

REVIEW ARTICLE

Role of Different *Basti* in the Management of *Gridhrasi* w.s.r to Sciatica: A Review

Author: Mohita Bohra¹

¹Deptt. of Panchakarma, Himalayiya Ayurvedic Medical College and Hospital, Dehradun, UK, India

ABSTRACT

There is an enormous description of *Vata* disorders and their management in Ayurvedic texts. *Gridhrasi* is described among *Vataja Nanatmaja* disorders, whose symptoms correlate with Sciatica. Sciatica is among the commonest reason for low back pain which is a major health and socio-economic burden in the present era. Early diagnosis of the disease results in a better prognosis, as the disease gets older it may lead to serious disabilities. Ayurveda holds a lot of options in the form of oral treatment, external and internal purification therapies. Basti therapy is the most widely prescribed treatment for sciatica as it is the best treatment for *Vata* disorders. Various decoction and oil enemas are mentioned in classical texts which can be chosen according to the involvement of *Dosha* and symptoms appearing

Key Words *Gridhrasi, Sciatica, Vata disorders*

Received 07th June 22 Accepted 11th August 22 Published 10th September 2022

INTRODUCTION

Gridhrasi (~*sciatica*) is one of the eighty *Nanatmaja Vata* disorders (diseases only due to vitiated *Vata*) according to Acharya Charaka¹, who has also mentioned its types as- *Vataja* and *Vata-Kaphaja*². Acharya Susruta has also considered it as a *Vataja* disorder and given its description in *Vatavyadhi nidana* chapter. Acharya Vagbhatt has also included it among eighty *Vataja* disorders. The word *Gridhrasi* originated from the root '*Gridhra*' which means the bird vulture. Due to pain, the gait of the patient becomes similar to that of the vulture. Considering the cardinal symptoms which are *Ruka* (pain), *Toda* (pricking sensation), *Stambha*

(stiffness) and *Muhurspandana* (twitching) in the waist, hip, back of the thigh, knee, calf region and foot respectively, it can be best correlated to sciatica. Sciatica is defined as pain along with the course of the sciatic nerve which is felt in the back of the leg running from the buttock down to the back of the thigh into the calf and foot³. It is a symptom that arises due to compression or inflammation of the sciatic nerve. Low back pain is the most frequently reported musculoskeletal problem in elderly adults, can be said as the most common job-related disability. And almost 5-10% of people with low back pain have sciatica⁴. Pain is not only the issue in this disease but it also affects the walking ability and posture of the patient, which degrade working abilities and in

REVIEW ARTICLE

severe form interferes with daily routine also. Most of the sciatic nerve problems are temporary and heal naturally or with conservative medication and exercise, but in some cases, it leads to a more serious and long-lasting health impact so, care should be taken at the earliest to prevent further nerve degeneration. WHO also reported that low back pain including sciatica is a major health and socio-economic burden in the present era⁵. Ayurvedic purification and palliative treatment can provide a good cure for this disease and aid in decreasing the burden of this health issue from society. *Gridhrasi* being a *Vata* disorder, the general line of treatment of *Vata* alleviation is followed. *Snehana* (oleation), *Swedana* (sudation therapy), *Mridu Shodhana* (purification procedures), *Basti* (enema therapy), *Siravedha* (venepuncture), *Agnikarma* (thermal cauterization) are advised. *Basti*, *Siravedha*, *Agnikarma* are considered as the prime treatment of *Gridhrasi* by almost all Acharyas.

Specific causative factors of this disease are not mentioned in texts but as it is mentioned under disorders due to *Vata* so, all the *Vata* aggravating factors are considered as the causative factor. Two types are mentioned by Acharya *Charaka* as *Vataja* and *Vata-Kaphaja*. The main symptoms of *Vataja* are- *Ruk* (pain), *Toda* (pricking sensation), *Stambha* (stiffness) and *Muhuspanadana* (intermittent twitching) in the regions of *Sphik* (waist), *Kati* (upper back), *Prishtha* (low back), *Uru* (thigh), *Janu* (knee), *Jangha* (calf) and *Pada* (foot) in order. *Tandra* (drowsiness), *Gaurava* (heaviness) and *Arochaka*

(anorexia) are in addition to *Vata-Kaphaja* type. Acharya *Susruta* has mentioned a symptom- *Sakthikshepa Nigraha* which means inability to lift the leg, this features directly correlates with positive SLR test in sciatica. Acharya *Madhava* has mentioned specific symptoms of two types of *Gridhrasi* i.e. *Dehasya Pravakrat* (Sciatic scoliosis) in *Vataja* type, *Mukhapraseka* (excessive salivation) and *Bhaktadvesha* (aversion to food) in *Vata-Kaphaja* type.

