

ROLE OF AGNIKARMA IN THE MANAGEMENT OF VATAKANTAKA (CALCANEAL SPUR): A REVIEWMd Haidar¹, Md Tanzil Ansari²

¹PG Scholar, Department of Panchakarma, Institute of Post Graduate Ayurvedic Education & Research at Shyamadas Vaidya Shastra Pith, Kolkata, West Bengal, India

²PG Scholar, Department of Kayachikitsa, Institute of Post Graduate Ayurvedic Education & Research at Shyamadas Vaidya Shastra Pith, Kolkata, West Bengal, India

Corresponding Author: dr.mdhaidar@gmail.com<https://doi.org/10.46607/iamj.1609012021>

(Published online: January 2021)

Open Access

© International Ayurvedic Medical Journal, India 2021

Article Received: 04/12/2020 - Peer Reviewed: 05/12/2020 - Accepted for Publication: 05/12/2020

**ABSTRACT**

Vatakantaka is the painful condition of the heel in which the person can't walk properly, and it hampers his daily activities. Heel pain is commonly found in 80% of population in our society. It occurs mainly due to vitiation of *Vatadosha* and continuous pressure on the heel area. It is characterized by pain in the heel region and included in *Vatavyadhi* by *Maharshi Sushruta*. Almost all signs and symptoms of *Vatakantaka* mentioned in Ayurvedic text can be compared to the clinical features of Calcaneal spur mentioned in modern texts. *Agnikarma* is Parasurgical treatment modalities with economy and minimum hospitalization. *Agnikarma* has *Shulahara* and *Vatahara* properties, less painful with minimum expenditure. According to *Ayurveda*, basic factor (*Dosha*) responsible for causation of *Ruja* (pain) is *Vata* and pain is cardinal symptom in most of the *Vatavyadhis*. *Vata Dosha* is predominantly having *Sheeta Guna* which is opposite to *Ushna Guna* of *Agni*. So, *Agni* is capable of producing relief in pain by virtue of its *Ushna Guna*. In this article, an attempt has been made to search the researchers conducted on *Agnikarma* related to *Vatakantaka* to establish its role in calcaneal heel pain.

Keywords: *Ayurveda*, *Vatakantaka*, *Agnikarma*, *Vata*, Calcaneal spur

INTRODUCTION

Pain is a cardinal symptom in most of the *vatavyadhis*. *Vatakantaka* is one such type of *Ruja Pradhana vyadhi*. This disease mainly affects the *gulpha sandhi* (ankle joint). It affects the daily activities of affected individual badly due to the presence of pain in the heel. So proper treatment is very much needed to overcome this painful disease.

The word '*Vatakantaka*' is composed of two words '*Vata*' and '*Kantaka*'. The word '*Vata*' mainly denotes that which has movement, and which is the main cause for action and its derangement causes pain. On the other hand, the word '*Kantaka*' means thorn, which produces a sharp stinging pain. So *Vatakantaka* refers to a condition caused by *Vata* characterized by a sharp stinging pain at the heel of foot. It can be correlated with Calcaneal spur due to same clinical features. Calcaneal spur is characterized by formation of spur in the heel bone. Major symptoms consist of pain in the region surrounding the spur, which typically increases in intensity after prolong period of rest. Patients may report heel pain to be more severe when waking up in the morning. Patients may not be able to bear weight on the affected heel comfortably. Running, walking or lifting heavy weight may exacerbate the issue.¹ The major affected age group being 40-50 years of age, the incidence of spur both in plantar and the site of insertion of Achilles were found to be 24% of the total calcaneal spur.²

Agnikarma has been described as the most effective therapy in the management of all painful conditions especially for musculo-skeletal disorders. The *Agnikarma* (thermal cautery) is a procedure where heat is transferred to the affected parts of the body using a metal *Panchaloha Shalaka* (metal rod) in various method. According to *Acharya Sushruta*, *Agni* (fire) is better than alkali in action (of burning), it is so, because diseases treated by burning will not recur again and those diseases which are incurable by the use of medicines, sharp instruments and alkalies will be cured by fire (thermal cautery).³

Need for Study

Modern management for treating calcaneal spur pain includes NSAIDs, local infiltration of hydrocortisone.

