



RESEARCH ARTICLE

GRIDHRASI: A CRITICAL REVIEW

¹Dr. Preeti Pimoli, ²Dr. Vimal Kumar and ³Dr. Ajay Kumar Gupta

¹PG scholar, P.G. department of Shalya Tantra, Uttarakhand Ayurveda University, Rishikul Campus, Haridwar Uttarakhand India Pin code 249401; ²Assistant Professor P.G. department of Shalya Tantra, Uttarakhand Ayurveda University, Rishikul Campus, Haridwar Uttarakhand India Pin code 249401; ³H.O.D. and Professor P.G. department of Shalya Tantra, Uttarakhand Ayurveda University, Rishikul Campus, Haridwar Uttarakhand India Pin code 249401

ARTICLE INFO

Article History:

Received 24th July, 2024
Received in revised form
17th August, 2024
Accepted 29th September, 2024
Published online 30th October, 2024

Key Words:

CVDs, Diabetes,
Dyslipidemia,
Kalonji (Negilla Sativa).

*Corresponding author:
Dr. Preeti Pimoli

ABSTRACT

Gridhrasi is one of the most common disorders, described as one among the *Vata Nanatmaja Vyadhi* (diseases caused by vitiation of *Vata Dosha* only) where the vitiated *Vata Dosha* (one of the principle dosha in the body, responsible for the movement and functionality of the body), manifests as low back pain which radiates to the lower limbs, accompanied by stiffness and a pricking type of pain. Sometimes even Kapha vitiation along with Vata (*vata kaphaj*) also causes *Gridhrasi*. It closely resembles with *Sciatica*, characterized by pain or discomfort associated with sciatic nerve. Contemporary medicine has limitations giving short-term relief in pain, or surgical intervention often accompanied with side effect. In present scenario, no single definite treatment for *Sciatica* is available. Thus, an attempt has been made in this article to highlight the best possible modalities mentioned in *Ayurvedic* classics for management of *Gridhrasi* (*Sciatica*). Treatment in *Ayurveda* is aimed at restoring equilibrium through correcting underlying functional inequilibrium. *Ayurvedic* treatments for *Gridhrasi* concentrate on normalizing the aggravated *Vata* or *Vata Kapha doshas* to the state of equilibrium and thereby restoring the state of health.

Copyright©2024, Preeti Pimoli et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Dr. Preeti Pimoli, Dr. Vimal Kumar and Dr. Ajay Kumar Gupta. 2024. "Gridhrasi: A critical review". *International Journal of Current Research*, 16, (10), 30427-30431.

INTRODUCTION

In most age groups, low back pain is a frequent musculoskeletal problem in today's fast-paced, modern world. It mostly affects working-age people and affects men slightly more than women. Some aggravating factors that contribute to this are improper sitting positions, over-exertion, sedentary lifestyle, jerky movements while travelling, sudden falls, and lifting heavy objects with the wrong posture. In addition to causing discomfort, *sciatica* also makes walking difficult and has a negative impact on quality of life. This condition is extremely severe, with pain radiating from the lumbar region all the way down to the toes along the posterior lateral part of the thigh region. Depending on how severe the illness is, it may be unilateral or bilateral. This is the reason why walking is difficult. While not all lower back pain is *sciatica*, improper or delayed management will certainly result in the condition.

Acharya Charaka has also defined *Gridhrasi* in *Chikitsa Sthan* as:

स्फिक्पूर्वी कटिपृष्ठोरुजानुजङ्घापदं क्रमात्
गृध्रसी स्तम्भरुक्तोदैर्गृह्णाति स्पन्दते मुहुः
वाताद्वातकफात्तन्द्रागौरवारोचकान्चिता |

(च.चि.28/56)

Shula of *Gridhrasi* emerges from *Sphik* and radiates towards *Kati*, *Prishtha*, *Uru*, *Janu*, *Jangha*, and *Paad*.^[1]

पाणिप्रत्यङ्गुलीनां तु कण्डरा या अनिलादिता ।
सकथनः क्षेपं निगृह्याद गृध्रसीति हि सा स्मृता ॥ (सु.नि. 1/7)

