



Management of Gridhrasi WSR to Sciatica: Ayurveda

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	Abstract
CC License CC-BY-NC-SA 4.0	<p>Gridhrasi (Sciatica) is one of the severe debilitating syndromes among all the neurological disorders. The main symptoms of Gridhrasi are Ruka (pain), Toda (pricking sensation), Stambha (stiffness) and Muhuspandana (twitching) in the Sphika (Gluteal Region), Kati (Waist), Prishtha (Low Back), Uru (Thigh), Janu (Knee), Jangha (Calf) and Pada (Foot) respectively and Sakthikshepa Nigraha (restricted lifting of the leg). The above mentioned symptoms can be compared with sciatica syndrome which is characterised by severe pain starting from low back region and radiating down towards the foot. This is a common entity encountered in a clinical practice. The review elaborates the general description of disease Gridhrasi w.s.r to Sciatica. The general principle of treatment and procedures for the management of Gridhrasi/Sciatica according to various Ayurveda classics have been discussed.</p> <p>Keywords: <i>Ayurveda, Gridhrasi, Sciatica</i></p>

Introduction:

On account of our busy lives, unknowingly our muscles, joints, and bones are put under strain. This stress can mount up incrementally and results in a serious impact on the body such as sudden fall or a misalignment of the spine resulting into low back pain. Millions of people in the world suffer from low back pain (LBP), both in the acute and chronic situations. Acute onsets commonly become chronic and chronic conditions may be complicated with acute exacerbations. Low back pain is the second most common reason for all physician visits and it is a condition that affects as many as 80-90% of people during their life time, among them true sciatica cases occurs in about 5% of cases(3). Sciatica is more common among the age group between 30-50 years of age. Modern science describes 'Sciatica' as a benign syndrome characterized especially by pain beginning in the lumber region and spreading down the back of one lower limb to the ankle and sometimes the foot. Ayurveda had identified this problem long back and named it 'Gridhrasi'. The word 'Gridhrasi' itself suggests the gait of the patient which is similar to Gridhra (vulture) due to pain. Gridhrasi comes under 80 types of Nanatmaja Vatavyadhi(though, occasionally there is kaphanubandha. The cardinal signs and symptoms of Gridhrasi are Ruka (pain), Toda (pricking sensation), Stambha (stiffness) and Muhuspandana (twitching) in the Sphika (Gluteal Region), Kati (Waist), Prishtha (Low Back), Uru (Thigh), Janu (Knee), Jangha (Calf) and Pada (Foot) in order and Sakthikshepa Nigraha i.e. restricted lifting of the leg. Due to

Kaphaanubandh, Arochaka (Anorexia), Tandra (Stupor) and Gaurava (Heaviness) are found. The above mentioned symptoms can be compared with sciatica syndrome. It is characterised by severe pain starting from low back region and radiating down towards the foot. This is a common entity encountered in a clinical practice. In all Ayurveda classic, the description of the diseases is available. Charaka Samhita, Madhvakara, Bhavaprakasha, Yogaratnakara, Sharagadhara and Vangasena have been mentioned two types of Gridhrasi, Vataja and Vatakaphaja. According to Charaka, the symptoms of Gridhrasi are as follows. In Vataja type – • Ruk (Pain) • Toda (Pricking sensation) • Stambha (Stiffness) • Muhuspandanam (Tingling sensations) In Vata-Kaphaja type– • Tandra (Stupor) • Gaurava (Heaviness) • Arochaka (Anorexia) Sushruta, the father of surgery has described all the details about the disease. He has given elaborated descriptions of aetiology, pathogenesis, symptomology, management and various other aspects of Gridhrasi in his treatise, named Sushruta samhita. The symptom ‘Sakthikshepa Nigraha’ has been described for the first time which can be correlated to the SLR test in modern medicine .

