



EFFICACY OF AGNIKARMA IN VATAKANTAKA W.S.R PLANTAR FASCITIS-A SINGLE CASE STUDY

KRISHNADEV C.P^{1*} EVEENA STEPHEN²

^{1*}Assistant professor, Department of Shalya Tantra, Sumandeep Ayurved Medical College and Hospital, Vadodara, Gujarat, India.

²Consultant/Ayurvedic Physician, Hair Tree Hair Transplantation and PRP Clinic, Kozhikode, Kerala, India

Corresponding Email id: drkrishnadev165@gmail.com Access this article online: www.jahm.co.in

Published by Atreya Ayurveda Publications under the license CC-by-NC-SA 4.0

ABSTRACT:

Plantar fasciitis, often known as heel discomfort, is one of the most prevalent diagnoses in orthopaedic outpatient departments. It can be associated with *Vatakantaka* based on clinical symptoms such as first step discomfort and stiffness. Conservative therapy is available in the form of NSAIDs, steroids, and certain techniques such as injection of steroidal injection at local site, iontophoresis. All of these methods give short relief and are linked with well-documented negative effects. In such circumstances, Ayurvedic treatment can provide a complete cure. *Acharya Sushruta* mentioned different treatment measures for management of *Vatakantaka*. *Agnikarma* is one amongst them and it was used in this case study, to assess the efficacy in relieving pain. A 44-year-old male patient presented to the outpatient clinic with the primary complaint of discomfort in the left heel and foot sole that had been present for two months. According to him, the first few steps after waking up from bed were excruciatingly painful. He received *Agnikarma* (3 sittings interval of 7 days) at a nearby location and *Simhanada Guggulu* twice daily for 30 days. The problem was fully treated, with no recurrence. Because this was a single case research, larger sample size validation is required before claiming that plantar fasciitis may be entirely treated without recurrence with Ayurvedic therapy.

Keywords: *Agnikarma*, *vatakantaka*, plantar fasciitis

INTRODUCTION

Vatakantaka, According to *Sushruta*, is a *Vatapradhana Vyadhi* (predominance of *vata*dosha), specifically brought on by walking on uneven ground or by *Atishrama* (extreme effort), which causes discomfort in the *Khudukapradesha*.^[1,2] According to *Madhavakar* in *Madhava Nidan*, *Vatakantaka* is a discomfort in the ankle area brought on by the foot moving improperly.^[3] Numerous medical diseases, including Sevier's disease, Calcaneal Knob, Bursitis, Bony Spur, Paget's, Osteomyelitis, and Acute and Chronic Plantar Fasciitis, can cause heel discomfort. These include those that are connected to plantar fasciitis. Heel discomfort is thought to affect 1 in 10 persons at some point in their lives. Between the ages of 40 and 60^[4,5], incidence occurs. Typically, just the history and physical examination are used to make a diagnosis. Patient has excruciating pain upon awakening in the morning or after a period of inactivity during the day, which gets worse while walking barefoot or up stairs. Maximum discomfort during an examination is felt while palpating the inferior heel, which corresponds to the location where the plantar fascia attaches. Hydrocortisone injections can be administered in the area that is most painful. In the event that this fails, plantar fascia division is the recommended final step.^[6]

Vatakantaka Snayu Asthi Sandhi Ashrit Vyadhi, a painful ailment (tendon, bone, and joint disease) *Sushruta* listed many care techniques for *Vatakantaka*, including massage, oleation, poultice, Agnikarma, ^[7] etc. *Agnikarma* is utilised in this example to evaluate its effectiveness in reducing pain and stiffness of *Vatakantaka*, in accordance with the aforementioned reference.

CASE REPORT

A 44-year-old male patient arrived with the main complaint of discomfort in the left heel and sole of the foot since two month ago. He claimed that the first few steps after getting out of bed were painful.