According to *Acharya Sushruta*, the disease wherein *Kandara* which passes through *Parshni* (the region below *Gulpha bhaaga*) towards the *Pratyanguli* gets affected by *Vata dosha* resulting in difficulty in *Prasarana* of *Sakthi* (region starting from *Gulpha* and ending in *Vitapa*), is called as *Gridhrasi*.^[2]

It is most prevalent in people during their 40s and 50s. Low back pain has been enumerated as fifth most common cause for hospitalization and the third most frequent reason for a surgical procedure.^[3] The signs and symptoms of "Sciatica" found in allopathic treatment quietly mimic with those of *Gridhrasi* mentioned in *Ayurveda*. *Gridhrasi* comes under *Nanatamja Vata vyadhi*.^[4] *Gridhrasi*, the name itself indicates the way of gait shown by the patient due to extreme pain, that is, *Griddha* or Vulture. The cardinal signs and symptoms of *Gridhrasi* are *Ruk* (pain), *Toda* (pricking sensation), *Muhuspandan* (Tingling sensation), *Stambha* (stiffness) in the *Sphik*, *Kati*, *Uru*, *Janu*, *Jangha*, and *Pada* in order^[5] and *Sakthikshepanigraha* (i.e., restriction in upward lifting of

lower limbs).^[6] In *Gridhrasi*, *Tandra* (Drowsiness), *Gaurava* (Heaviness), and *Aruchi* (Anorexia) may be present if *Kapha* is associated with *Vata*.^[7]

Nidana (Etiology) of Gridhrasi

In case of *Gridhrasi*, specific *nidana* has not been mentioned. So the causative factors mentioned producing *Vata vyadhis* are considered as *nidana* and it has been tried to understand the manner in which they produce the disease. *Vata prakopaka* factors are almost same and the difference like *Gridhrasi*, *Pakshaghata* etc. are only due to the *samprapti vishesa* of vitiated dosha.^[8]

Since *Gridhrasi* is considered as *Vata Nanatmaja Vyadhi*, the provocative factors of *Vata* can also be taken as the causes of *Gridhrasi*.

In addition to this, in *Charaka Samhita*, *Astanga Sangraha* and *Ashtanga Hridaya*, specific causes of *Vata Vyadhi* i.e. *dhatukshaya* and *avarana* have also been mentioned.^[9]

Samprapti of Gridhrasi: *Vataja Gridhrasi* is produced by *Vata prakopa* or *Vata vridhi* due to *dhatu kshaya* having symptoms of *Stambha*, *Ruka*, *Toda* and *Muhu Spandana*. *Vata prakopa ahara vihara* gives rise to aggravation of *Vata* and at the same time *Ruksha*, *Khara*, *Laghu*, *Sheeta*, *Chala guna* of *Vata* suppresses the *Snigdha*, *Guru*, *Mrudu*, *Pichhila* and *Sangha guna* of *Kapha* which reduces the *Sleshma*. Reduced *Sleshma* in *Prustha*, *Kati*, *Sakthi*, and *Kandara* is occupied by vitiated *Vata*. Thus vitiated *Vata* gets located in *kandara* and produces the symptoms like *Stambha*, *Ruka*, *Toda*, and *Spandana* in *Kati*, *Prustha*, *Uru*, *Janu*, *Jangha* and *Pada* in respective order.

Agantuja factors like *abhighata*, etc also produce *dhatu kshaya* instaneously causing *vata prakopa* without attaining the *chayadi avastha* and leading to *Gridhrasi*. *Avarana* is another pathology which causes *vata prakopa*. When *Kapha* gets *anubandhatva*, its symptoms like *aruchi*, *tandra* and *gaurava* are added to the features of *Vataja Gridhrasi* and is termed as *Vatakaphaja Gridhrasi*.

Acharya *Sushruta* has mentioned the involvement of *kandara* in *Gridhrasi*. *Sushruta* has quoted special variety of *siras* called as *vata vaha siras*, which are the channels of movement of *vata*, in the senses.

Samprapti Ghataka

Nidana: *Vataprakopaka nidana*

Dosha: *Vata* and *Kapha*.

