

REVISITING VATAKANTAKA: AN INTEGRATIVE AYURVEDIC PERSPECTIVE ON PLANTAR FASCIITIS FROM ETIOPATHOGENESIS TO CLINICAL MANAGEMENT

Dr. Ravina Verma¹, Dr. Pranesh Gaikwad^{*2}, Dr. Vaishali Chaudhari³,
Dr. Samruddhi Vaidkar⁴

¹PG Scholar, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved and Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune– 411018 Maharashtra, India.

²Professor, Department of Panchakarma, Dr. D. Y Patil College of Ayurved and Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune– 411018 Maharashtra, India.

³Professor and HOD, Department of Panchakarma, Dr. D. Y Patil College of Ayurved and Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune– 411018 Maharashtra, India.

⁴PG Scholar, Department of Panchakarma, Dr. D. Y Patil College of Ayurved and Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune– 411018 Maharashtra, India.

Article Received on 15 July 2026,
Article Revised on 05 August 2026,
Article Published on 16 August 2026,
<https://doi.org/10.5281/zenodo.21913872>

*Corresponding Author

Dr. Pranesh Gaikwad

Professor, Department of Panchakarma,
Dr. D. Y Patil College of Ayurved and
Research Centre, Dr. D. Y. Patil
Vidyapeeth, (Deemed to be University),
Pimpri, Pune– 411018 Maharashtra,
India.



How to cite this Article: Dr. Ravina Verma¹,*Dr. Pranesh Gaikwad², Dr. Vaishali Chaudhari³, Dr. Samruddhi Vaidkar⁴ (2026). Revisiting Vatakantaka: An Integrative Ayurvedic Perspective On Plantar Fasciitis From Etiopathogenesis To Clinical Management. World Journal of Pharmaceutical Research, 15(16), 305–318.

This work is licensed under Creative Commons Attribution 4.0 International license.

ABSTRACT

Background: Plantar fasciitis is one of the most common causes of heel pain, accounting for approximately 80% of chronic heel pain cases. It is characterised by inflammation and degeneration of the plantar fascia due to repetitive micro-trauma, prolonged standing, obesity, inappropriate footwear, and excessive physical activity. In Ayurveda, the clinical features of plantar fasciitis closely resemble *Vatakantaka*, a condition described under *Vata Vyadhi*, where aggravated *Vata* localises in the heel, resulting in severe pain, tenderness, and difficulty in walking. **Objective:** This review aims to explore the Ayurvedic understanding of plantar fasciitis (*Vatakantaka*), correlate it with contemporary medical concepts, and summarise the available evidence regarding its etiopathogenesis, diagnosis, and management. **Methods:** A comprehensive narrative review was conducted using classical Ayurvedic texts, including the *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, and relevant *Rasashastra* and

Panchakarma literature, along with review articles indexed in PubMed, Scopus, Google Scholar, and other scientific databases. The literature was analysed to establish correlations between Ayurvedic principles and current biomedical knowledge. **Results:** The review indicates that *Vata* aggravation, particularly due to excessive walking, prolonged standing, overexertion, trauma, obesity, and improper footwear, plays a vital role in the pathogenesis of *Vatakantaka*. Management includes *Nidana Parivarjana*, *Shamana Chikitsa*, *Panchakarma* procedures such as *Abhyanga*, *Swedana*, *Upanaha*, *Basti*, *Agnikarma*, and local therapies, along with internal medicines possessing *Vatahara*, *Shothahara*, *Vedanasthapana*, and *Rasayana* properties. Modern conservative measures, including stretching exercises, orthotics, physiotherapy, and lifestyle modifications, complement Ayurvedic interventions. Emerging clinical studies suggest that Ayurvedic therapies provide significant relief in pain, tenderness, and improve functional activities while improving quality of life. **Conclusion:** Plantar fasciitis can be effectively interpreted through the Ayurvedic concept of *Vatakantaka*. An integrative approach combining Ayurvedic principles with evidence-based conservative management offers a safe, cost-effective, and holistic strategy for managing plantar fasciitis.

KEYWORDS: Plantar Fasciitis, *Vatakantaka*, Heel Pain, *Ayurveda*, *Vata Vyadhi*.

