

An ayurvedic management of *vatakantak* with special reference to plantar fasciitis

Sachinkumar Sahebrao Patil ^{1,*}, Madhavi Vilasrao Malusare ¹ and Rahul Ishwarlal Desai ²

¹ Department of Kayachikitsa, M.A.M.'s Sumatibhai Shah Ayurved Mahavidyalaya, Malwadi, Hadapsar, Pune-411028, Maharashtra State, India.

² Department of Kayachikitsa, Ashtang Ayurved Mahavidyalaya, Sadashiv Peth, Pune-411030, Maharashtra State, India.

World Journal of Advanced Research and Reviews, 2023, 19(03), 879-884

Publication history: Received on 22 June 2023; revised on 01 September 2023; accepted on 04 September 2023

Article DOI: <https://doi.org/10.30574/wjarr.2023.19.3.1538>

Abstract

Ayurveda - the science of life and longevity - is an ancient Indian system of holistic medicine. *Vatakantak* can be correlated with Plantar Fasciitis. According to the *Ayurveda* "Vatakantaka" is defined by Acharya *Charaka* in *Charak chikitsa 28 (Vata vyadhi chikitsa adhyaya)*, by *Sushruta* in *Sushruta Nidan 1* and by *Vagbhata* in *Vagbhata Nidan 15* which is caused by vitiated *Vata* at *Gulfa Sandhi Pradesha* (*Khudakashrit* by *Sushruta*). Plantar Fasciitis is a chronic inflammation of plantar fascia and degeneration of fibrous tissue with without fibrous formation. Plantar fasciitis is a common cause of foot pain in adults, with the peak incidence occurring in people between the ages of 40 and 60 years, according to the Harrison. A 42-year-old male patient came to outpatient department with chief complaints pain in left heel and foot sole since 1 month. Pain was increased during first few step after waking up from bed. In modern medicine diclofenac sodium introduce by intramuscular, orally can be given for pain management of Plantar Fasciitis. He was treated with *Agnikarma* (5 seatings at interval of 8days) at local site and *Yogaraj Guggulu* 500 mg thrice daily for 30 days and *Vatavidhwansa Rasa* 500 mg thrice daily for 30 days. The condition was completely cured without recurrence. Plantar fasciitis can be cured completely without recurrence through *Ayurvedic* management like *Agnikarma* with *Rajat Shalaka*.

Keywords: *Vatakantak*; Plantar Fasciitis; *Agnikarma*; *Ayurvedic* management

1. Introduction

Vatakantaka is basically a *Vyadhi* of vitiated *Vata Doshas* and come under *Vatavyadhi*. The *Vayu*, in its normal or undisturbed condition, maintains a state of equilibrium between the different *Doshas* and the root principles of the body (*Dhatu*); it further tends to maintain uniform state in the metabolism of the body (*Agni*) and helps the organs of sense-perception in discharging their specific functions.^[1]

Acharya *Sushruta* has mentioned the disease at *Nidansthana (Su.Ni. 1)* in *Vatavyadhinidanadhyaya*. The local *Vayu*, enraged by making a false step on an uneven ground, finds lodgment in the region of the ankle (*Khudaka*, instep according to others), thus giving rise to a disease which is called *Vatakantaka*.^[2]

Acharya *Charaka* has mentioned the disease at *Chikitsasthana (Cha.Chi.28)* in *Vatavyadhi chikitsa adhyaya*.^[3]

Acharya *Vagbhata* has mentioned the disease at *Vagbhatnidandhyaya (Vg. Ni. 15/53)*.^[4]

Plantar fasciitis is a common cause of foot pain in adults, with the peak incidence occurring in people between the ages of 40 and 60 years. The pain originates at or near the site of the plantar fascia attachment to the medial tuberosity of the calcaneus. Several factors that increase the risk of developing plantar fasciitis include obesity, pes planus (flat foot or absence of the foot arch when standing), pes cavus (high-arched foot), limited dorsiflexion of the ankle, prolonged

*Corresponding author: Sachinkumar Sahebrao Patil

standing, walking on hard surfaces, and faulty shoes. In runners, excessive running and a change to a harder running surface may precipitate plantar fasciitis.^[5]

The clinical features of *Vatakantaka* can be correlated with the symptoms of Calcaneal spur where there is involvement of *Kaphavruta Vayu*.^[6] *Vatakantaka* caused mainly due to the vitiation of *Vata Dosha* occurring due to walking on an uneven ground frequently, placing the feet improperly.^[7] As the reference of Acharya Sushruta suggests the disease chronic plantar fasciitis can be correlated with *Vatakantaka*. *Vatakantaka* is *Snayu Asthi SandhiAashrita*.^[8]