Basti is the best treatment to pacify *Vata*. Along with curative aspects like-relieving pain and stiffness, contractions and adhesions, effective in paralytic conditions, dislocations and fractures, it also has preventive actions like- providing a better life, improving strength, digestive power, voice and complexion^{6,7}. Different types of *Basti* are indicated according to the involvement of *Dosha* and *Dushya*.

DIFFERENT *BASTI* IN THE MANAGEMENT OF *GRIDHRASI* (~*SCIATICA*):

The references of various *Basti* indicated in *Gridhrasi* are collected from major ayurvedic texts and data of clinical studies performed are collected from articles published in reputed journals which are available online.

Gridhrasi has its origin in *Pakwashaya* (large intestine), as it is a *Vata* disorder and its seat is around waist and back. *Basti* can be the best mode of drug administration due to its action on *Vata Dosha*. *Charaka* mentions that *Basti* by reaching up to the umbilical region (transverse

REVIEW ARTICLE

colon), sacroiliac region (rectum), flanks and hypochondriac regions (ascending and descending colon) and churning of the fecal and morbid matters present therein and at the same time by spreading its unctuous effect in the whole body, draw out the fecal and morbid matter with ease⁸. *Vagbhata* describes that the potency of *Basti* is conveyed to *Apana* and *Samana Vata* which regulate the function of *Agni* (digestive factor), then to *Udana*, *Vyana* and *Apana* thus providing its efficacy all over the body. At the same time this effect of *Basti* by specifying *Vata* restores the displaced *Kapha* and *Pitta* at their original seats⁹. The control gained over *Vata* leads to the breaking of the pathogenesis of *Gridhrasi*.

1. Niruha Basti (Decoction enema): This *Basti* is generally indicated in *Kapha-Vataja* and *Kaphavritta Vata* conditions. Some common types of *Niruha Basti* used in *Gridhrasi* are discussed here-

a) *Erandmooladi Basti*- This *Basti* is indicated by *Acharya Charaka* specifically for pain and stiffness caused by *Vata-Kapha* in the lower back, waist, hip, and leg region¹⁰. This *Basti* contains total of 34 drugs. The main ingredients of *Basti* are- *Madhu* (honey), *Saindhava lavana* (rock salt), *Til tail* (sesame oil), paste of various *Vata-kapha* alleviating herbs, decoction drugs (*Erand-mula*, *Palash*, *Laghu Panchmula*, *Rasna*, *Ashwagandha*, *Atibala*, *Guduchi*, *Punarnava*, *Argvadha*, *Devdaru*, *Madanphala*), cow's urine. Majority of drugs present in *Basti* are *Vata-Kapha* alleviating. This *Basti* is also told as

Dipana (enhancing metabolic fire) and *Lekhana* (scraping action) which pacifies *Kapha* and reduce symptoms like- heaviness and stiffness. The main content *Erand (Ricinus communis)* is told as best *Vata* alleviator by *Acharya Charaka*. It also possesses anti-inflammatory, analgesic, anti-oxidant and bone regeneration activity¹¹. Also, other main contents- *Laghu-Panchmool*, *Palash* have anti-inflammatory, analgesic and nerve regeneration properties. Clinically, it is one of the most prescribed *Basti* in *Gridhrasi* and has proven very effective in managing the symptoms¹².