Dushya: *Sira*, *Snayu*, *Kandara*, *Asthisandhi*,

Agni: *Jatharagni*

Ama: *Nirama (vata pradhana)*, *Ama (kapha pradhana)*

Udbhavasthana: *Pakwashaya*

Sancharasthana: *Sarvashareera*

Srotas: *Rasavaha*, *Asthivaha*, *Majjavaha*, and *Purishavaha*

Srotodushti: *Sanga*

Rogamarga: *Madhyama*

Vyaktasthana: *Sphik*, *Kati*, *Prishtha*, *Uru*, *Janu*, *Jangha*, *Pada*.

Bheda: *Vataja* and *Vatakaphaja*

Swabhava: *Chirakari*

Rupa of Gridhrasi: Pain starting from *Sphik* and radiating towards *Kati*, *Prishtha*, *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. *Charak* has also described *Stambha* and *Muhuspandana*.^[10] *Shusruta* and *Vagbhatta* have given *sakthikshepa nigraha* as the cardinal sign.^{[11],[12]} Some signs and symptoms like *Dehasyapi Pravakrata*, *Janu* and *Uru sandhi spurana* etc. have defined specially as *Vatik lakshanas* by *Bhavaprakash*, *Madhavnidan* and *Yogaratanakara*.^{[13],[14],[15]} Some *lakshanas* like *Tandra*, *Gaurava Arochaka*, *Mukhapraseka*, *Bhaktdwesha* etc. have been defined as *Vatakaphaja* by *Charka*, *Madhavnidan*, *Bhavapraksha* and *Yogaratanakara*.

Symptoms of Vataja Gridhrasi

Ruk (Pain): This is an important symptom of *Gridhrasi* and in fact this typical pain readily starts at *Sphik* (hip) and later on it affects *Kati* (Waist), *Prishtha* (back) *Uru* (Thigh), *Janu* (Knee), *Jangha* (calf) and *Pada* (foot) respectively. 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 or 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*. 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.

Symptoms of Vatakaphaja Gridhrasi

Tandra: *Tandra* is one of the symptoms of the *Gridhrasi* caused by *Vatakapha*. *Acharya* states that *Tandra* is the outcome of the vitiated *Vata* and *Kapha*. 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. and the ultimate result of the above is the vitiation of *Vata* and *Kapha Doshas*.

Gaurava: *Gaurava* is the feeling of heaviness of the body. Heaviness is the quality of *Kapha Doshas*. So when the *Kapha* is vitiated in the *Vata-Kaphaja* type of *Gridhrasi*, *Gaurava* occurs.

Arochaka: *Charaka*, *Madhava* and *Bhavaprakasha* have mentioned *Arochaka* as a symptom of *Gridhrasi*. It is a subjective symptom where patient loses the taste but appetite

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 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 *Pachaka pitta* 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 *Madhava nidana* 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*.

Bhaktadwesa: 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 *Haarit* only. *Staimitya* means timidness (frozen sensation). Due to *Kapha* vitiation patient feels like some wet cloth has been wrapped around the limb.

Chikitsa of Gridhrasi: In Ayurveda, various methods used for treatment of *Gridhrasi*, viz. *Bheshaja*, *Snehana*, *Swedana*, *Basti*, *Siravedha*, *Agnikarma*, etc. *Gridhrasi* is being a *Vata vyadhi*, general treatment is advised for that of *Vata*. The first and foremost principle to be adopted in treatment is to avoid the *nidanas* that cause *Gridhrasi*. In initial stages, *Shamana chikitsa*, is advised by *Acharyas*. In later stage or if *shamana* treatment will not give any good result, *Shodhana* should be given. After the *sodhana*, *shamana* can be used. *Agnikarma* (therapeutic intentional burn) and *Siravedha* (therapeutic blood letting by vein puncture) are considered instant healers of pain. They have been proved effective in *Ruja Pradhan Vatavyadhis*. *Acharya Sushruta* has considered them as superior to other treatment modalities.

