

## CASE STUDY

# Management of Plantar Fasciitis through *Panchkarma* Principles – A Case Study

Annu Kaushik<sup>1\*</sup>, Gopesh Mangal<sup>2</sup>

<sup>1</sup>PG Scholar, Department of Panchkarma, National Institute of Ayurveda, Deemed to be University, Jaipur, Rajasthan, India.

<sup>2</sup>Professor and Head, Department of Panchkarma, National Institute of Ayurveda, Deemed to be University, Jaipur, Rajasthan, India.

### ARTICLE INFO

#### Article history:

Received on: 14-09-2024

Accepted on: 20-10-2024

Published on: 31-10-2024

#### Key words:

Ayurveda,  
Ishtika Sweda,  
Panchkarma,  
Plantar Fasciitis,  
Vatakantaka

### ABSTRACT

**Introduction:** Plantar fasciitis (PF) is a prevalent condition caused by repetitive stress on the plantar fascia, a band of tissue connecting the heel bone to the toes. It constitutes about 80% of heel discomfort cases. This condition typically targets middle-aged individuals, impacting both genders equally, with a lifetime prevalence of approximately 10%. Although often self-limiting, the intense pain prompts many to seek medical help. Early intervention and managing risk factors can lead to rapid symptom relief and improved outcomes. Clinical presentations typically involve initial step discomfort and stiffness, which can be correlated to “*Vatakantaka*” in Ayurvedic terminology. This condition underscores the importance of early recognition and appropriate management to alleviate symptoms and enhance patient outcomes. *Vatakantaka* manifests as varying degrees of discomfort from mild to severe in the *Pada* (foot), *Parshini* (heel), *Gulfa* (ankle), and *Jangha* (calf) regions. Despite conventional pain management approaches, it frequently proves refractory, posing significant challenges and impacting the patient’s quality of life and mobility.

**Case Report:** A 30-year-old male patient presented with chief complaints of pain in both the heels and feet soles associated with tenderness in the past 3 months. According to him, pain was severe during the first few steps after waking up from bed, especially in morning time. The patient was managed with one sitting of *Baluka Sweda* along with *Mridu Virechana* with *Eranda Taila* for 3 days followed by *Ishtika sweda* for 8 days along with *Erandmooladi Niruha Basti* and *Dashmool Taila Anuvasana Basti* in *Yog Basti Krama*.

**Observation and Results:** The therapy provided marked improvement in the pain and tenderness. Pain from Visual Analog Scale (VAS) of 8 came to 0, and tenderness grading soft-tissue scale from 3 came to 0. It is the need of the hour to focus on such therapies which are result oriented and less expensive. From this study, it can be inferred that this treatment can be effectively adopted in patients of PF.

**Conclusion:** That *Mridu virechana* and *Baluka Sweda* followed by *Ishtika Sweda* and *Erandmooladi Niruha Basti* along with *Abhyantar Vatashamana Chikitsa* are the management of *Vatakantaka* (PF).

## 1. INTRODUCTION

Heel and sole pain are a common issue affecting adults across all age groups, but it can significantly impact middle-aged and elderly individuals, often leading to disability and discomfort. A hallmark sign of plantar fasciitis (PF) is pain in the sole and heel, which typically intensifies upon rising in the morning and improves after a few steps. Prolonged standing and walking barefoot tend to exacerbate the discomfort. PF can affect both sedentary individuals and athletes

alike, stemming from chronic strain due to lifestyle factors or physical activity.<sup>[1]</sup> The condition typically follows a chronic course, with pain and tenderness persisting for 1–2 years. Over time, the pain may gradually subside on its own, or the patient may adapt to the discomfort. In some cases, the condition heals with the formation of fibrosis, resulting in reduced flexibility of the plantar fascia. PF is the leading cause of heel pain, accounting for about 15% of all foot issues that prompt individuals to seek medical attention.<sup>[2]</sup> It typically develops gradually, often targeting the medial aspect, with pain that can extend into the medial arch of the foot in many patients who report heel discomfort. It is typically diagnosed based on history and physical examination alone. Patients often describe severe pain with their initial step upon

