

A Literature Review of Management of Vatakantaka (Plantar Fasciitis) with Agnikarma (Mrityika Shalaka)

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ABSTRACT

In the world of modernization, due to rapidly changing lifestyles, most people now lead frenetic, active lives that involve constant standing and walking, significantly contributing to society's general health. *Vatakantaka* is a painful condition of pain in the heel due to vitiated *Vatadosha* can be correlated with plantar fasciitis which is mentioned in the context of *Vatavyadhi* by many *Acharya*. Conservative therapy is available in the form of NSAIDs, steroids, or steroidal injections at a local site, all of these methods give short-term relief and are linked with well-documented negative effects.

In *Ayurvedic* view, pain in *Vatakantaka* is due to *Snayu*, *Sandhi*, and *Asthigata Vata*. *Agnikarma* is an ancient treatment procedure done by using heat in various painful musculoskeletal diseases and with different instruments (*Dahanupkrama*) which are mentioned in *Samhitas*. *Agnikarma* is believed to be the most superior among all the surgical procedures in *Ayurveda* because the diseases treated with *Agnikarma* are *apunarbhav* (does not recur).

AIMS AND OBJECTIVES - To explain the role of *Agnikarma* through *Mrityika Shalaka* enumerated in ancient *Ayurvedic* texts which will benefit the management of *Vatakantaka*.

MATERIALS AND METHOD - As the study is a review study, the available literature *Samhitas* and other books are searched for the disease and analyzed to get a comprehensive concept of the management of *Vatakantaka*.

CONCLUSION - *Agnikarma* through *Mrityika Shalaka* effectively curing *Vatakantaka* (Plantar Fasciitis).

Keywords: Vatakantaka, Vatavyadhi, Agnikarma, apunarbhav, Mrityika Shalaka.

INTRODUCTION

Pain at the medial plantar prominence of the calcaneum impacts the lives of millions of people around the world. It is estimated that 7% of people over 65 years of age report tenderness in the heel ^[1].

Patients usually complain of pain at the anteromedial prominence of the calcaneum. The pain is exacerbated by passive dorsiflexion of the toes. Symptoms may have been present for weeks or months during presentation. The pain worsens when first standing after rest, typically early in the morning. Once the patient starts walking, the pain tends to recede. The pain eases but never fully resolves throughout the day and is exacerbated by activities such as prolonged walking or exercise, particularly on hard surfaces ^[2]. In modern science, it includes medicines (like oral analgesia and NSAIDs), exercise, lifestyle modification, orthotic devices, extracorporeal shockwave therapy, and surgery ^[3].

According to *Acharya Sushruta*, *Vatakantaka* results from vitiated Vata dosha caused by long standing or walking on uneven surfaces. It has been mentioned in *Snayu Asthi- Sandhigata Vata Vyadhi* [4]. According to *Acharya Vagbhata*, it results from vitiated Vata dosha in the ankle caused by keeping the legs crooked (*Visham paad*) and excessive exertion which causes pain [5]. The treatment therapy principle as mentioned by *Acharya Bhavprakasa* is *Raktmokshana, Erand taila Snehpan, and Agni dagdh Chikitsa* [6].

Acharya Sushruta recommended *Agnikarma* in *Asthi* (bone) and *Snayugata* (ligament) Vata [7]. *Vatakantaka* is *Asthisnayugata Vata*, and the main symptom that worsens the patient is discomfort in the contralateral heel region. The patient with *Vatakantaka* can be successfully treated with the *Ayurvedic* para-surgical treatment of *Agnikarma*. When *Agnikarma* is utilized to remedy a disease, it never recurs [8]. In this review, *Mrittika Shalaka* is used for *Agnikarma* in the *Vatakantaka*. *Agnikarma* with *Mrittika Shalaka* is particularly helpful in pain management and uncomplicated to perform in an outpatient department. It causes alleviation of Vata thus, helps reduce pain, stiffness, and inflammation.

Nidana Panchaka of Vatakantaka –

Nidana- Etiology of the disease has not been mentioned directly but *Vatakantaka* is one of the *Vatananatmaja Vikara*. Some causes of disease include:

1. Walking on rough or uneven terrain.
2. Foot structural abnormality causes higher pressure on heels.
3. Excessive stress on heels
4. Long periods of standing or walking
5. Usage of hard footwear or shoes.
6. Prolonged pressure on the heel or ankle joint, etc.