Discussion on the treatment modalities:-

Shamana Chikitsa

Agnitundi Vati: As the name suggest *Agni* means digestive fire, hence the one which improves digestive fire. *Agnitundi Vati* induces *Pachana* at gastrointestinal as well as *Dhatugata* level (cellular and tissue level) and corrects *Jatharagni* as well as *Dhatvagni*. It is indicated in *Adhmana*, *Shula*, pain related to *Vata* imbalance.^[16]

Trayodashanga Guggulu: *Vatanulomana* and *Aampachana* properties of the ingredients of *Trayodashanga Guggulu*^[17] help in relieving *Malabaddhata* (Constipation). Due to *Deepana* and *Pachana* properties *Tandra*, *Gauravta*, and *Aruchi* are also reduced. Along with this, it has anti-inflammatory, anti-arthritis, anti-gout, analgesic, muscle relaxant and

antioxidant properties by energize the growth of bone forming cells by producing more osteoclasts and osteoblasts. It prevent the pro inflammatory cytokines, activity of xanthine oxidase, hydrogen peroxide, and renal microsomal lipid peroxidation process and also blocks the action of histamine and enhances the level of dopamine.^[18]

Rasnasaptak Kwatha: *Rasnasaptak kwatha*^[19] is having an excellent *Vata Shamaka* property. Along with *Aampachana*, these herbs are known for their anti-inflammatory activity, analgesic, and anti-arthritis activity viz. *Rasna*, *Gokshura* and *Eranda*. Some of them are known for their immunomodulatory activity like *Guduchi*, *Aragvadha* is having *Vata-Kapha Shamaka* properties and is *Mridu Virechaka*, so helps to remove constipation and also does antioxidant activity.^[20]

Tablet Shallaki - With combination of *Erandamula* and *Guduchi* was used which is mainly indicated in treatment of inflammatory arthropathies, spondylitis and gout. It contains the extract of *Salai Guggulu* (*Boswellia serrata*), *Eraudamula* (*Ricinus comamanis*), and *Guduchi* (*Tinospora condifolia*). *Guggulu* is used to relief joint pain, stiffness, and inflammation *Erandmula* is best ayurvedic herb used to relieve inflammation, swelling, eases bowel movement, and *Guduchi*, which is a well known immune modulator corrects auto immune disorders.^[21]

Gandharva Haritaki Churna: It is polyherbal classical ayurvedic medicine. The ailment reside in the *Kati Pradesh*, which is the seat of *Vata dosha*, *Mridu virechana* is line of treatment of *vaat vyadhi*^[22] and this formulation has *Vatahara*, *Vrishya* and *Snigdha Virechaka* properties. It in indicated in the management of pain in *Vatavadhi*, *Sandhivata*, *Gridhrasi*, and *Ardita*. This formulation is used for *Anulomama*, *Ajeerna*, and *Aruchi* induced diseases.^[23]

By taking all the above mentioned discussion into consideration, the overall regime induces *Vatashamana*, *Srotostodhana* and *Srothahara* effects. Thus, it can be used as an excellent analgesic, anti-inflammatory, and nutritive therapy in *Gridhrasi*.^[24]

Snehana: *Taila* is supposed to be the best for *Vata* as *Vata* is *Ruksha*, *Sheeta*, *Laghu* and *Khara*, and *Taila* has just opposite qualities like *Snigdha*, *Ushna*, *Guru*, *Picchila* etc. Thus *Taila* alleviates *Vata* and at the same time does not increase *Kapha* as it is *Ushna*. A type of internal *Snehapana* helps in *Kledana* and *Vishyandana* of *Doshas*. By its *Apya*, *Snidha*, *Guru*, *Picchila guna*, it brings the *Doshas* to *Kostha* and then further it drived out by *Shodhana*. It destroys the *Malasanghata*, does *Koshthashuddhi*, *Agnidipti* and improves vigour and complexion.

Swedan: *Acharya Charaka* has pointed that even dry wood can be made soft and flexible with *Snehana* and *Swedana* then why not be living organs.^[25] *Gridhrasi* is clearly mentioned in the list of *Swedanhara* and also the cardinal and associated features of *Gridhrasi* like *Shoola*, *Stambha*, *Sankocha*, *Supti* have also been mentioned. *Gridhrasi* is a *Vatavyadhi* and sometimes *Kaphanubandhi*. *Swedana* is also indicated in *Vatavyadhies* as well as *Vatakaphaja Vyadhies*.^[26] *Gridhrasi* is a *Shoolapradhana Vatavyadhi* and *Shulavayuparama* (destruction of pain) is the sign of proper *swedana*. *Nirgundi*

patra pinda sweda is effective in Gridhrasi as it act as *snehana* as well as *swedana*.

