **AGNIMANDYA:** Agni is usually referred to as the state of Pachaka pitta of the body. When affected by the vitiated Kapha, the Pachakapitta fails to perform its normal function. This may be due to the antagonist properties of the Pitta & Kapha. So in the case of Gridhrasi also where Kapha is dominant, role of Ama must be taken into consideration. Agnimandya leads to the formation of Ama which in turn produces further Agnimandya.
- **MUKHAPRASEKA:** Mukhapraseka is caused by the vitiated Kapha. In Madhavanidana and Bhavaprakash Mukhapraseka has been mentioned in vatakaphaja type of Gridhrasi. Vata may have a little role to play in case of Mukhapraseka. Praseka has been mentioned due to the involvement of Ama by some Acharyas. In nutshell it can be said that Mukhapraseka is caused by the involvement of Kapha and Ama.
- **BHAKTADWESHA:** This symptom is also produced due to the involvement of Kapha and ama. Here the patient shows aversion towards the food substances in general. Both Madhava nidana and Bhavaprakash have mentioned this symptom in the type of vatakaphaja Gridhrasi
- **STAIMITYA:** This symptom is described by Harit only. Staimitya means timidness (frozen sensation). Due

to Kapha vitiation patient feels like some wet cloth has been wrapped around the limb.

SAPEKSHA NIDANA of Gridhrasi (differential diagnosis)

The differential diagnosis of Gridhrasi from Urustambha and khalli [12] disease can be made by considering the following points:

- i. By the nature of radiating pain which starts from Prishtha and Kati portion is a characteristic of Gridhrasi and absent in other two diseases i.e. *Urustambha* and *khalli*.
- ii. In Gridhrasi, saktikshepa (leg rising) is being restricted, while in Urustambha patient feels heaviness in his thighs and difficulty in walking.
- iii. Urustambha associated with Jvara, Chhardi, Aruchi, Angamarda etc. which are not usually found in Gridhrasi.
- iv. In Khalli the severity of pain will be more than Gridhrasi and is generally proximal in nature.
- v. In Khanja and Pangu first and foremost symptom is paralysis which may be present in sciatica, only as late complication and no history of pain may be present in khanja and pangu [13]. Whereas in Gudagata Vata, in addition to pain, in the foot symptoms like shosha, retention of faeces, urine and flatus, colic, flatulence and formation of stone (Ashmari) may also be present [14].

Samprapti Ghatakas In Gridhrasi

Nidana - vataprakopaka nidana

Dosha - Vyana and apana vata, kapha

Dushya - Rasa, Rakta, asthi, majja, sira, kandara, snayu

Agni - Jatharagni and Dhatwagni

Ama - Jatharagnijanya and dhatwagnijanya

Udhbhava sthana- Pakwashaya

Sancharasthana - Rasayanies

Adhithana - pristha, kati, sphik

Srotas - Rasa, rakta, mansa, medo, asthi and majjavaha srotasas

Vyakta - Adhosakthi-uru, janu jangha and pada

Rupa - Ruk, toda, stambha arochaka, suptata, bhaktadwesa, tandra, gaurava.

Sadhyasadyata of Gridhrasi[Prognosis]

No separate prognosis has been mentioned for Gridhrasi. If Gridhrasi is accompanied with khuddavata, angasosha and stambha or Gridhrasi in which the vitiated vata is seated in majjadhatu may or may not be cured even after careful treatment. But if this condition occurs in a strong person and is of recent origin and without any associated disease, then it is curable. *Sushruta* states that if a patient with vatavyadhi develops complications such as *shunam* (oedema / inflammation) *suptatwacham* (tactile senselessness), *bhagnam* (fracture), *kampa* (tremors) *adhmana* (distension of the abdomen with tenderness) and pain in internal organs, then he does not survive[15].

Chikitsa Of Gridhrasi

Being a Vata vyadhi, general treatment of Gridhrasi is advised as that of Vata. Nidana parivarjan is the first and foremost principle

to be adopted in treatment of Gridhrasi. Gridhrasi can be divided on the basis of Dosha Kopa into three stages. It should be studied carefully before starting the treatment as the stage varies from time to time.

Stages of Dosha prakopa Treatment

a. Minimum (vata) *Langhana*

b. Moderate *langhana-Pachana*

c. Maximum (ama/vata kapha) *Shodhana*.

Before starting the treatment we should study the disease in a patient, because in case we are misguided by the patient or due to ignorance, inappropriate medicines will create serious

complications. All Acharyas recommend oil preparations at all stages of Gridhrasi, except in Amavastha, both externally and internally. Ruksha prayoga should be advised in Ama and Vata Kapha Gridhrasi, Sneha prayoga will negative results. In this, in first two stages-minimum & moderate, in Kevala Vata, Shamana sneha is advised by Acharyas. Shodhana should be given in the third stage, because in this case, without purifying the body, shamana treatment will not yield any good results. After the Sodhana, shamana can be used. So first we should go through Shodhana therapy. Pre operative process helps to bring back the doshas to their respective Asayas. Here preoperative processes is of two kinds- Snehana and Swedana.