Poorvararupa- The occurrence of symptoms at minimal severity was the *Poorvaroopa* for *Vatavyadhi*. So, here in the context of *Vatakantaka*, the occasional occurrence of heel pain and stiffness was the *poorvaroopa*.

Roopa- The vitiated Vata dosha in *paad* (heel region) i.e. in *Snayu, Sandhi, and Asthi* of the heel causing pain, inflammation, and stiffness while walking.

Samprapti- Due to the *Nidana sevan*, Vata gets vitiated, lodges in *Gulphasandhi*, and produces *Padaruk (khuddakaashrit)* in the heel. The *nidanas* like *Vishama Pada* and *Shrama* may lead to *Vataprakopa*. Because of *abhighata* due to placing the *pada* on uneven surfaces, the *vata swarupa rakta dushti* happens. i.e *marga* of *vata* gets blocked by *prakupita rakta*. Vata gets *aavrata* by *rakta*, so *aavrata vayu* does *dhushana* of *rakta* of the complete body [9].

Samprapti Ghataka –

Table no.- 1

Dosha	Vata
Dushya	Mamsa, Rakta, Asthi
Srotasa	Raktavaha, Asthivaha
Srotodushti	Sanga, Vimargaman
Rogmarga	Madhyam
Udbhavasthana	Pakvashaya
Vyaktasthana	Gulphasandhi, padatala Adhishtana Gulphasandhi, padatala

Mrittika Shalaka Nirmana - *Mrittika* is collected from an appropriate place according to the *Desha* and *Kala* of the patient, and cleaned or sieved to remove the dirt. *Gomaya churn* (Cow dung powder) is added to the soil mixture. *Lauha Bhasma* and *Gairik Churna* are added in appropriate doses to enhance the properties of *Mrittika Shalaka*. *Jala* (water) is added to the mixture and a *Lepa* (paste), semi-solid formulation is made. Then the *shalakas* are formed with this mixture and are dried in the shade. These *Shalakas* can be stored in an air-tight container and used in patients of *Vatakantaka*.



Fig 1: Mrittika



Fig 2: Gomaya Churna



Fig 3: Lauha Bhasma



Fig 4: Gairik Churna

Procedure-

- **Purvakarma** -

1. The patient's consent for *Agnikarma* was taken
2. All necessary equipment is collected (*Mrittika shalaka*, candle, matchstick, *ghee*, marker, piece of paper).
3. Maximum tender points on the heel region are marked.
4. The site of *Agnikarma* was cleaned with normal saline.
5. *Mrittika shalaka* was heated.

- **Pradhana karma-**

1. The patient should be allowed to be in a comfortable position, exposing the site of the problem.

2. *Bindu* type *Agnikarma* (single dot) was done until ‘*Samyak twak-dagdha lakshan*’ appeared.
- **Paschata karma-**
1. *Go-ghrita* was applied at the burn site after *Agnikarma*.
 2. Duration of *Agnikarma* - According to the patient's condition and relief in the pain.



Fig 5: Required equipments for agnikarma (Mrittika Shalaka, candle, matchstick, ghee and a piece of paper)



Fig 6: Procedure of Agnikarama with Mrittika Shalaka

DISCUSSION AND CONCLUSION-

The *Agnikarma* word is made up of a combination of two words - *Agni* and *Karma* (i.e. fire and procedure). In *Atharva Veda* *Agni* is accepted as God and *Bhesaja* in the references of *Krimi*. (5/23/1.35). In *Rigveda* *Agnikarma Chikitsa* is available in the reference obstetric disease (10 /162/1 - 4). In *Yajurveda*, *Agnikarma* has been mentioned for the treatment of *Sita*. (23/ 10/1). In a *Samveda* importance of *Agni* is proved by the presence of the chapter known as *Agneyakhanda*.

According to *Acharya Sushruta* *Agnikarma* is used in two manners, one for the *Roga Unmulana* which is a disease cure, and the other for pain management. *Acharya Sushruta* and *Acharya Vagbhatta* have both given a superior place to *Agnikarma* compared to *Ksharakarma* and *Dahan Kriyas*. *Agnikarma* is Greater among all para-surgical procedures and a boon for local *Vataj* and *Kaphaj Vyadhi* as diseases treated by it do not recur and also give instant relief to the patients ^[10].

The probable mode of action of *Agni karma* may be the property of *Agni*. The properties of *agni* are *sukhsma*, *laghu*, *tikhsna*, and *usna guna*. *Acharya Charak* described the *Agni* as the best treatment for *shool* (pain). *Ushna* (hot) *guna* of *Agni* helps remove the *Avaran* effectively and stabilize the *Vata* movement, which provides relief from *shool* ^[11].