Mridu Virechana: If the vitiated *Doshas* are more in amount and no relief is acquired by *Snehana*, *Swedana*, then *Mridu Virechana* is indicated for the *Dosha shodhana*. They have already brought to *koshtha* by *Snehana* and *Swedana*, and can be easily driven out by *Mridu Virechana*.

As far as etiopathology of Gridhrasi is concerned 'Vata Vaigunya' is important. It essentially plays a role in the over stimulation of the nerve as experienced by severe pain in the course of affected part. In removing the 'Vata Vaigunya' pertaining to the disorder, Shodhan therapy should be indicated. Among the shodhan therapy 'Sneha Virechana' with 'Nirgundi patra swarasa' has a specific indication. For the Mridu Virechana, Eranda taila and Nirgundi Patra Swarasa should be mixed and given to Gridhrasi patients. This mixture relieves vata from kati pradasha. It clears the Apana Vata which is the main factor of Gridhrasi.

Bastikarma: *Basti* is the important karma in the treatment of *Vata vyadhies*. It is indicated in almost all *vata vyadhies* 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*, organs below umbilicus get benefitted through *virya* of the *Basti dravyas*, 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*.^[27]

Siravedha: In Charaka Samhita, *Siravedha* (Between *Kandara* and *Gulpha*) has been advised for management of Gridhrasi. *Sushruta* has advised *Siravedha* at *Janu* after flexion.^[27] *Astanga Sangraha* and *Astanga Hridaya* have also advised *Siravedha* four *Angula* above the *Janu*.^[28] *Chakradutta* has given the treatment of Gridhrasi in details. He has mentioned *siravedha* four *Angula* below *Indrabasti Marma*. *Yogaratanakara* has advised *siravedha* in the area of four *Angula* around *Basti* and *Mutreendriya*. In *Siravedha*, expulsion of vitiated *Doshas* accumulated due to inflammatory reaction outside body can give relief in pain.

Agnikarma: Pain is the predominant symptom of *Gridhrasi*, which disturbs the normal routine of the patient. It is a classical fact that this pain is effectively relieved by *Agnikarma*. The diseases treated with *Agnikarma* do not recur and there is no fear of putrefaction and bleeding, and ultimately it produces balancing effect on vitiated *Vata Dosha*. To perform this procedure, many *Dahana Upkaranas* (devices) like *Pippali*, *Ajashakrit*, *Godant*, *Shara*, *Shalaka*, *Jambavoshtha*, *Madhu*, *Guda*, *Sneha* and different types of metals are used.

Stambha is chiefly due to *Sheeta* and *Ruksha Guna* of *Vata Dosha*. *Agnikarma* having *Ushna Guna* acts as antagonist to *Vata* properties indirectly providing relief in *Stambha*. According to Ayurveda, basic humor responsible for causation of *Ruka* is *Vata* and pain is cardinal symptom in most of the *Vata vyadhies*. *Vata Dosha* is predominantly having *Sheeta Guna* which is exactly opposite to *Ushna Guna* of *Agni*. So *Agni* is capable of producing relief in pain by virtue of its

Ushna Guna. The exact cause of muscle stiffness is still unknown, but occurs most commonly due to altered neuromuscular control. In *Agnikarma* the temperature at the applied site is increased which reduces nerve reflexes resulting in relaxation of muscle. Relief in *Suptata* after *Agnikarma* may probably be due to relaxation of the surrounding muscles and ligaments and might be due to release of pressure on sciatic nerve. *Agnikarma* at *Kanishthika anguli* of *pada* has been suggested. *Yogaratanakara* has advised *Agnikarma* in the little finger of the leg.