b) *Vaitaran Basti*- This is mentioned in *Niruha Adhikar* by *Acharya Chakrapani*¹³. It is specifically indicated in *Aam-vata*, *Shula*, *Anaha*. *Vaitaran basti* is a type of decoction enema in which *Guda* (jaggery) is used in place of honey, *Chincha* (tamarind) as paste and cow urine in place of decoction. *Acharya Vangasen* indicated this *basti* in *Stambha*, *Kati-Ansha-Pristha shotha*, *Shula*, *Gridhrasi*, *Janu Sankocha*, *Urustambha*, *Klaibya*, *Vishama Jwara*¹⁴. The addition of cow's urine and tamarind paste make *Basti Ushna-Tikshana* (hot in potency and quick in action), due to which it is indicated in aggravated *Kapha* conditions (*Utlishta* and *Kaphavritta Vata*).

c) *Ksheer Basti*- *Basti* with a substance such as milk, *ghee*, and *tikta dravya* is best suitable for the *Asthi pradoshaja vikara*¹⁵. *Panchtikta Ksheer Basti* can be a good choice in the management of *Gridhrasi*. This *Basti* contains *Guduchi (Tinospora cardifolia)*, *Nimba (Azadirakta indica)*, *Vasa (Adhathoda vasica)*, *Kantakari*

REVIEW ARTICLE

(*Solanum Surrattense*), *Patola* (*Trichosanthes dioica*), *Ksheera* (milk), *Goghrita* (ghee), *Madhu* (honey), *Saindhava* (salt). *Basti* is best for disorders due to *Vata* and *Tikta rasa* drugs are beneficial for *Asthigata Vata*. As *Tikta* drugs are *Aakash-Vayu Mahabhoot* dominant so they have an affinity towards *Asthi dhatu* which is also *Vayu-Aakash* dominant. Acharya *Charaka* has also indicated *Tikta-ksheer basti* in *Asthidhatu dushti*. Milk present in *Basti* contains Vitamin D, Calcium, and Phosphorus which provide strength to bone tissues. This *Basti* drugs due to their *Dipana, Jwaraghna* action reduces inflammation around the nerve and the presence of milk and *Tikta* drugs promote healthy bone tissue formation and limit bone degeneration and osteoporosis, thus maintaining a healthy state of vertebrae. In a clinical study, this *basti* was found useful in relieving pain, tenderness, stiffness and increasing the range of motion¹⁶.

d) *Erand-muladi yapana Basti*- This *Basti* is told by Acharya *Charaka*. The main ingredients of this *Basti* are: decoction drugs- (*Erand Mula, Rasna, Bala, Devdaru, Sahachar*), *Kalka* drugs (*Madanphala, Musta, Vacha, Pippali, Punarnava, Sarshapa*), sesame oil, rock salt, honey and cow's milk. Most of the contents are *Vata-Kapha* pacifier and having hot potency. Clinically this *Basti* affects symptoms - *Kati graha* (back stiffness), *Kati shula* (back pain), *Sparsha asahyata* (tenderness), *Gridrasivat Pida* (sciatic pain), Straight Leg Raise (SLR) test, *Pada harsha* (tingling sensation in feet), *Pada gaurava* (heaviness in feet), *Mamsa bala kshaya*

(decreased muscle strength), *Gamane kashtata* (difficulty in movements)¹⁷.

2. Anuvasana/Matra basti (oil enema): This *Basti* is generally indicated in pure *Vata* condition. Oil used in *basti* is considered to have the best *Vata* alleviating property. *Snigdha, Guru* and *Ushna* properties of oil destroy *Ruksha, Laghu* and *Sheeta* properties of *Vata* respectively. Some commonly used *Anuvasana Basti* in this disease are-

a) *Sahacharadi Tail Anuvasana Basti- Sahacharadi Tail* is indicated in treatment of *Vata* disorders by Acharya *Vagbhata*¹⁸. Ingredients of this oil are- *Sahachara* (1 part), *Devdaru* (1 part), *Nagara* (1 part) and *Til Tail* (4 part). All the drugs are hot in potency and *Kapha-Vata* pacifier. *Sahachara, Nagara, Devdaru* have *Vedanasthapak* (pain-relieving) and *Shothara* (anti-inflammatory) properties which help to relieve pain and inflammation of the sciatic nerve. *Matra Basti* with this oil causes reduction in pain, stiffness, pricking sensation, active and passive SLR test and lumbar movement¹⁹.

b) *Prasarini Tail Anuvasana Basti*- This oil is indicated in the disease *Amavata* in *Bhaishajya Ratnavali*²⁰. The contents are- *Erand tail* and *Gandhaprasarini*, which alleviate *Vata-Kapha* and also relieve pain. This *Basti* is indicated in conditions where mild *Kapha* or *Ama* is associated with *Vata*. On clinical administration, this *Basti* provided better relief in symptoms like *Arochaka* (anorexia), *Stambha* (stiffness), *Spandana* (twitching) and *Tandra* (lethargy)²¹.