History Of Present Illness

The patient was alright before 2 month. Then patient then had discomfort and stiffness in his left heel. He went to the doctor and was given NSAIDS, which he took for two weeks but only temporarily relieved his symptoms, which then grew worse and made it difficult for him to go about his daily tasks. As a result, he visited the OPD at the Sumandeep Ayurved Medical College and Hospital, Vadodara's Shalya Tantra Department.

Past History

No history of tuberculosis, diabetes mellitus, hypertension, hypothyroidism, any surgery or chronic illness.

Personal History

- Occupation - Farmer
- Addiction - Non alcoholic, Non smoker

Family History

No evidence of this type of disease in the family

Physical Examination

- General condition - Good
- Body temperature - 98.6 F
- Blood pressure - 140/100 mmHg
- Pulse - 64/min
- Respiratory rate - 18/min

Local Examination

Thorough examination was bilateral limb was done.

Inspection : No evidence of skin discolouration or swelling on bilateral ankle and foot sole region.

Palpation : No evidence of tenderness in right ankle and foot sole.

- Evidence of moderate tenderness in left ankle and foot sole.
- Windlass test was positive in left lower extremity.

Diagnosis

On the basis of clinical features, diagnosis of Plantar fasciitis was made.

Materials And Method

Material

- *Panchdhatu Shalaka*(Tool for therapeutic heat burn)
- Aloe vera pulp



Image no.1 showing material required for Agnikarma

Diet

Patient was advised to take *Mudga Yusha* (green gram soup) in diet 2 times in a day for three days.

Pre Operative

- Sterilisation of all equipments was done.
- Informed written consent of patient was taken prior to procedure.
- Demarcation of points of maximum tenderness was done on left heel.
- The gap of 1 cm was kept between the points.
- *Panchdhatu Shalaka* was heated to red hot.

Operative Procedure

- Position- supine
- Cleaning of local site was done with 5% Betadine solution.
- *Agnikarma* was done on 7 demarcated points with the help of *Panchdhatu Shalaka*.

- Application of Aloe vera pulp was done.
- Same procedure was repeated after every 7 days.

Post Operative

- Application of Aloe vera gel was done at site of *Agnikarma*

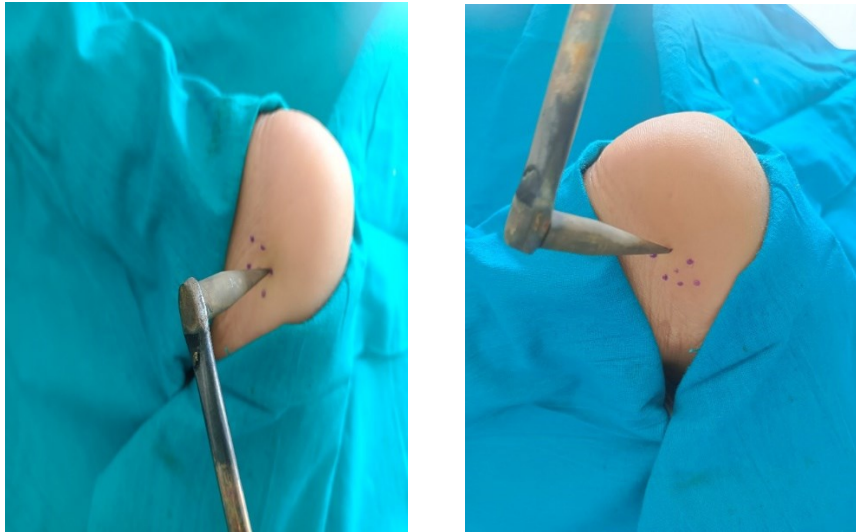


Fig. II (a,b) showing illustration of Agnikarma at maximum tender point area by *Panchadhatu Shalaka*



Image III showing Application of Aloe vera gel at site after *Agnikarma*

Active treatment period – 30 days

Patient was advised to visit at the interval of 7 days for initial 14 days as *Agnikarma* was done on 0,7th and 14th day.