Management of Gridhrasi (Sciatica) The treatment of Sciatica is a challenge for the modern medicine and surgery. The treatment option for Sciatica in present time includes. • Conservative treatment • Epidural steroid injection • Peri-radicular infiltration • Surgical treatment In Ayurvedic texts, various types of treatment are described for Gridhrasi. 1. Nidana Parivarjana (Avoid the causative factors) 2. Snehana (Oleation therapy) 3. Swedana (Sweating therapy) 4. Virechana (Purgation therapy) 5. Basti Karma (Medicated enema therapy) 6. Raktamokshana (Bloodletting) 7. AgniKarma (Thermal cauterization) 8. Shamana (Palliative therapy)

1. Nidana Parivarjana (Avoid the causative factors): As the name suggests, the ‘Nidana’ stands for ‘the causative factors’ which produce the disease and ‘Parivarjana’ means ‘to give up’. The prime approach of an Ayurvedic treatment is analyzing the root cause of disease. This is the first and the foremost principle to be adopted in the treatment of each and every disease. Nidana parivarjana stops the further progression of disease, by restricting vitiation of Doshas. The general causes of Vatavyadhi are considered as the causes of Gridhrasi since it is considered under eighty Nanatmaja Vata Vyadhis. The exclusive Nidana of Gridhrasi are not mentioned in the classics. In regard to causative factors of Vata Vyadhi, only Charaka and Bhavaprakasha have explained in detail, while in Sushruta Samhita, Ashtanga Sangraha and Ashtanga Hridaya etc. the causes have not been clearly described. However in these texts, the causative factors provoking Vata Dosha are described. The Vataprakopaka Hetus found in different Samhitas are listed below. • Rukshahara (Dry food) • Sheetahara (Cold food) • Alpahara (Diet below the requirement) • LaghuAhara (Light diet) • Kashayarasapradhana (Diet with astringent tastes) • Katurasapradhana (Diet with pungent tastes) • Tiktarasapradhana (Diet with bitter tastes) • Ativyayam (Excessive exercise) • Ratrijagarana (Staying awake at night) • Ativyavaya (Excess in sexual activity) • Langana (Fasting) • Vegadharana (Suppression of natural urges) • Vishama upachara (Contradictory treatment) • Dukhashayya (Uncomfortable posture while sleeping) • Shrama (Excessive work) • Chinta (Stress) • Shoka (Grief) • Bhaya (Fear) • Krodha (Anger) • Abhighata (Injury) • Rogatikarshana (overtreatment)

2. Snehana (Oleation therapy): Snehana or oleation therapy is used externally and internally in case of Gridhrasi. Externally Snehana may be performed in the form Abhyanga, Pizhichhil, Avagaha, Parisheka etc. If the Kapha Dosha is involved in the pathogenesis as in case of Vatakaphaja Gridhrasi, Snehana Chikitsa should be restricted as this treatment tends to worsen the imbalance of Kapha Dosha.

3. Swedana (Sweating therapy): Shula (pain) and Stambha (stiffness) in the lower extremities are the cardinal symptoms of Gridhrasi and is best treated by the Sweden Chikitsa. Swedana also helps in the liquefaction of the Dosha there by assisting clearing the Srotas, or else rectifying the Margavarana. Among the different forms of Swedana procedures, Avagaha Sweda, Pizhiccil, Nadisweda, Patrapinda Sweda, Pinda Sweda and Upanaha Sweda may be efficiently performed in patients of Gridhrasi(8) but in Vatakaphaja Gridhrasi, Valuka Sweda is a better option for evident reasons.

4. Virechana (Purgation therapy): Virechana has an important role in Gridhrasi. The action of Virechana is not only limited to particular site, it has effects on the whole body. In Vata Vyadhi, Charaka Samhita has mentioned Mridu Virechana .Oral administration of Eranda Sneha (castor oil) along with milk is ideal for the Virechana purpose .

5. Basti Karma (Medicated enema therapy): Pakwashaya is the primary location of Vata Dosha. It is true that Vyana Vata is vitiated in Gridhrasi. So, Basti is very helpful in pacifying Vata. Further it is glorified that

Basti Chikitsa as “Ardha Chikitsa” of Vata ..By these facts, basti is most important among the Panchakarma in the treatment of Gridhrasi. No other Chikitsa has the capacity to pacify and regulate the force of Vata apart from Basti . Niruha Basti: Erandamuladi Niruha and Dashamuladi Niruha are the best choices. Anuvasanabasti: Anuvasana Basti using Vatahara Tailas like Bala Taila, Mulaka Taila, Ksheerabala Taila, Prasarani Taila etc. are beneficial.