REVIEW ARTICLE

c) *Dhanvantar Taila Anuvasana Basti*- *Dhanvantar Taila* is given in *Sahasrayoga Taila Prakarana*, mainly advised in various *Yoni Roga* (gynecological disorders) and *Vata* disorders. The main contents of this oil are- *Dashamoola*, *Ashtavarga*, *Bala*, *Yava*, *Kola*, *Kulthi*, *Devadaru*, *Rakta Chandan*, *Sariva*, *Tagar*, *Shaileya*, *Agaru*, *Vacha*, *Punarnava*, *Shatavari*, *Triphala*, *Ela*, *Dalchini*, *Tejpatra*, cow milk and sesame oil. Almost all the drugs used are *Vata* pacifying and *Balya* (nourishing). Drugs like *Amla* (*Emblica officinalis*) are found to be having chondroprotective action inhibiting the activities of hyaluronidase and collagenase type 2 in vitro in degenerative bone and joint disorders²². A recent study showed that *Dhanwantar Kashaya* increased the proliferation rate, decreased the turnover time and also delayed senescence by its action on the Wharton jelly mesenchymal stem cells (WJMSC). It improves the yield and quality of stem cells in vitro²³. Hence, it can prove as an effective drug to treat conditions with cell damage and degeneration such as sciatica when used in the form of oil. *Anuvasana Basti* with this oil can be used in *Vataja Gridhrasi* where *Dhatu kshaya* (diminution of body tissue elements) has started and disease has reached in the chronic stage.

d) *Bala Taila Anuvasana Basti*- *Bala Taila* is described in the chapter *Vatavyadhi Chikitsa* by Acharya *Vagbhata* in *Ashtanga Hrudayam*. The main ingredients of this oil are- *Bala*, *Chhinaruha*, *Rasna*, *Goat milk*, *Mastu*, *Ikshurasa*, *Shukta* and 46 other drugs such as-

Jivaka, *Rishabhaka*, *Yashtimadhu*, *Vacha*, *Musta*, *Padmaka*, *Chandan*, *Ela*, *Devdaru*, *Manjishtha*, *Agaru*, *Twak*, *Kumkum*, *Kankol*, *Kushtha*, *Priyangu*, *Nagkeshara*, etc. and *Tila taila*. It is described by Acharya *Vagbhata* to be best destroyer of *Vataja* diseases²⁴. The main content, *Bala* (*Sida cordifolia*) has an anti-peroxidative and anti-inflammatory effect on neurotoxicity²⁵. The other important content *Chhinaruha* (*Tinospora cordifolia*) has an anti-inflammatory effect on cotton pellet granuloma and formalin-induced arthritic models. It also exhibited an anti-inflammatory effect in both acute and subacute models of inflammation and was found to be more effective than acetylsalicylic acid in acute inflammation²⁶. Another important content *Rasna* contains triterpene which attenuates pro-inflammatory cytokines on Lipopolysaccharide stimulated neuro-inflammatory conditions²⁷. This way the combined effect of *Bala Taila Basti* results in neuroprotective, regenerative and anti-inflammatory effects on disorders like Sciatica.