#### Corresponding Author:

Annu Kaushik, PG Scholar, Department of Panchkarma,  
National Institute of Ayurveda, Deemed to be University,  
Jaipur, Rajasthan, India. Email [vdkaushikannu@gmail.com](mailto:vdkaushikannu@gmail.com)

waking in the morning or after periods of inactivity during the day. This discomfort worsens when walking barefoot or going upstairs. During examination, palpation reveals maximum tenderness over the inferior aspect of the heel, precisely at the attachment site of the plantar fascia.<sup>[3]</sup> With this pathology and clinical presentation, *Vatakantaka* (a clinical pain-dominant condition described in Ayurveda) can be correlated with PF. *Vatakantaka* in Ayurveda classics is explained with clinical symptoms like “*Nyaste Tu Vishmam Pade Ruja*”<sup>[4]</sup> pain cause vitiation of *Vata* takes *Ashraya* (takes place) in *Gulfa Sandhi* (ankle joint) and produces pain. As the pain is seen more during morning and after a period of inactivity in patients, it indicates *Samsarga* of *Kapha* or the presence of *Ama* with the *Vata*. Here, *Dushyas* are *Snayu* (ligament) and *Sandhi* (joint) and *Rogmarga* is *Madhyama*.<sup>[5]</sup>

## 2. CASE REPORT

A 30-year-old male came to outpatient department, National Institute of Ayurveda Hospital, Jaipur, with the chief complaints of gradual pain in both the heels and feet sole associated with tenderness for 3 months. He was unable to keep his feet on the floor after waking up in the early morning due to severe pain in both heels and having constant pain during the whole day. On the basis of clinical symptoms, the case was diagnosed as *Vatakantaka* (PF). He was unable to walk long distance due to pain. Local examination revealed grade 8 pain and tenderness.

### 2.1. Past History

- No history of hypertension, diabetes, hypothyroidism
- No any history of chronic illness and surgery.

### 2.2. Personal History

- Occupation History - General Manager
- Addiction - Smoker for 16 years
- Family History - Not specific
- Sleep - Sound (irregular pattern)
- Appetite - Reduced
- Bowel Habits - Regular
- Diet - Vegetarian.

### 2.3. General Examination

- *Ashtavidha Pariksha* is described in Table 1
- Upon general examination, the patient was found to be fit and well oriented
- Blood Pressure - 118/80 mmHg
- Pulse - 80/min
- Respiratory Rate - 18/min
- Temperature - afebrile
- Pallor - Absent
- Edema - Absent
- Icterus - Absent
- Inspection revealed no swelling or redness
- Palpation revealed marked tenderness (+3) on the plantar aspect of the B/L feet
- All routine blood investigations yielded results within normal ranges.

## 3. MATERIALS AND METHODS

### 3.1. Therapeutic Intervention

Both *Panchkarma* procedures and medicines were administered simultaneously. Details are mentioned in Tables 2 and 3.

### 3.2. Criteria for Assessment

Assessment of pain and tenderness at 0<sup>th</sup>, 4<sup>th</sup>, 12<sup>th</sup>, 28<sup>th</sup> day of treatment are given in Table 4.

### 3.3. Procedures

#### 3.3.1. Baluka Sweda

A treatment procedure that involves sweating therapy using a bolus or poultice made of sand or gravel was done for 3 days. *Baluka* was heated in a pan using a heater. Afterward, the hot *Baluka* was placed on cotton clothes of 45 × 45 cm and 2 poultices were made. The patient was asked to lie comfortably on table. Poultices were placed on the affected area after testing the temperature. To maintain the temperature, *Baluka* was again heated. This procedure was done for 20 min. The patient was then advised to relax for 5–10 min.

#### 3.3.2. Mridu Virechana

A gentle purgation with *Eranda Taila* is given in 10 mL, 20 mL, and 30 mL, respectively, with *Ushnodaka* at bedtime for 3 days.

#### 3.3.3. Ishtika Sweda

Brick was heated on moderate heat till it got hot and placed in a vessel. Patient was made to sit on a chair and the steam was infused with Vinegar. The patient was asked to keep his feet over the brick that releases gentle steam. This procedure was done till the patient can tolerate (for 4–5 times) or the brick got cool down on its own, continuously for 8 days.

#### 3.3.4. Sarvanga Abhyanga-Swedana

Massage with *Dashmoola Taila* was performed on the whole body in 7 positions followed by Sudation with *Dashmool Bashpa* in Steam chamber before Enema Therapy.

#### 3.3.5. Basti

Enema prepared from *Erandmooladi* decoction was administered in quantity of 600 ml before food along with *Dashmoola Taila Matra Basti* in quantity of 70 mL after food in *Yoga Basti Krama* for 8 days.

### 3.4. Preparation of Niruha Basti

Preparation of Niruha Basti are given in Table 5.

## 4. OBSERVATIONS AND RESULTS

### 4.1. Treatment Outcome

The patient's response to treatment was evaluated using the Visual Analog Scale and Tenderness Grading Soft Tissue Scale before and after treatment are given in Table 6.