1.1. Incidence

The current literature is inconsistent regarding the association between sex and plantar fasciitis, with some studies showing an increased prevalence in men,^[9,10] while others show an increased prevalence in women.^[11,12] It is estimated that 1 in 10 people will develop Plantar fasciitis during their lifetime.^[13]

2. Case report

A 34-year-old male patient came with chief complaints pain in left heel and foot sole since 1 month. According to him, pain was severe during first few steps after waking up from bed. History of present illness The patient was alright before 1 month. After that, the patient started feeling pain and stiffness in left heel. He visited a general practitioner and was prescribed NSAIDS which he took for 1 week but got only temporary relief and symptoms gradually increased leading to trouble in day to day routine activities. Hence he came to OPD No.2 of Kayachikitsa Department, Sumatibhai Shah Ayurved Mahavidyalay, Hadapsar, Pune.

2.1. Past history

- No history of Hypertension, Diabetes Mellitus, Hypothyroidism.
- No any history of surgical or chronic illness.

2.2. Personal history

- Occupation - General manager in a bank
- Addiction -non-alcoholic, non-smoker
- Family history - No evidence of this type of disease in the family.

2.3. General examination

- General condition of patient was good and afebrile.
- Pulse-88/min
- Blood pressure-110/70 mmHg
- Respiratory rate-18/ min
- Pallor-Absent

2.4. Systemic examination

- CVS- S1 S2 normal
- CNS -Well oriented, conscious
- RS -AEBE clear
- P/A -Soft, non-tender

Table 1 Ashta vidha parikshan

Nadi	Mala	Mutra	Jivha	Shabda	Sparsha	Drik	Aakruti
vata	Kathin	Samyak pravrutti	Sama	Spashta	Ushna	Prakrut	Madhyam

2.5. 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 heel and foot sole.

3. Materials and methods

3.1. Selection of Ayurveda treatment

Vatakantaka occurs due to vitiation of *Vata Dosha* reflecting as pain and stiffness clinically in this case. So, treatment was aimed at pacification of *Vata Dosha* at systemic as well as local level.

Agni karma [14] at local site along with administration of *Vatavidhwansa Rasa* internal medication was selected to treat the case in present study. Patient was advised to wear soft padded shoes during day to day life.

3.2. Agnikarma (Therapeutic heat burns)

3.2.1. Materials-

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

3.2.2. Pre-operative

- Informed written consent of patient was taken prior to procedure.
- Demarcation of points of maximum tenderness was done on left heel.
- Rajat Shalaka was heated to red hot.

3.2.3. Operative procedure

- Position- sitting
- Cleaning of local site was done with distilled water.
- Agnikarma was done on demarcated points with the help of Rajat Shalaka.
- Application of Aloe vera pulp was done.

3.2.4. Post-operative

- Dusting of Haridra Churna was done at site of Agnikarma.
- Same procedure was repeated, total 5 sittings with interval of every 8 days.

3.2.5. Internal Medications:

Vatavidhwansa Rasa was administered for 30 days in the dosage of 500mg twice daily.

3.3. Assessment criteria

Table 2 Assessment Criteria

Sr.No.	Grades →	0	1	2	3
	Sign and symptom↓				
1.	Pain	No Pain	Mild	Moderate	Severe
			(Not disturbing daily routine activity and pain only during morning hours)	(Continuous pain in the morning hours and walking after rest)	(Pain throughout the day and disturbing daily routine)
2.	Tenderness	No Tenderness	Pain on deep pressure	Pain on slight pressure	Pain on touch
3.	Swelling	No Swelling	Mild Swelling	Mild Swelling	Mild Swelling
4.	Burning Sensation	No Burning Sensation	Mild Burning Sensation	Mild Burning Sensation	Mild Burning Sensation
5.	Redness	No Redness	Mild Redness	Mild Redness	Mild Redness

4. Observations and results

After initial 30 days of active treatment period, patient was assessed for more further 15 days. Patient got complete relief from symptoms and there was no recurrence of symptoms in 6 months of follow up period.

Table 3 Signs and Symptoms before treatment and after treatment

Sr.No.	Signs and symptoms	Before Treatment	After Treatment
1.	Pain	3	0
2.	Tenderness	3	0
3.	Swelling	2	0
4.	Burning Sensation	1	0
5.	Redness	1	0

5. Discussion

Vatakantak can be correlated with Plantar Fasciitis. In *Vatkantak* vitiation of *Vata dosha*. So *Agnikarma* is important treatment for it.