6. Raktamokshana (Bloodletting): It is a therapeutic blood cleansing and purification therapy. It is derived from two words, ‘Rakta’, which means blood and ‘Mokshana’ which means leave. Thus Raktamokshana means to let the blood out. The blood is expelled out from the body to reduce the quantity of toxic substances in the blood. Various methods given in Ayurvedic classics, are the use of Shringa (Horn application), Jalauka (Leech application), Alabu (Gourd), Prachhana (Scarification) and Siravyadha (Venepuncture). For Gridhrasi Charaka explained Siravyadha at the site of Antara-Kandara-Gulpha (13) and Acharya Sushruta and Vagbhatta indicated Siravyadha four Angula above or four Angula below at the site of knee joint.

7. Agnikarma (Thermal Cautery): Various Acharya mentioned Agnikarma in the management of Gridhrasi. According to Sushruta and Vagbhatta, in the management of Sira, Snayu, Asthi and Sandhigata Vyadhi, Agnikarma is indicated and Gridhrasi is one of the diseases of these Samprapti (pathogenesis). For the treatment of Gridhrasi, the following different places for Agnikarma are mentioned: Charaka: Antara kandara Gulpha. Charkradatta: Pada Kanisthika Anguli (little toe of the affected leg).

8. Shamana (Palliative therapy): This therapy is given for the Shamana of vitiated Dosha. They are in the form of Aushadhi and Ahara. Shamanoushadhi– These are the internal medicines to cure the disease. There are several medicinal formulations mentioned in different classics in the context of Chikitsa. Churna: Ajamodaadi Churna, Abhayaadi Churna, Krishnadi Churna, Rasnaadi Churna. Kalka and Lepa: Maha Nimba Kalka, Rasona Kalka, Swalpa Rasona, Vaatahara Pradeh Kashaaya and Arishta: Panchamoola Kashaaya, Maha Rasnaadi Kashaaya, Erandamoola Kashaaya, Dashamoola Kashaaya, Balarishtha, Dashamoolarishtha. Ghrita and Taila: Chagaalyadhya Ghrita, Bala Taila, Eranda Taila, Vajigandhadi Taila, Saindhavaadya Taila, Maashaadi Taila, Vishagarbha Taila, Prasaarani Taila, Mahaabalaadi Taila, Naraayana Taila, Vishnu Taila and Ghrita, Vijaya Bhairava Taila, Rasnapooteeka Taila, Saptaprastamsa Taila, Datturaadi Taila. Guggulu and Rasayogas: Rasna Guggulu, Trayodasanga Guggulu, Yogaraaja Guggulu, Mahayogaraaja Guggulu, Pathyaadi Guggulu, Vataari Rasa, Vatagajankusa Rasa, Vatarakshasa Rasa. Gridhrasi is not a contemporary health problem but it has been familiar to the mankind since Samhita period. Vata is the Dosha responsible for the causation of the disease. The causes of Gridhrasi are not described in the classics, but the factors vitiating Vata are the Nidana for Gridhrasi. Bad posture, irregular and unwholesome dietary habits, travelling in jerky vehicles etc. are most commonly encountered factors in today’s life. Vitiated Vata especially Apana and Vyana Vayu are involved in the Samprapti (pathogenesis) of Gridhrasi. The Samprapti takes place either by Dhatukshaya (improper nourishment of Dhatus) or Margavarana (obstruction) or due to Agantunja (external factors) causes like Abhighata (injury) and Prapatana (fall from height). In Dhatukshaya Samprapti, due to improper nourishment of Rasadi Dhatus, these Dhatus land into Kshayavastha. Dhatukshaya further vitiates Vata causing Gridhrasi. This type of Samprapti can be correlated to the Sciatica caused by degenerative changes. These changes are osteoporosis, spondylosis etc. which lead to Sciatica. When Vayu is obstructed by Kapha, Ama etc. it gets vitiated leading to Margavarana Samprapti of Gridhrasi. Gridhrasi is classified into Vataja and Vatakaphaja. It can be understood on the basis of aetiology as follows: - Vataja Gridhrasi (Dhatukshaya): Lumber spondylosis, Disc Degeneration Disease (DDD), Degenerative Spondylosis, Lumber Arthritis, Disc Herniation, Lumber Compression Fracture etc. - Vatakaphaja Gridhrasi (Margavarana) - Lumbar Spinal Stenosis, Tumor etc.