It has been said that when severe pain occurs at the site of *Twaka*, *Mamsa*, *Sira*, *Snayu*, *Sandhi*, and *Asthi* due to vitiated *Vata*, *Agnikarma* is indicated for instant pain relief and *Vatakantaka* is one of them ^[12]. *Agnikarma* also acts like a *Dosha Dushya Vighatanakarka* because *Ushna Guna* performs two functions. Firstly, by stimulating i.e., *Utkleshana of Dhatvagni*, and due to this action same *dhatu* (localized *ama*) is digested and secondly, *Ushna Guna* dilates the channels of *Srotas*. Hence *Srotovarodha* is removed (cleaning the respective *srotas* channel). It is hypothetically stated that *Binduwat Agnikarma* which is practically used, is probably capable of breaking down various cycles of painful adhesions ^[13].

Materials used for *Agnikarma* include *Pippali*, *AjaShakrut*, *Godanta*, *Shara*, *Shalaka*, *Jambavastha*, *Dhatu*, *Madhu*, *Madhuchista Guda*, *Vasa*, *Ghruta*, *Taila*, *Yashtimadhu*, etc.

Dahana vishesha—The *Akriti* or shape formed by red hot *Shalaka* over the site while performing *Agnikarma* is known as *Dahana vishesha*. *Acharya Sushruta* mentioned four types of *Dahana vishesha*: *Valaya* (round shaped), *Vilekha* (linear cauterization), *Bindu* (dotted), and *Pratisarana* (irregular shape). *Acharya Vagbhatta* mentioned three more types: *Ardha Chandra*, *Swastika*, and *Astapada* ^[14]. The *Mrittika Shalaka* used in *Vatakantaka* is *Valaya* type of *dahana*.

Contra-indications for *Agni Karma*: According to *Sushrut Agni Karma* should not be done in the *Pitta Prakriti*, *Bhinna Kostha*, *Durbalya*, *Vridhdha*, *Antah Shonita*, *Anuddhrata Shalya*, *Bala*, *Bhiru*, A person afflicted with a large number of *Vranas*, A person who is forbidden for *Swedana* ^[15]. According to *Charaka Agnikarma* should not be done in the *Vrana* of *Snayu*, *Marma*, *Netra*, *Kushtha*, and *Vrana* with *Visha* and *Shalya* ^[16]. According to *Ashtang sangraha Agnikarma* should not be done in a patient who takes *virechana*, suffers from *atisaar* (diarrhea), has *shalya* in his body, has boils on the body, and is contraindicated for *ksharkarma* ^[17].

Probable Mode of action of *Mrittika shalaka* -

Rasa panchaka of Mrittika- ^{[18], [19], [20], [21]}

- *Rasa – Madhura*
- *Guna – Snigdha , Sheeta, Guru*
- *Veerya – Sheeta*
- *Vipaka – Madhura*
- *Prabhava - Vishgna*

Mrittika when mixed with *jala* (water), a *Lepa* is formed. Now, the qualities of *Lepa* are *Snigdha*, *Guru*, and *Pichhila guna*. These properties are opposite to the *Gunas* of *Vata dosha* which counteract the properties of *Vata dosha* and reduce the intensity i.e. *Snigdha guna* will act on *Ruksha guna* of *Vata*, *Guru guna* will reduce the *Laghuta* of *Vata* and *Pichhila guna* will counteract the *Vishada guna* of *Vata*. Therefore by reducing the intensity of *Vata Dosha* properties, pain and other associated symptoms of *Vata* will be relieved ^[22].

Gairik churna has *Madhura rasa*, *Snigdha guna*, *Sheeta veerya*, *Madhura vipaka* and acts as *Vatajit*, *Vrana ropana*, and *Dahahara*. Hence, it is primarily used for its perceived benefits in promoting wound healing, reducing inflammation, and alleviating pain ^[23]. ***Lauha*** has *Madhura rasa*, *Guru guna*, and *Sheeta veerya* and acts as *Vishaghna*, *Shulahar*, and *Sothahar karma* ^[24]. Therefore, it helps reduce heel pain in patients.

Hence, it can be concluded that *Agnikarma* with the *Mrittika shalaka* can be very effective in the management of pain caused due to *Vatakantaka* (Plantar fasciitis).

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