The patient experienced significant pain reduction and elimination of tenderness after completing the *Panchkarma* procedure.

## 5. DISCUSSION

Given the patient's symptoms of pain and tenderness, a comprehensive treatment plan was devised to address the underlying imbalances. The primary objective was to alleviate *Vata* aggravation.

### 5.1. Role of Mridu Virechana

In this case, castor oil was administered in a dose of 10 mL, 20 mL, and 30 mL for 3 days to eliminate vitiated *Dosha* and *Mala* through mild purgation. This resulted in six episodes of bowel movements.

Following mild purgation, the patient exhibited *Samyaka Lakshana* (desirable symptoms):

- Proper evacuation of stool
- Lightness in the body.

This indicated a positive response, with the patient experiencing relief and restoration of balance.

### 5.2. Role of *Ishtika Swedana*

*Ishtika Swedana* is a type of *Swedana* which is included under the category of *Ruksha Swedana*. In this therapy, heated bricks are used to induce *Swedana* in the targeted area of the body. First, apply the oil gently over the painful area to promote relief. Take a heated *Ishtika* (brick), and pour a medicated *Kwatha* or other suitable *Drava Dravya* over the brick using a spoon. This will generate steam. Expose the affected area to the steam for therapeutic benefits. Over the course of 3 to 14 days, or as the doctor directs, the therapy is usually given for at least 30 min every day. Procedure can be done twice a day as per the requirement. Using the gentle heat of the steam, *Ishtika Sweda* therapy aims to induce sweating, which aids in relaxing muscles and joints, improving circulation, thereby reducing pain and inflammation.

### 5.3. Role of *Basti*

In the management of *Vatavyadhi*, *Basti*<sup>[6]</sup> is the best tool to alleviate the *Vata Dosha*. In addition, *Pakvashaya* is the *sthana* (site) of *Vatadosha*. Thus, drugs introduced by rectal route may have systemic effect as well as local effect. *Basti* is administered in the rectum, and it gets absorbed and spread throughout the body up to the subtle channels.<sup>[7]</sup> In the *Siddhi Sthana*, *Acharya Charaka* describes the eliminative or purifying action of *Basti*. He explains that *Basti*, when applied to the *Pakvashaya* (the rectum), acts like the sun drawing moisture from the earth due to its heat. Just as the sun extracts moisture from the land, *Basti* draws *Dosha* (harmful elements) and *Mala* (waste products) from the entire body, from the feet to the head. Similarly, just as fabric absorbs only the dye from water colored with flowers, *Basti* specifically cleanses the *Mala* and *Dosha* from the body.<sup>[8]</sup> Recent research suggested that rectal absorption can prove the good alternative route of drug administration as it provides partial avoidance of first portal pass metabolism. It has been demonstrated that the rectal route is more efficient than even intravenous route.<sup>[9]</sup>

## 6. CONCLUSION

From the above discussion, we can conclude that *Mridu virechana* and *Baluka Sweda* followed by *Ishtika Sweda* and *Erandmooladi Niruha Basti* along with *Abhyantar Vatashamana Chikitsa* are the management of *Vatakantaka* (PF). This *Panchkarma* approach aimed to address the root causes of the patient's symptoms, promoting overall recovery and well-being.

## 7. ACKNOWLEDGMENT

Nil.

## 8. AUTHORS' CONTRIBUTIONS

All the authors contributed equally to the design and execution of the article.

## 9. FUNDING

Nil.

## 10. ETHICAL APPROVALS

This study is not required ethical approval as it is a case study.

## 11. CONFLICTS OF INTEREST

Nil.

## 12. DATA AVAILABILITY

This is an original manuscript and all data are available for only review purposes from principal investigators.

## 13. PUBLISHERS NOTE

This journal remains neutral with regard to jurisdictional claims in published institutional affiliation

## REFERENCES

1. Schwartz EN, Su J. Plantar fasciitis: A concise review. *Perm J* 2014;18:e105-7.
2. Menon N, Jain J. Plantar fasciitis: A review. *Indian J Pain* 2018;32:24.
3. Misar S. Agnikarma in the management of Vatakantaka (planter fasciitis). *J Indian Syst Med* 2017;5:126-9.
4. Jadavji T. Nidana sthana; Vatavyadhi nidana. In: *Sushruta Samhita of Sushruta*. 5<sup>th</sup> ed., Ch. 1/79. Varanasi: Chaukhamba Orientalia; 1992.
5. Rao VG, Nischita MS. Ayurvedic management of Vatakantaka (plantar fasciitis). *Int J Ayurvedic Med* 2013;4:43-9.
6. Narine A, Mangal G. An in-depth review of ayurvedic basti karma (medicated enema). *Int J Res Ayush Pharm Sci* 2020;4:388-91.
7. Jadavji T. Chikitsa sthana; Netra basti pramana pravibhaga chikitsitam. In: *Sushruta Samhita of Sushruta*. Ch. 35/25-27. Varanasi: Chaukhamba Orientalia; 1992.
8. Rathod D. The assessment of basti karma. *Int Ayurvedic Med J* 2019;7(8).
9. Mirteimouri M, Tara F, Teimouri B, Sakhavar N, Vaezi A. Efficacy of rectal misoprostol for prevention of postpartum haemorrhage. *Iran J Pharm Res* 2013;12:469-74.