CONCLUSION

Gridhrasi is one of painful condition which hampers the daily routine of the patient. This disease having predominancy of *Vata doshas* as it comes under eighty *vataj nanatmaj vyadhi* & may have *kapha anubandh* with it. Thus radiating pain from lumber region to the lower extremities may show stiffness in the lower limb & patient feels difficulty in walking, or continuous standing even for short period. *Ayurveda* believes that *chikitsa* like *Shamana*, *Shodhan*, *Basti*, *Siravedha* and *Agnikarma* acts against the qualities of *vata* and *kapha doshas* and hence cures all the *Vataj* and *Kaphaj* disorders. Pain occurring anywhere in the body is due to *Vata*, these treatment pacifies *Vata*, and thus the pain is relieved immediately. According to Ayurveda, every *dhatu* (tissue) has its own *Dhatvagni* (tissue *Agni*) which is responsible for the nourishment, increase & decrease of *Dhatu*. When this *Dhatvagni* becomes *Manda* diseases begin to manifest. Thus in this condition *Agnikarma* works by giving external heat there by increasing the *Dhatvagni* which helps to digest the aggravated *doshas* and hence cures the disease. While describing *Gridhrasi*, *Acharya Sushrut* has given more emphasis on involvement of ligament of heel & toe afflicted with *Vata Dosha* which obstruct the movement of leg. In the chapter of *Vaatvyadhi chikitsa Adhyaay Acharya Charaka* has mentioned process of *Agnikarma* in case of *Gridhrasi*. So as to discontinue the recurrence & for *Samprapti Vighatan*, patient should be given Oral *Vatshamak* medication. These therapies show remarkable relief in nearly all signs & symptoms of *Gridhrasi* (Sciatica), especially in case of pain as it is one of the most uncomfortable factor for patient in this disease. The procedures are simple, economical & can be done in OPD level as per derived protocol for long lasting relief to the patient of *Gridhrasi* (Sciatica).

REFERENCES

1. Shastri, K. and Chaturvedi, G. N. 2016. *Charaka Samhita – Vidyotini Hindi Commentary: Vol II*. Chaukhambha Bharati Academy. Chikitsa Sthana 28/56, page no. 787.
2. Shastri, A. 2017. *Sushruta Samhita - Ayurveda Tattva Sandipika: Vol. I*. Chaukhambha Sanskrit Sansthan. Nidana Sthana 1/74, page no. 303.
3. Armstrong P, Wastie M, Rockall A. Diagnostic Imaging. 5th ed. Blackwell Publishing: UK: 2004. Chapter 11. p. 362.
4. Sharma PV, editor. *Sutrasthana; Maharog Adhyaya*. Charaka. Samhita of Agnivesha. 8th ed. Chapter 20, Verse 11. Varanasi, India: Chaukhamba Orientalia: 2007. p. 139.
5. Sharma PV, editor. *Chikitsasthana: Vatavyadhichikitsa Adhyaya*. Charaka Samhita of Agnivesha. 8th ed. Chapter 28, Verse 56. Varanasi, India: Chaukhamba Orientalia; 2007, p. 466.