Discussion on the Treatment

- **Snehana**-Taila is supposed to be the best for Vata, because Vata is Ruksha, Sheeta,

Laghu and Khara, and Taila has qualities as compared to Snigdha, Usna, Guru, Piahila etc. So Taila soothes Vata and does not increase Kapha as it is ushna at the same time. In Kledana and Vishyandana of Doshas, a kind of internal Snehapana helps. It takes the Doshas to Kostha by its Apya, Snidha, Guru, Picchila guna. and then further it drived out by shodhana, This kills the malasanghata, does Agnidipti kosthasudhi, and increases vigor and teint. In Abhyanga, Pariseka, Avagaha etc., Sneha is used externally. Vata's location is Sparsanendriya. It soothes Vata because Abhyanga is performed on the skin. Shusruta gave a time measurement in which sneha hits various Dhatus in Abhyanga. With this connection, it can be said that Sneha can touch Majja Dhatu when applied to the skin for 900 matras. In Asthimajjagata Vatavyadhies, it can also be useful. Abhyanga increases the strength of the body to withstand pain and hard work, which is Gridhrasi's ultimate source. Abhyanga prevents the cycle of aging away. Hence it can slow down the degenerative process occurring in different Dhatus (Especially in the spine the sciatic nerve and the muscles of lower extremities in Gridhrasi).

- **Swedan**-Charakacharya pointed out that even dry wood can be made soft and flexible with Snehana and Swedana, so why not be living organs. 16 Gridhrasi is clearly mentioned in the Swedanarha list, as well as the cardinal and associated characteristics of Gridhrasi such as shool,

Stambha, Sankocha, supti. Gridhrasi is Vatavyadhi and Kaphanubandhi at times. Swedana is also shown in vatavyadhies as well as Vatakaphaja Vyadhies. [17] Gridhrasi is a shoolapradhana vatavyadhi and shulavayuparama is a symbol of proper swedana. [17] In Gridhrasi, Nirgundi patra pinda sweda works as both snehana and swedana.

- **Mridu Virechana**- If the vitiated Doshas are more numerous and Snehana, Swedana, does not acquire any relief, then only Mridu Virechana is indicated for the Dosha shodhana Snehana and Swedana have already taken them to kostha, and for this reason Mridu Virechana can easily extract them. Trivruttta, Eranda, Aragvadhya etc. are used for this purpose. Virechana removes the maladravyas, increasing Agni, purifying srotas, Dhatus, and destroying the vyadhi. [18]. Although it is particularly indicated in Pittapradhana and Raktapradoshaja Vyadhies, it is also useful in Vatavyadhies as it affects the Dhatu pariposhan karma as a whole 'Vata Vaigunya' is important in Gridhrasi's etiopathology. It essentially plays a role in the over stimulation of the nerve as experienced by severe pain in the course of affected part. Shodhan therapy should be indicated when removing the disorder-related 'Vata Vaigunya'. There is a clear indication of the shodhan therapy 'Sneha Virechana' with 'Nirgundi patra swarasa'. For the Mridu Virechana, Eranda taila and Nirgundi Patra Swarasa should be mixed and given to Gridhrasi patients. This mixture relieves vata from kati

pradesha. It clears the Apana Vata which is the main factor of Gridhrasi.

BASTIKARMA and concept of selection of the Basti karmabasti is the important karma in the treatment of Vata vyadhies. It is indicated in almost all vatavyadhies and especially indicated in the patients who have disability, stiffness in the extremities, pain in the organs, and fractures in the bones. Severe constipation, loss of appetite etc. Majority of the symptoms is present in the patients of Gridhrasi. As Basti stays in pakwashaya, pelvises, organs below umbilicus get benefitted through virya of the Bastidravayas, transmitted all over the body. It sucks out Doshas from head to toe as the sun, though miles away, with its ray's sucks the water from the plants on the earth. No other chikitsa is as capable as Basti to tolerate and regulate the force of Vata [19]. If used methodically and skillfully, Niruha Basti purifies mala, Tridoshas and Saptadhatus, drives Dosha Sanchaya out of the entire body, increases Agni, intellect, span of life, controls the aging process [20]. In Anuvasana Basti Sneha is used. Nothing is as superior to Taila in killing Vata as Taila kills Rukshata with her Snigdha Guna and Laghu and Sheeta Guna of vata with her Guru and Usna guna respectively. As water poured into the root nourishes the entire tree and blossoms, the anus oil nourishes the entire body, increases Sukra Dhatu, and increases fertility.

AGNI KARMA as Specific treatment of Gridhrasi

Siravedha and Agnikarma (between Kandarsa and Gulpha) have been recommended in Charaka Samhita Bastikarma (Niruha and Anuvasana basti). [21]. Sushruta has advised Siravedha at Janu after flexion [22]. Astanga sangraha and Astanga Hridaya have also advised Siravedha four Angula above the Janu [23]. Chakradutta has described Gridhrasi's diagnosis. He stressed that after proper Agnidipan, pachan, and Urdhvasodhana, basti should be administered. He said that before Urdhvasudhi (Purification by Vaman, Virechana etc.) the administration of Basti is meaningless. He mentioned a small operation with Snehana and Swedana to remove Granthi in Gridhrasi and four Angula under Indrabasti marma in siravedha as well. If this medication is not resolved, then Agnikarma was suggested at Kanishthika anguli of pada. In the region of four Angula around Basti and Mutreendriya, Yogaratnakara has instructed siravedha if this fails to advise Agnikarma in the leg's small finger. He listed the taila of Mahavishagarbha, the taila of Vajigandhadi, the lasuna etc.

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Conflict of Interest

None.

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