Discussion:

It may be concluded that Gridhrasi can be equated with the condition Sciatica syndrome in modern parlance, which occurs because of spinal nerve irritation and is characterized by pain in the distribution of sciatic nerve which begins from buttock and radiates downwards to the posterior aspect of thigh, calf and to the outer border of foot. Modern science have so many treatments like Conservative treatment Epidural steroid Injection, Periradicular infiltration, Surgical treatment which are used in sciatica but there are complications in modern science. So Ayurvedic approach of treatment is much better as compared to allopathic treatment. Nidana Parivarjana, Sodhana Chikitsa (Snehana, Swedana, Virechana, Basti, Raktamokshana etc.) and Shamana Chikitsa are main route of treatment for any disease. Sodhana may be recommended for Bahu-dosha, but

Shamana is also essential for removing the remained Dosha after Shodhana process. Nidana Parivarjana is the first and the foremost principle of Ayurvedic treatment of each and every disease. It stops the further progression of disease, by restricting vitiation of Doshas. Gridhrasi comes under 80 types of Nanatmaja Vatavyadhi. As told by Acharaya Charaka, there is no other drug equivalent to Taila Sneha for Vata Shamana (16) and he also described Snehana as a first line of management in Vata Vyadhi (17). Internal Snehana (Ghruta, Taila/Oil) having Snigdha Guna undergoes digestion and gets absorbed through blood and reaches the Sukshma Rasayani by its Sukshma guna and nourishes Dhatu & pacifies vitiated Vata Dosha. External Snehana (Abhyanga or Massage with medicated oil) directly acts on muscles and makes them strong and Swedana is Sandhichestakar (improves the movements of joints), Srotoshuddhikar (clears up the micro channels), Agni Deepaka, and Kaphavatanirodhan (antagonist of Kapha). It decreases Stambha (stiffness). Heat administration by Swedana may produce hypno analgesic effect by diverted stimuli. In Vatakaphaja Gridhrasi, margavaranajanya Samprapti is present swedana, by doing srotoshuddhi, this obstruction is relieved (18). The Sneha Virechana clears obstruction in the Srotas and relieves Vata vitiation very quickly (19). Thus Sneha Virechana of Mridu nature helps in controlling Shula in Gridhrasi. In Gridhrasi, Vata specifically Apana and Vyana Vayu Dushti is found. Basti stays at Pakwashaya and starts its action from there. Pakwashaya is the natural abode of Vayu. Basti conquers the vitiated Vata is its Prakruta Sthana by which Vata dwelling in other parts of the body is automatically conquered (20). Basti removes Malasanghata (21) and thus maintains the Anulomagati of Apana Vayu which helps to pacify the symptoms of Gridhrasi. Basti acts on the natural bacterial flora of the intestines which is important for the synthesis of Vit. B6, B12. Basti Chikitsa decreases the ketoacid and pyruvic acid levels due to which Vit. B synthesis increases. This Vit. B restricts the demyelination process of the nerves and helps in regeneration. One theory proposes that the Virya of Basti Dravyas spreads through A.N.S. and expels out vitiated Doshas from the body. This signifies its action on the nervous system. This undoubtedly proves the efficacy of Basti therapy in the management of Gridhrasi. Acharya Sushruta has mentioned diseases; those are not relieved so quickly by Snehana, Lepa- nadi therapeutic measures in these situation Siravyadha is an emergency management to achieve better results. Acharya Sushruta mentioned Agnikarma is more efficacious than other therapeutic procedures as it gives instant relief in pain. The place where heat burns the local tissue metabolism is improved, thus various metabolic and rejuvenating changes take place at the site of heat burns and it leads to increase demand of oxygen and nutrients of the tissues at the site of heat burns. It also excretes the unwanted metabolites and toxins. Due to increased local metabolism, the waste products (metabolites) which are produced get excreted, which normalizes the blood circulation, resulting in reduction in the intensity of pain. There may be generalizing dilatation of the heated blood vessels on the centres concerned with regeneration of the body temperature. Heating affects the vasomotor centres causing general rise in temperature.

Conclusion:

Gridhrasi is a painful condition and so far there is no established therapy. Gridhrasi can be equated with Sciatica in modern medicine. Abhyanga with medicated oil followed by swedana may be used as first line of treatment for both type of Gridhrasi. Agnikarma and Raktamokshana may be useful in severe painful condition and in chronic (degenerative) condition. Basti therapy may be better choice for the management of Gridhrasi. Nidana parivarjan may stop the further progression of disease. It may be concluded that various treatment modalities present in Ayurveda vary according to condition of disease present.