Simhanada guggulu was administered for 30 days in the dosage of 500mg twice daily.

Assessment criteria

During follow up visit patient was assessed on the basis of designed assessment parameters.

Table 1: Scoring of signs and symptoms.

SL.NO	SYMPTOM	SCORE			
		0	1	2	3
1	Heel pain	No pain	Mild	Distressing	Severe

			discomfort	pain	excruciating pain
2	Stiffness	No stiffness	Mild stiffness	Moderate stiffness	Severe stiffness
3	Tenderness	No tenderness	Mild tenderness	Moderate tenderness	Severe tenderness

Observations And Results

After initial 30 days of active treatment period, patient was assessed via telephonic conversation for recurrence of symptoms.

Patient got complete relief from symptoms and there was no recurrence of symptoms in 6 months of follow up period.

Table 2: Assessment scores during *Agnikarma* procedure.

SL.NO	ASSESSMENT CRITERIA	DAY 0	DAY 7	DAY 14
1	Heel pain	2	1	0
2	Stiffness	2	1	0
3	Tenderness	3	1	0

Table 3: Assessment scores Before treatment and After treatment.

SL.NO	SYMPTOMS	BEFORE TREATMENT	AFTER TREATMENT
1	Heel pain	2	0
2	Stiffness	2	0
3	Tenderness	3	0

DISCUSSION

Musculoskeletal disease called plantar fasciitis primarily affects fascial enthesis. Due to the modern idea of degenerative changes, it is now referred to as plantar fasciosis. Change being the primary pathophysiology behind the illness. Clinical characteristics are virtually invariably the basis for diagnosis. Clinical characteristics allow for a correlation between

the entity and *Vatakantaka*. The etiological variables indicated in the classical Ayurvedic texts accurately correspond to current causal factors. The plantar fascia has undergone significant thickening and fibrosis, as well as collagen necrosis.^[8], according to histological analyses. Modern medicine treats the problem by prescribing NSAIDs, giving corticosteroid injections, and using iontophoresis. However,

these treatment approaches' long-term results are not sufficient.^[9,10,11]

Discussion on Agnikarma

According to research, *Agnikarma* is one of the finest methods for treating pain^[12] associated with *Asthi* (bone), *Snayu* (tendon), and *Sandhi* (joint) illnesses. It heals illnesses completely and effectively^[13]. *Agnikarma's Ushna* (hot) *Guna* (property) interacts with *Sheeta* (cold) *Guna* of *Vata Dosha* to assist relieve pain and stiffness. *Agnikarma* enhances localised blood circulation. Due to the use of heat to relieve stiffness, tissue softens and muscles relax. The lateral spinothalamic tract is stimulated by therapeutic heat, which activates the descending pain inhibitory fibres and releases an endogenous opioid peptide that prevents the transmission of pain^[14].

Discussion on Simhanada guggulu^[15]

Simhanad Guggulu's Ushna property causes *Vatashaman* and acts on *Srotorodhjanya Samprapti* (obstructive pathophysiology) and relieves blockage, easing pain and stiffness.

Castor oil and *Guggulu* are two ingredients that produce *vatashamak* effects. The *Haritaki*, *Bibhitaki*, and *Amalaki* components of *Triphala* possess a *Rasayana* characteristic, which has a rejuvenating effect at both the systemic and tissue levels.

CONCLUSION

Agnikarma is a straightforward, cost-effective process that may be carried out at the OPD

level. Thus, it helps to lessen pain, stiffness, and inflammation by causing relief. It can be inferred from this case study that can be efficiently managed using to further verify the effectiveness, more clinical research studies with bigger sample sizes could be required.