If such drugs are used for longer duration in calcaneal spur, they can cause various side effects on the body. Surgery has been failure in many cases with a number of complications. Hence, there is an emerging need to search for an efficacious, safe and cost-effective option for the *Vatakantaka*.

Aim & Objectives

- The present review is aimed at analyzing the role of *Agnikarma* in the pain management of *Vatakantaka*.
- To review the research articles related to *Agnikarma* useful in *Vatakantaka*.

Materials and Methods

For the present Review study, the available literature like *Samhitas* and other books are reviewed for the disease and treatment. All the relevant content is considered and analyzed to get a comprehensive concept in the treatment of *Vatakantaka*. Ayurvedic texts referred are *Charak samhita*, *Sushruta samhita*, *Astanga Hridaya*, *Astanga sangraha* and *Chakradutta*. Also, relevant references are taken from Modern books, Thesis & Published journal.

Vatakantaka refers to a condition caused by *Vata* characterized by a sharp stinging pain at the heel of foot. According to *Vagbhata*, *Vata* getting localized in the ankle joint either by placing the foot improperly (while walking) or by over exertion to the feet produces pain in the ankles. This is called as *Vatakantaka*.⁴ According to *Acharya Sushruta* when the foot is kept on ground irregularly, *Vata* localized in the *khuda* (ankle) gets aggravated and produces pain.⁵

Almost all sign and symptoms of *Vatakantaka* mentioned in Ayurvedic text can be compared to the clinical features of Calcaneal spur mentioned in modern texts. The calcaneus (Latin *heel*) is the largest tarsal bone. It forms the prominence of heel. Its long axis is directed forwards, upwards and laterally. It is roughly cuboidal and has six surfaces. The anterior surface is small and bears a concavconvex articular facet for the cuboid. The posterior surface is large and rough. The dorsal or upper surface bears a large convex articular surface in the middle. The plantar surface is rough and triangular.

The lateral surface is flat and the medial surface concave from above downwards. The concavity of medial surface is accentuated by the presence of a shelf-like projection of bone, called the *sustentaculum tali*, which projects medially from its anterosuperior border. The upper surface of this process assists in the formation of talocalcaneonavicular joint. Its lower surface is grooved, and the medial margin is in the form of rough strip convex from before backwards.⁶

Calcaneal spur is a spike of bone at the anterior edge of the calcaneal tuberosity (usually medial). It may be seen on the posterior aspect of the calcaneum also and is called the retrocalcaneal spur. It occurs due to repeated attacks of plantar fasciitis, repeated trauma, constant pulls of the shortened plantar fascia, ill-fitting footwear. The patient complains of pain over ball of the heel, tenderness on plantar aspect of the heel, slight swelling at the attachment of plantar fascia. It is due to fibrositis or traumatic detachment of plantar fascia and does not give rise to symptoms per se and the pain when present is due to the causative condition and not the spur. Lateral view of Radiograph of the heel show prominent bone spike arising from the calcaneum.⁷

Due to constant stress, calcium deposits build up on the bottom of the heel bone. Repeated damage can cause these deposits to pile up on each other, causing a spur-shaped deformity.¹

Nearly 80 percent of patients with plantar fasciitis have plantar heel spurs. About 10 percent of the general population has asymptomatic heel spurs, though believed it is actually not the source of pain. Many patients with “suspected painful heel spur syndrome” have actually plantar fasciitis. Spur has no therapeutic or prognostic significance. Modern management for treating calcaneal spur pain includes NSAIDs, local infiltration of hydrocortisone and microcellular rubber (MCR) used for the sole of the footwear.⁷ Surgery has been failure in many cases with a number of complications. It requires hospitalization and is expensive for the patient and there is a chance of recurrence in these treatment modalities.

In *Ayurveda*, *Aushadha* (Medicine), *Shashtra* (Surgical intervention), *Kshara* (Chemical cauterization) and *Agnikarma* (Thermal cauterization) are main line of treatment.