6. Sharma PV, editor. Nidanasthana: Vatavyadhi Nidana Adhyaya. Sushruta, Sushruta Samhita. Chapter 1. Verse 74. Varanasi, India: Chaukhamba Visvabhamti: 2005, p. 15.
7. Sharma PV, editor. Chikitsasthana; Vatavyadhichikitsa Adhyaya.
7. Charaka Samhita of Agnivesha. 8th ed. Chapter 28, Verse 57. Varanasi, India: Chaukhamba Orientalia; 2007. p. 466.
8. Anna Moreshwar Kunte, Krsna Ramchandra, Shastri Navre Astangahrdya of Vagbhata, Nidana Sthana, (6th edn), Chaukhamba Sanskrit Sansthan, Varanasi, India, 1939:p. 443-444.
9. Priyavrat sharma Charak Samhita, Chikitsa Sthana. (7th edn), Vol 2, 28/59, Chaukhamba Orientalia, Varanasi, India, 2005:p. 467.
10. Priyavrat sharma Charak Samhita, Chikitsa Sthana. (7th edn), Vol 2 28/56-57, Chaukhamba Orientalia, Varanasi, India, 2005:p. 466
11. Vaidya Jadvi, Trikamji Acharya Susruta Samhita of Susruta, Nidana Sthana, Reprint edition 2010, 1/74 Chaukhamba Sanskrit Sansthan, Varanasi, India, 2010:p. 268.
12. Anna Moreshwar Kunte, Krsna Ramchandra Shastri Navre Astangahrdya of Vagbhata, Nidana Sthana, (6th edn), Chaukhamba Sanskrit Sansthan, Varanasi, 15/54, India, 1939:p. 535.
13. Sri Vijayaraksita, Srikanthadatta, Madhavanidana Chaukhamba Sanskrit Sansthan, Varanasi, India, 2010:pp. 166.
14. Pandit Sri Brahma Sankara Misra, Bhavprakash Uttarddh, Chikitsa Prakarana. (7th edn), 24/4-16 Chaukhamba Sanskrit Sansthan, Varanasi, India,2010:p. 227-228.
15. Indradev Tripathi, Daya Shankar Tripathi YogratnakarPurvakhanda. (2nd edn), Choukhamba Krishnadas Academy, Varanasi, India, 2007:p.16.
16. Mishra S, editor. Govinddas Bhaisajyaratnavali: Mandagani Chikitsa Prakarana: Chapter 10, Verse 93-94. Varanasi, India: Chaukhamba Surbharati Prakashan; 2007. p 648-9.
17. Mishra S, editor. Govinddas, Bhaisajyaratnavali; Vatavyadhi Chikitsa Prakarana: Chapter 26, Verse 98-101. Varanasi, India: Chaukhamba Surbharati Prakashan; 2007, p 148-9.
18. Moharana PK, Patel A. Synergistic effect of Trayodashang Guggulu and yoga basti in the management of low back pain with special reference to Gridhrasi. Int J Health Sci Res 2018; 8:167-73.
19. Mishra S, editor. Govinddas, Bhaisajyaratnavali; Vatavyadhi Chikitsa Prakarana: Chapter 26, Verse 69. Varanasi, India: Chaukhamba Surbharati Prakashan; 2007. p. 142-143.
20. Pandey S. Chaudhary AK. A review on rasnasaptak kwath: An Ayurvedic polyherbal formulation for arthritis Int J Res Ayurveda Pharm 2017:8:4-11.
21. Gufic Sallaki XT Tablets Available from: <https://www.eayur.com/ayurvedic/vati-tablets/gufic-sallaki-xt-tabletshtm>. [Last accessed on 2017 June 28].
22. Tripathi B. editor. Sutrasthana; Doshopakramaniya Adhyaya. Vagbhata, Ashatang Hrudaya. Chapter 13. Verse 1 3. Delhi, India: Chaukhamba Sanskrit Pratishtan; 2015. p. 185.
23. Joshi YG, editor. Textbook of Kayachikitsa; Samyabheda Vivechana. Chapter 76. Pune, India: Sahitya Vitarana; 2001. p. 792. 45. Sawarkar P. Sawarkar G. Ayurvedic management of Gridhrasi (sciatica). Joinsysmed 2017:5:119-25
24. Priyavrat sharma Charak Samhita, Chikitsa Sthana, Seventh Edition, Vol 2,28/79-80, Chaukhamba Orientalia, Varanasi, India, 2005:pp. 468.
25. Kashi Nath Sastri Charak Samhita of Agnivesh, part 1, Sutra Sthana. Reprint edition 2012, 14/3, Chaukhamba Sanskrit Sansthan, Varanasi, India,2010:p. 197.
26. Vaidya Yadvi, Trikamji Acharya Sushruta Samhita of Susruta, Chikitsa Sthana. Reprint edition, 2010, 35/27-30, Chaukhamba Sanskrit Sansthan, Varanasi, India, 2010:p. 527-528.
27. Vaidya Yadvi Trikamji Acharya Sushruta Samhita of Susruta, Chikitsa Sthana, Reprint edition, 2010, 05/23, Chaukhamba Sanskrit Sansthan, Varanasi, India, 2010:p. 428.
28. Anna Moreshwar Kunte, Krsna Ramchandra Shastri Navre Astangahrdya of Vagbhata, Sutra Sthana. (6th edn), Chaukhamba Sanskrit Sansthan, Varanasi, India, 27/16, 1939:p. 328.