In contemporary science, Plantar Fasciitis is dealt by prescribing NSAIDs, administration of corticosteroid injections, iontophoresis. But long term outcomes of these treatment options are not satisfactory. [15-17]

5.1. Discussion on Agnikarma

Agnikarma is indicated as one of the best treatment of pain [18] in diseases of *Asthi* (bones), *Snayu* (tendons) and *Sandhi* (joints). It cures diseases with no recurrence. [19] *Ushna* (hot) *Guna* (property) of *Agnikarma* acts on *Sheeta* (cold) *Guna* of *Vata Dosha* helping in relieving in pain and stiffness. *Agnikarma* improves blood circulation at local site. There occurs softening of tissue and relaxation of muscles due to heat application relieving stiffness. Therapeutic heat stimulates the lateral spinothalamic tract, leading to stimulation of descending pain inhibitory fibers, causing release of endogenous opioid peptide, which blocks the transmission of pain. [20]

5.2. Discussion on Vatavidhwansa Rasa

It is useful to promote the strength of the bones and joints. It has as an excellent anti-inflammatory and analgesics property. Ayurveda has a theory says that there is no pain without vata. *Vatavidhwansa Rasa* itself is a *Vatashamak*. It mainly pacifies *Vata* and decreases pain. Main function of *Vatavidhwansa Rasa* is to establish *vata-samya* by curing *vata-dushti*. It relieves the pain very soon. [21]

5.3. Discussion on Yogaraja Guggulu

Yogaraja Guggulu a herbo-mineral preparation having *Kaphavatahara* property. The main target area of the drug is *Asthi Majjagata Vata*. As the drug which having *Ushna* and *RukshaGuna* which clears the srothas (channel). *Yogaraja Guggulu* has main therapeutic action as *Vedana Sthapaka* and *Shothahara* which is attributed by the presence of *Guggulu* as the major ingredient. [22]

6. Conclusion

From above discussion we can conclude that *Agnikarma* and *Abhyantar VatashamanaChikitsa* is the management of *Vatakantaka* (plantar fasciitis).

Compliance with ethical standards

Acknowledgments

We express our gratitude to the Department of Kayachikitsa and Hospital Authority for giving us this opportunity to study this case of Diabetic Peripheral Neuropathy patient. Special thanks to Secretary of Maharashtra Arogya Mandal's Secretary, Hon'ble Mr. Anil Gujar, Hon'ble Principal Dr. Nilesh Phule and Faculty members for co-operating, also thanks to the teachers Dr. Yogesh Kotangale, Dr Vijayalakshmi Patil, Dr. Ritesh Damle, Dr. Kiran Ubhe, for guiding throughout to provide better management.

Disclosure of conflict of interest

This work is not published anywhere. The authors declare no conflict of interest.

Statement of ethical approval

Ethical approval is not applicable for this case study as this is a single case study.

Statement of informed consent

Informed consent was obtained from individual participant included in the study.

References

- [1] An English translation of the Sushruta Samhita Vol. 2: edited by Kaviraj Kunjalal Bhishagratna, The Author publication nidana sthan, 1 / 64, 1911, pp15.
- [2] An English translation of the Sushruta Samhita Vol. 2: edited by Kaviraj Kunjalal Bhishagratna, The Author publication nidana sthan, 1 / 64, 1911, pp15.
- [3] Agnivesha,charaka samhita with ayurveda dipika commentary,edited by vaidya yadavji trikamji acharya,Varanasi, chaukamba sanakrit sansthan, chikitsa sthana, 28
- [4] Vagbhata, Ashtanga hridaya with Sarvanga sundara & ayurveda rasayana commentary, edited by Pdt. harisadashiva shastri paradakara,Varanasi, chaukamba Sanskrit samsthana, , nidana sthana 15/53 pp 535.
- [5] Harrison's principles of internal medicine, volume 2, 18th edition chapter 337, pp 2862. Harrison's Principles of internal medicine, Volume 2, 18th edition chapter 337, pp 2863.
- [6] Kuchanur S, Santosh YM (2014) Innovative Practice of Agnikarma in Vatakantaka. Journal of Ayurveda 8(4).
- [7] Maragalawaththa SK, Goyal M, Chandimaratne PB (2017) Efficacy of Sri Lankan Traditional Paste on Vatakantaka with special reference to Calcaneal spurs-A Case Report. International Journal of AYUSH Case Reports 1(2): 20-24.