In Ayurvedic text for *Vatakantaka* (pain in ankle), frequently bloodletting or internal use of castor oil or the cauterization of painful part with needles (*Agnikarma*) is mentioned.⁸

According to *Ayurveda*, basic factor (*Dosha*) responsible for causation of *Ruja* (pain) is *Vata* and pain is cardinal symptom in most of the *Vatavyadhis*. *Vata Dosha* is predominantly having *Sheeta Guna* which is opposite to *Ushna Guna* of *Agni*. So, *Agni* is capable of producing relief in pain by virtue of its *Ushna Guna*.

The *Agnikarma* (thermal cautery) is a procedure where heat is transferred to the affected parts of the body using a metal *Panchaloha Shalaka* (metal rod) in various method. *Agnikarma* is a thermal, minimally invasive parasurgical procedure for all kinds of pain. This involves the creation of controlled, pointed, therapeutic burns over the most tender part of the painful region.

According to *Acharya Sushruta*, *Agni* (fire) is better than alkali in action (of burning), it is so, because diseases treated by burning will not recur again and also because those diseases which are incurable by the use of medicines, sharp instruments and alkalies will be cured by fire (thermal cautery).³

Agnikarma has been described as the most effective therapy in the management of all painful conditions especially for musculo-skeletal disorders. *Agnikarma* (branding) should also be done in conditions such as presence of severe pain in the skin, muscles, veins, ligaments, bony joints and bones, caused by *Vata* (aggravation) etc.⁹

Procedure of Agnikarma: Agnikarma procedure includes three steps:-

1. *Purva karma* (Pre-procedure of *Agnikarma*): The *Agnikarma* can be done after feeding the patient with pichhila diet, and on an empty stomach according to condition of disease. Before going to *Agnikarma*, complete assessment regarding all the factors and thorough examination of patient should be carried out.¹⁰

2. *Pradhana karma* (Principal procedure of *Agnikarma*): Before doing the procedure of *Agnikarma*,

swasthikvachan should be done; the patient kept in suitable position by keeping head in the East direction and held by expert assistants to avoid movement. After this the surgeon should make the *Bindu* shape of *Agnikarma* by heated *Shalaka* in a smoke free fire of *Khadira* or *Badara* with the help of a blower or a fan. During this period if patients feel discomfort then keep them satisfied by courageous, consolations talks, give cold water for drink and sprinkle cold water. But procedure of *Agnikarma* should be done till production of complete cauterization.¹¹

3. *Paschat karma* (Post *Agnikarma* Management): After completion of *Agnikarma Madhu* and *Ghritha* apply on the part where *Agnikarma* has done for *Ropana* of *Dagdha Vrana*.¹²

DISCUSSION

Samprapti of *Vatakantaka* mainly consists of vitiation of vitiation of *Vata* and getting localized in the ankle joint either by placing the foot improperly (while walking) or by over exertion to the feet produces pain in the ankles.¹ *Acharya Sushruta* said, when the foot is kept on ground irregularly, *Vata* localized in the *khuda* (ankle) gets aggravated and produces pain.²

Probable mode of action of *Agnikarma*

Agni possesses *Ushna*, *Tikshna*, *Sukshma* and *Aashukari Gunas*, which are opposite to *Vata* and anti *Kapha* properties. Physical heat from red hot *Shalaka* is transferred as therapeutic heat to *Twakdhatu* by producing *Samyak Dagdha Vrana*. From *Twakdhatu* this therapeutic heat acts in three ways. First, due to *Ushna*, *Tikshna*, *Sukshma*, *Ashukari Guna* it removes the *Srotavarodha*, pacifies the vitiated *Vata* and *Kapha Dosh* and maintains their equilibrium. Secondly, it increases the *Rasa Rakta Samvahan* (blood circulation) to affected site. The excess blood circulation to the affected part flushes away the pain producing substances and patient gets relief from symptoms. Third, therapeutic heat increases the *Dhatwagni*, so metabolism of *Dhatu* becomes proper and digests the *Amadosha* from the affected site and promotes proper nutrition from *Purva Dhatu*. In this way, *Asthi* and *Majja Dhatu* become more stable. Further it can be endorsed that the therapeutic heat goes

to the deeper tissue like *Mamsa Dhatu* and neutralizes the *Sheeta Guna* of *Vata* and in this way vitiated *Dosh*as come to the phase of equilibrium and patient gets relief from the symptoms.¹³