DISCUSSION:

Gridhrasi being *Vata* prominent disorder, *Basti* serves the best treatment modality for this. Its action is not only limited to *Vata* Dosha but also *Pitta*, *Rakta* and *Kapha* Dosha. So, it is designated as half treatment (*Ardhachikitsa*). In *Gridhrasi*, *Vata* specifically *Apana* and *Vyana* *Vayu* abnormality is found. Large intestine is the natural place of *Vayu* and *Basti* pacifies the vitiated *Vata* in its main place by which *Vata* dwelling in other parts of the body automatically

REVIEW ARTICLE

comes in a balanced state. *Basti* cleanses whole intestine and increases its absorption capacity thus; the absorption of important micro and macronutrients like sodium, potassium and Vit-B12 which are necessary for functions of nerves is also increased. Through proper cleansing of the colon, removes unwanted bacteria and creates an environment for the development of healthy gut flora. These friendly bacteria help in the synthesis of Vitamin B and K which is essential for the maintenance and functioning of the nervous system. In chronic conditions, radiculopathy changes start in the Sciatic nerve which further worsens the condition of the patient. *Basti* can help by limiting the development of those changes. Drugs used in *Basti* also have *Vata* and *Kapha* pacifying action which are the main *Dosha* involved behind the disease, they also possess properties like analgesic, anti-inflammatory, bone tissue remodeling and preventing nerve degeneration.

CONCLUSION:

Basti not only relieves the symptoms, it helps in curing the disease by breaking the pathogenesis and also prevents future complications. Type of *Basti* need to be chosen according to *Dosha* involvement, symptoms and condition of the patient. Different patterns of *Basti* i.e *Karma*, *Kaal* and *Yoga* are chosen according to chronicity and severity of the disease. *Niruha Basti* is advised in *Vata-Kaphaja* condition and *Anuvasana* or *Matra Basti* is advised in pure *Vatika* conditions. In almost every study carried

out to date, *Basti* treatment provided better relief in symptoms as compared to oral medicine and the best results were obtained when *Basti* treatment is combined with oral drugs. This article is a compilation of various *Basti* indicated especially for this disease in classical texts and are further verified by clinical study. Other *Basti* can also be prescribed according to signs and symptoms, as advised by the physician.

References:

1. Pt. Kashinath Shastri and Gorakhnath Chaturvedi. Vidyotini hindi commentary on Charak Samhita, Chaukhamba Bharati academy, Varanasi, Sutra Sthan chapter 20 verse 11, 399.
2. Pt. Kashinath Shastri and Gorakhnath Chaturvedi. Vidyotini hindi commentary on Charak Samhita, Chaukhamba Bharati academy, Varanasi, Sutra Sthan chapter 19 verse 7, 390.
3. Sciatica definition. <https://www.spine-health.com/glossary/sciatica>
4. Younes M, Bejia I, Aguir Z, Letaief M, Hassen-Zroer S, Touzi M, et al (2006). Prevalence and risk factors of disc-related sciatica in an urban population in Tunisia. Joint Bone Spine, 73, 538-42.
5. Anthony D Woolf and Bruce Pflieger (2003). Burden of major musculoskeletal conditions. Bulletin of world Health Organization, 81, 646-656.
6. Pt. Kashinath Shastri and Gorakhnath Chaturvedi. Vidyotini hindi commentary on Charak Samhita, Chaukhamba Bharati Academy, Varanasi, Siddhi Sthan chapter 1 verse 32, 970.