References

1. Andersson, G.B.J. The epidemiology of spinal disorders. In *The Adult Spine: Principles and Practice*, 2nd ed.; Frymoyer, J.W., Ed.; Lippincott-Raven Publishers: Philadelphia, PA, USA, 1997; pp. 93–141.
2. Harrison's principles of internal medicine. Anthony S. Fauci editors. Mc Graw hill Publication. 18th ed. Vol 1, 2013. Page No. 341
3. Valat JP; Genevay S; Marty M; Rozenberg S; Koes B. Sciatica, Best Pract Res Clin Rheumatol. 2010 Apr;24(2):241-52. doi: 10.1016/j.berh.2009.11.005.
4. Agnivesha, Charaka Samhita with Charaka Chandrika Hindi Commentary by Dr. Brahmanand Tripathi, Part 1st, Sutrashtana 20/11, 1stedn (reprint), Varanasi: Chaukhambha Krishnadas Academy; 2009; p 389
5. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Chikitsasthana 28/56, Dwivedi Lakshmidhar editor. 1stedn (reprint), Varanasi: Chaukhambha Krishnadas Academy; 2004; p 700
6. Sushruta, Sushruta Samhita with Nibandha Sangraha commentary. Nidanasthana 1/74, 1stedn (reprint), Varanasi: Chaukhambha Sanskrit Series; 2008; p 268

7. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Chikitsasthana 28/15-18, DwivediLakshmidhar editor. 1stedn(reprint), Varanasi: ChaukhambhaKrishnadas Academy; 2004; p 619.
8. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Chikitsasthana 28/78, DwivediLakshmidhar editor. 1stedn(reprint), Varanasi: ChaukhambhaKrishnadas Academy; 2004; p 651.
9. CharakaChikitsaSthana 28/83 Charaka Samhita, Ayurveda Deepika, YadavjiTrikamji, Reprint Edition 2009, Varanasi, ChaukhambaOrientalia p 620.
10. AshtangaSangrahaChikitsaSthana 23/4, AshtangaSangraha of with 'Sasilekha' commentary by Indu, Prof.JyotirMitra Reprint Edition 2009 varanasiChaukhambha Sanskrit Series p 564
11. Charaka Sutra Sthana 1/40 Charaka Samhita, Ayurveda Deepika, YadavjiTrikamji, Reprint Edition 2009, Varanasi, ChaukhambaOrientalia p 8.
12. SushrutaChikitsaSthana 35/29-30 Sushruta Samhita, NibandhaSangraha, YadavjiTrikamji Reprint edition 2010 Varanasi, ChaukhambasurbhartiPrakashana p 528
13. CharakaChikitsaSthana 28/100-101 Charaka Samhita, Ayurveda Deepika, YadavjiTrikamji, Reprint Edition 2009, Varanasi, ChaukhambaOrientalia.
14. Susruta, Susruta Samhita, AyurvedTatvaSandipika Hindi commentary by KavirajAmbikaduttaShastri, Part 1st, Sharirsthana 8/17, ed. (1st) reprint; Varanasi: Chaukamba Sanskrit Sanasthan; 2010. p88
15. CharakaChikitsaSthana 28/100-101 Charaka Samhita, Ayurveda Deepika, YadavjiTrikamji, Reprint Edition 2009, Varanasi, ChaukhambaOrientalia.
16. Agnivesha, Charaka Samhita, Charaka Chandrika Hindi Commentary by dr. BrahmanandTripathi, vol. 2 nd, Chikitsasthana 28/181, Varanasi: ChaukhambhaKrishnadas Academy; 2014; p 970
17. Agnivesha, Charaka Samhita, Charaka Chandrika Hindi Commentary by dr. BrahmanandTripathi, vol. 2 nd, Chikitsasthana 28/75, Varanasi: ChaukhambhaKrishnadas Academy; 2014; p 951
18. Singh SK, Rajoria K. Ayurvedic approach in the management of spinal cord injury: A case study. AncSci Life 2015;34(4):230-4.
19. AshtangaSangrahaChikitsaSthana 23/4, AshtangaSangraha of with 'Sasilekha' commentary by Indu, Prof.JyotirMitra Reprint Edition 2009 varanasiChaukhambha Sanskrit Series p 564
20. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Sutrasthana 20/13, DwivediLakshmidhar editor. 1stedn(reprint), Varanasi: ChaukhambhaKrishnadas Academy; 2004.
21. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Siddhisthana 11/8, DwivediLakshmidhar editor. 1stedn(reprint), Varanasi: ChaukhambhaKrishnadas Academy; 2004.