REFERENCES

1. Sharma Shivaprasad, Editor. Vagbhata, Astanga Sangraha, 10th ed, Choukambha Sanskrit;2006;416.
2. K.R. Sreekantha Murthy(translator), Sushruta Samhita of Sushruta, Nidanastana, Chapter 1, verse no. 79. reprint edition, Varanasi; Chaukambha Orientalia; 2003; 269
3. Singhal GD, Editor. Madhava, Madhav Nidan. 4th ed, Chaukhamba Surbharati Prakashan;2004;408.
4. Davies MS, Weiss GA, Saxby TS. Plantar fasciitis: how successful is surgical intervention? Foot Ankle Int. 1999 Dec;20(12):803-7. doi: 10.1177/107110079902001209. PMID: 10609710.
5. Saxena A, Fullem B. Plantar Fascia Ruptures in Athletes. The American Journal of Sports Medicine. 2004;32(3):662-665. doi:10.1177/0363546503261727
6. Somen Das, A Manual on Clinical Surgery; 3 rd edition, Dr.S Das; Kolkata; 2005;130
7. K.R. Sreekantha Murthy(translator), Sushruta Samhita of Sushruta, Chikitsa sthan, Chapter 4, verse no. 8. reprint edition, Varanasi; Chaukambha Orientalia; 2001; 205
8. Lemont H, Ammirati KM, Usen N. Plantar fasciitis: a degenerative process (fasciosis) without inflammation. J Am Podiatr Med

Krishnadev C.P., Eveena Stephen. Efficacy of agnikarma in vatakantaka w.s.r plantar fascitis-a single case study. Jour. of Ayurveda & Holistic Medicine, Vol.-XI, Issue-V (May 2023).

- Assoc. 2003 May-Jun;93(3):234-7. doi: 10.7547/87507315-93-3-234. PMID: 12756315.
9. Pfeffer G, Bacchetti P, Deland J, Lewis A, Anderson R, Davis W, Alvarez R, Brodsky J, Cooper P, Frey C, Herrick R, Myerson M, Sammarco J, Janecki C, Ross S, Bowman M, Smith R. Comparison of custom and prefabricated orthoses in the initial treatment of proximal plantar fasciitis. *Foot Ankle Int.* 1999 Apr;20(4):214-21. doi: 10.1177/107110079902000402. PMID: 10229276.
10. Crawford F, Thomson C. Interventions for treating plantar heel pain. *Cochrane Database Syst Rev.* 2003;(3):CD000416. doi: 10.1002/14651858.CD000416. Update in: *Cochrane Database Syst Rev.* 2010;(1):CD000416. PMID: 12917892.
11. Acevedo JI, Beskin JL. Complications of plantar fascia rupture associated with corticosteroid injection. *Foot Ankle Int.* 1998 Feb;19(2):91-7. doi: 10.1177/107110079801900207. PMID: 9498581.
12. Acharya Yadavji Trikamji, Editor. *Charaka Samhita of Agnivesha, Chikitsa Sthana*, Reprint edition Chapter 25, Verse no.40, Chaukhambha Prakashan; 2009,132.
13. K.R. Sreekantha Murthy(translator), *Sushruta Samhita of Sushruta, Chikitsa sthan*, Chapter 12, verse no. 3. reprint edition, Varanasi; Chaukhambha Orientalia; 2001; 38
14. Sherkhane, Rahul. (2013). *CRITICAL APPRAISAL OF AGNIKARMA AND ITS THERAPEUTIC ASPECTS*. *International Research Journal of Pharmacy.* 4. 75-77. 10.7897/2230-8407.04516.
15. Govinda Das. *Bhaishajya Ratnavali*, Chapter 29, Verse 191- 194, 15th Edition, Varanasi: Chaukhambha Sanskrit Samsthana; 2002;1286.

CITE THIS ARTICLE AS

Krishnadev C.P., Eveena Stephen. Efficacy of Agnikarma in Vatakantaka w.s.r. Plantar Fascitis-a single case study. *J of Ayurveda and Hol Med (JAHM)*. 2023;11(5):103-109

Conflict of interest: None

Source of support: None