REVIEW ARTICLE

7. Dr. Anantram Sharma. Susrutavimarshini hindi commentary on Susruta Samhita, Chaukhamba Surbharti Prakashan, Varanasi., Chikitsa Sthan chapter 35 verse 3-4, 442.
8. Pt. Kashinath Shastri and Gorakhnath Chaturvedi. Vidyotini hindi commentary on Charak Samhita, Chaukhamba Bharati Academy, Varanasi, Siddhi Sthan chapter 1 verse 41, 972.
9. Dr. Anantram Sharma. Susrutavimarshini hindi commentary on Susruta Samhita, Chaukhamba Surbharti Prakashan, Varanasi., Chikitsa Sthan chapter 35 verse 6, 442.
10. Pt. Kashinath Shastri and Gorakhnath Chaturvedi. Vidyotini hindi commentary on Charak Samhita, Chaukhamba Bharati Academy, Varanasi, Siddhi Sthan chapter 3 verse 38, 999.
11. Manpreet Rana, Hitesh Dhamija, Bharat Prashar, Shivani Sharma (2012). Ricinus communis L. – Review. International Journal of Pharm Tech Research, 4(4), 1706-1711.
12. Pooja, Kajaria Divya (2019). Clinical Evaluation of Erand mooladi Basti in the management of Gridhrasi w.s.r to Sciatica –A Case study. International Journal of Ayurveda and Pharma Research, 7(1), 60-66.
13. Dr. Indradev Tripathi. Vaidyaprabha commentary on Chakradatta, Chaukhamba Sansrita Bhavan, Varanasi, Niruha adhikaar verse 32, 455.
14. Dr. Nirmal Saxena. Vangasen Samhita, Chowkhamba Sanskrita Series, Varanasi, Basti Karma Adhikara verse 190.
15. Pt. Kashinath Shastri and Gorakhnath Chaturvedi. Vidyotini hindi commentary on Charak Samhita, Chaukhamba Bharati Academy, Varanasi, Sutra Sthan chapter 28 verse 27, 972.
16. Dr. Mridula Pathak, Dr. Ashish Mhatre (2020). Clinical efficacy of Panchatikta Kshira Basti in the management of Gridhrasi. J Ayurveda Integr Med Sci, 1, 45-51. Available online <http://dx.doi.org/10.21760/jaims.5.1.9>
17. Damayanthie Fernando, K. P., Thakar, A. B., & Shukla, V. D. (2013). Clinical efficacy of Eranda Muladi Yapana Basti in the management of Kati Graha (Lumbar spondylosis). Ayu, 34(1), 36–41. Available online <https://doi.org/10.4103/0974-8520.115444>
18. Vaidya Yadunandan upadhyay. Vidyotini hindi commentary on Ashtang Hridaya. Chaukhamba sanskrita sansthan., Varanasi. Ed reprint 2005, 420.
19. Vasudev R & Swathi S Deshpande (2020). A Comparative Clinical Study on Matra Basti with Sahacharadi Taila and Vyosadi Taila In Gridhrasi W.S.R To Sciatica. International Ayurvedic Medical Journal, 4694-4700. Available from: http://www.iamj.in/posts/images/upload/4694_4700.pdf
20. Prof. Siddhinandan Mishra. Siddhiprada hindi commentary on Bhaishajya Ratnavali. Chaukhamba surbharti prakashan. Chapter 29 verse 202, 612.
21. Anamika Kumari, Raja Ram Mahto, Alankruta R. Dave, V.D. Shukla (2009). A comparative study on the indigenous compound drug and Matra Basti in the management of Gridhrasi (Sciatica). Ayu, 30(4), 495-502.

REVIEW ARTICLE

22. Sumantran VN, Kulkarni A, Chandwaskar R, Harsulkar A, Patwardhan B, Chopra A, et al (2008). Chondroprotective potential of fruit extracts of *Phyllanthus emblica* in oustoarthritis. *Evid Based Complement Alternat Med.*, 5, 329-35.
23. Warriar SR, Haridas N, Balasubramanian S, Jalisatgi A, Bhonde R, Dharmarajan A (2013). A synths formulation, Dhanwantharam kashaya, delays senescence in stem cells. *Cell Prolif.*, 46, 283-90.
24. Vaidya Yadunandan Upadhyay. *Vidyotini hindi commentary on Ashtang Hridaya*. Chaukhamba Sanskrita Sansthan, Varanasi, Chikitsa Sthan chapter 21 verse 81, 422.
25. SS Swathy, Seema Panicker, RS Nithya, MM Anuja, S Rejitha, M Indra (2010). Anti-peroxidative and anti-inflammatory effect of *Soda cordifolia* Linn. on Quinolinic acid induced neurotoxicity. *Neurochem Res.*, 35(9), 1361-67.
26. SS Singh, SC Pandey, S Srivastava, VS Gupta, B Patro, AC Ghosh (2003). Chemistry and medicinal properties of *Tinospora cordifolia* (Guduchi). *Indian Journal of Pharmacology*, 35, 83- 91.
27. Pooja Srivastav, Shilpa Mohanti, Dhyaneshwar Umrao Bawankule, Feroz Khan, Karuna Shanker (2014). Effect of *Pluchea Lanceolata* bioactives in LPS-induced neuroinflammation in C6 rat Glial cells. *Naunyn-Schmiedeberg's Archives of Pharmacology*, 387(2), 119-27.