- [8] Shekokar AV, Borkar KM (2013) Role of Agnikarma in the management of chronic plantar fasciitis. International Journal of Ayurvedic Medicine 4(4): 421-425.
- [9] Taunton JE, Ryan MB, Clement DB, et al. A retrospective case control analysis of 2002 running injuries. Br J Sports Med 2002;36(2):95-101.
- [10] Lapidus PW, Guidotti FP. Painful heel: Report of 323 Patients with 364 painful heels. Clin Orthop Relat Res 1965; 39:178- 186.
- [11] Rano JA, Fallat LM, Savoy-Moore RT. Correlation of heel pain with body mass index and other characteristics of heel pain. J Foot Ankle Surg 2001;40(6):351-356.
- [12] Davis PF, Severud E, Baxter DE. Painful heel syndrome: results of nonoperative treatment. Foot Ankle Int 1994;15(10):531- 535.
- [13] Riddle DL, Pulisic M, Pidcoe P, Johnson RE. Risk factors for plantar fasciitis: a matched case-control study. J Bone Joint Surg Am.2003;85-A:872-7.
- [14] Govinda Das. Bhaishajya ratnavali, Chapter 26 Verse 48, 16th Edition, Varanasi: Chaukhamba Sanskrit Samsthana; 2002, p.378.
- [15] Pfeffer G, Bacchetti P, Deland J, Lewis A, Anderson R, Davis W, et al. Comparison of custom and prefabricated orthoses in the initial treatment of proximal plantar fasciitis. Foot Ankle Int 1999; 20:214-21.
- [16] Crawford F, Thomson C. Interventions for treating plantar heel pain. Cochrane Database Syst Rev 2003;(3): CD000416.
- [17] Acevedo JI, Beskin JL. Complications of plantar fascia rupture associated with corticosteroid injection. Foot Ankle Int 1998; 19:91-7.
- [18] Acharya Yadavji Trikamji, editor. Charaka Samhita of Agnivesha, Chikitsa Sthana, Reprint edition Ch.25. Ver.40, Varanasi: Chaukhamba Prakashan; 2009. p.132.
- [19] Dr. Shashtri A, editor. Sushruta Samhita of Sushruta,Sutra Sthana. Reprint Edition. Ch.12. Ver.3. Varanasi: Chaukhambha Surbharti Prakashan;2001. p.38.
- [20] Sherkhane Rahul Nagnath. Critical Appraisal of Agnikarama and its therapeutic Aspects. Int. Res. J. Pharm. 2013, 4(5): p.75-77.
- [21] Indradev Tripathi, Yogaratnakara of Vaidya Laxmipati sastri,1st edition.1, Chaukhamba Krishnadas Academy Varanasi;1998. p. 436-437.
- [22] Shri. Govinda Das,Bhaishajya Ratnavali,edited by Shri Brahmashankar Mishra, Chaukhamba Prakashana, Varanasi:report 2015, 29th Chapter Verses 156-161,625p

Author's short biography

	<p>Dr. Sachinkumar Sahebrao Patil M.D. (Kayachikitsa) Medicine, Ph.D. (Kayachikitsa) Medicine, M.B.A. (H.R.), M.A. (Sanskrit), P.G.D.E.M.S., D.Y.A. Professor and H.O.D., Ph.D. Guide, M.D. Guide, Department of Kayachikitsa, M.A.M.'s Sumatibhai Shah Ayurved Mahavidyalaya, Malwadi, Hadapsar, Pune – 411028, Maharashtra State, India. He is working as an Ayurved Physician and Panchakarma Specialist since last 18 Years. He is a FORMERBOARD OF STUDIES MEMBER for Paraclinical Ayurved Board of Maharashtra University of Health Sciences (M.U.H.S.), Nashik. He is a FORMER FACULTY MEMBER for Post Graduate Paraclinical Ayurved Board of M.U.H.S., Nashik. He is working as a Research Faculty for Research Methodology and Medical Statistics for M.U.H.S., Nashik. He is a Ph.D. GUIDE for 08 Ph.D. Kayachikitsa (Medicine) students and M.D. GUIDE for 28 M.D. Kayachikitsa (Medicine) students out of which 21 M.D. Kayachikitsa (Medicine) students have been already passed out. His research experience is 15 Years. His research interests in Anxiety disorder, Diabetes Mellitus, Obesity, Hyperacidity, Diarrhoea, Anaemia, Infertility, Hypertension etc.</p>
---	---