### How to cite this article:

Kaushik A, Mangal G. Management of Plantar Fasciitis through Panchkarma Principles – A Case Study. *IRJAY*. [online] 2024;7(10):25-29. Available from: <https://irjay.com>  
DOI link- <https://doi.org/10.48165/IRJAY.2024.71005>

**Table 1:** *Ashtavidha Pariksha*

<i>Nadi</i>	<i>Manduka Vata</i>
<i>Mala</i>	<i>Ama</i>
<i>Mutra</i>	<i>Samyaka</i>
<i>Jihwa</i>	<i>Kaphavrita</i>
<i>Shabda</i>	<i>Spashta</i>
<i>Sparsha</i>	<i>Ushna</i>
<i>Drika</i>	<i>Spashta</i>
<i>Akriti</i>	<i>Madhyama</i>

**Table 2:** Details of the *Panchkarma* procedures administered

S. No.	<i>Panchkarma</i> procedures	Time of administration	Duration
1.	<i>Baluka Sweda</i>	Before food in morning	3 days
2.	<i>Mridu Virechana</i> with <i>erand Taila</i>	10 mL, 20 mL, 30 mL, respectively, at bed time	
3.	<i>Ishtika Sweda</i>	In morning time	8 days
4.	<i>Erandmooladi Niruha</i>	600 mL before food	
5.	<i>Dashmoola Taila Anuvasana Basti</i>	70 mL after food	
6.	<i>Follow-Up</i>	-	15 Days

**Table 3:** Details of the medicines administered

S. No.	Medicines	Dose	Anupana
1.	<i>Yograj Guggulu</i>	2 tab BD/BF	<i>Kwatha</i>
2.	<i>Dashmoola Kwatha</i>	40 mL BD/BF	<i>Ushnodaka</i>
3.	<i>Mahanarayana taila</i>	for LA	-
4.	<i>Ashwagandha churna+Chopchini Churna+Nagaradya Churna</i>	3 g+2 g+1 g (respectively) BD/AF	<i>Ushnodaka</i>
5.	Tab. Jointovid	1 Tab TDS/AF	<i>Ushnodaka</i>

**Table 4:** Assessment of pain and tenderness at 0<sup>th</sup>, 4<sup>th</sup>, 12<sup>th</sup>, 28<sup>th</sup> day of treatment

S. No.	Symptom	Grading				
		0	1	2	3	4
1.	Pain (VAS)	No Pain (0)	Mild pain (1–3)	Moderate Pain (4–6)	Severe pain (7–9)	Unbearable Pain (10)
2.	Tenderness	No tenderness	Tenderness on palpation without grimace/flinch	Tenderness on palpation with grimace/flinch	Tenderness with withdrawal on palpation	Severe tenderness (patient does not allow palpation)

VAS: Visual Analog Scale

**Table 5:** Preparation of Niruha Basti

S. No	Material Required	Quantity Required
1.	<i>Madhu</i> (Honey)	30 mL
2.	<i>Saindhava</i> (Rock salt)	8 g
3.	<i>Sneha</i> ( <i>Til Taila</i> )	50 mL
4.	<i>Kalka</i> ( <i>Putoyavanyadi kalka</i> )	12 g
5.	<i>Erandmooladi Kwatha</i>	500 mL

**Table 6:** Visual Analog Scale (VAS) and Tenderness Grading Soft Tissue Scale before and after treatment

S. No.	Assessment	VAS score	Tenderness grade
1.	Initial Assessment (At 0 <sup>th</sup> day)	8/10	3/4
2.	After 3 days of <i>Baluka Sweda</i> and <i>Mridu Virechana</i>	No significant change	No significant change
3.	After 8 days of <i>Ishtika Sweda</i> and <i>Shodhana</i>	2/10	0/4
4.	Final Assessment (15 days after <i>Panchkarma</i> procedure)	0/10	No tenderness detected

VAS: Visual Analog Scale