According to modern, the use of local heat (*thermotherapy*) may provide relief of pain and painful muscle spasm by acceleration of metabolic processes whereby the concentration of pain inducing toxic metabolites are reduced. This is accomplished primarily by an increase in local circulation. Acceleration of the inflammatory response to resolution may initially exacerbate discomfort but will shorten the time course to resolution of inflammation. *Thermotherapy* is generally soothing and psychologically relaxing, thereby favorably modifying emotional response to pain and further reducing pain.¹³

CONCLUSION

Agnikarma is superior treatment modalities than all other procedure described in Ayurveda. So, it is also best for treatment of *Vatakantaka*. From this review, it can be concluded that *Agnikarma* can be used for the management of pain in *Vatakantaka*. This is one attempt to describe information of *Agnikarma* in the management of *Vatakantaka* in this Research article. Future studies can be conducted on large number of patients of calcaneal spur heel pain to establish its efficacy and mechanism of action.

REFERENCES

1. https://en.wikipedia.org/wiki/Calcaneal_spur.
2. International Journal of Research article in orthopedics on incidence of calcaneal spur in Indian population with heel pain by R. Kevin Lourds, Ganesan G. Ram. 31st August 2016.
3. Murthy Prof. K.R. Srikantha, Sushruta Samhita of Sushruta, Chaukhambha Orientalia Varanasi, Reprint edition 2016, 12/10 sutra sthana 12/3 Vol I, page no 70.
4. Murthy Prof. K.R. Srikantha, Astanga Hridayam of Vagbhata, Krishnadas Academy Varanasi, Reprint 4th edition 2012, nidana sthana 15/53 Vol. II, page no 157.
5. Murthy Prof. K.R. Srikantha, Sushruta Samhita of Sushruta, Chaukhambha Orientalia Varanasi, Reprint edition 2016, nidana sthana 1/79, page no 473.
6. Chaurasia B D, Human Anatomy, 6th edition Vol 2, New Delhi, CBS Publishers & Distributors Pvt Ltd; 2017, Page no 32.

7. Ebnezar John, Textbook of Orthopedics, 4th edition, New Delhi, Jaypee Brothers Medical Publishers (P) Ltd; 2010, page no 443.
8. Sharma PriyaVrat, Chakradatta of Chakrapanidatta, Chaukhamba Publishers Varanasi, 2nd edition, 1998, page no 731.
9. Murthy K.R. Srikantha, Sushruta Samhita of Sushruta, Chaukhambha Orientalia Varanasi, Reprint edition 2016, sutra sthana 12/10 Vol I, page no 72.
10. Sharma Dr. Anant Ram, Susruta Samhita of Maharshi Shusruta, Chukhambha Prakashan, Varanasi, 1st Edition 2010, Sutrasthan 12/11; page no.87.
11. Subhashranade Dr. & Paranjape G.R, Ashtang-sangraha of Maharshi Vagbhat, Anmol prakashan, Pune, Reprint 1st Edition 2006, Sutrasthan 40/5 page no 493.
12. Sharma Dr. Anant Ram, Susruta Samhita of Maharshi Shusruta, Chukhambha Prakashan, Varanasi, 1st Edition 2010, Sutrasthan 12/13; page no.87.
13. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4649569/>

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Md Haidar & Md Tanzil Ansari: Role Of Agnikarma In The Management Of Vatakantaka (Calcaneal Spur): A Review. International Ayurvedic Medical Journal {online} 2020 {cited November, 2020} Available from: http://www.iamj.in/posts/images/upload/122_126.pdf