INTRODUCTION

Plantar fasciitis is the most common cause of chronic plantar heel pain, accounting for approximately 80% of all cases of heel pain encountered in clinical practice. It is characterised by pain and tenderness at the medial aspect of the calcaneal tuberosity, particularly during the first steps taken in the morning or after prolonged period of rest. Although regarded as an inflammatory condition, current evidence indicates that it is primarily a degenerative disorder of the plantar fascia resulting from repetitive micro-trauma and collagen degeneration.^[1,2]

The plantar fascia is a strong fibrous aponeurosis extending from the medial calcaneal tubercle to the proximal phalanges. It plays an essential role in maintaining the medial longitudinal arch of the foot, absorbing shock during weight-bearing, and facilitating efficient gait through the windlass mechanism. Repetitive mechanical stress exceeding the tissue's reparative capacity leads to micro-tears, collagen degeneration, pain, stiffness, and functional disability.^[3]

Several intrinsic and extrinsic risk factors have been associated with plantar fasciitis, including obesity, prolonged standing, excessive walking or running, limited ankle dorsiflexion, pes planus, pes cavus, advancing age, and the use of inappropriate footwear.^[4,5] The lifetime prevalence is estimated to be approximately 10%, with the highest incidence occurring among individuals between 40 and 60 years of age.^[6] Most patients respond to conservative management; however, nearly 10% develop persistent or recurrent symptoms that significantly impair daily activities and quality of life.^[7]

The diagnosis of plantar fasciitis is primarily clinical, while imaging modalities such as ultrasonography and magnetic resonance imaging (MRI) are reserved for atypical or refractory cases. Conventional treatment includes activity modification, stretching exercises, orthotic devices, physiotherapy, non-steroidal anti-inflammatory drugs (NSAIDs), corticosteroid injections, platelet-rich plasma therapy, extracorporeal shock wave therapy, and surgical intervention in resistant cases.^[8,9]

In Ayurveda, the clinical features of plantar fasciitis closely resemble *Vatakantaka*, a disorder described under *Vata Vyadhi*. The term *Vatakantaka* refers to severe thorn-like pain produced by aggravated *Vata Dosha* localised in the heel (*Padatala* or *Gulpha*). According to *Sushruta Samhita*, excessive walking on uneven or hard surfaces, trauma, improper foot placement, and overexertion vitiate *Vata*, resulting in intense heel pain and difficulty in walking.^[10] The disease process involves *Vata Prakopa*, *Snayu Dushti*, and *Khavaigunya*, producing symptoms such as *Shoola* (pain), *Stambha* (stiffness), *Sparshasahatva* (tenderness), and impaired gait.^[11]

Ayurvedic management emphasizes *Nidana Parivarjana*, *Abhyanga*, *Swedana*, *Agnikarma*, *Upanaha Sweda*, *Basti*, and administration of *Vatahara*, *Shothahara*, *Vedanasthapana*, and *Rasayana* drugs to relieve pain, improve tissue healing, restore function, and prevent recurrence.^[12]

Considering the increasing prevalence of plantar fasciitis and the growing demand for evidence-based integrative medicine, this review aims to comprehensively discuss plantar fasciitis with special reference to *Vatakantaka*, highlighting its etiopathogenesis, clinical features, diagnosis, and Ayurvedic management.

AIM

To comprehensively review the Ayurvedic and contemporary perspectives of plantar fasciitis (*Vatakantaka*), including its etiopathogenesis, clinical features, diagnosis, and management.

METHODOLOGY

A narrative literature review was conducted using classical Ayurvedic texts (*Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya*) along with review articles retrieved from PubMed, Scopus, Google Scholar, and other indexed databases.

Modern Review

Anatomy of the Plantar Fascia

The plantar fascia is a thick fibrous aponeurosis extending from the medial tubercle of the calcaneus to the proximal phalanges. It consists of medial, central, and lateral bands, with the central band being the thickest and most clinically significant. It supports the medial longitudinal arch, absorbs shock during gait, and facilitates the windlass mechanism for efficient foot biomechanics.^[13]

Epidemiology

Plantar fasciitis is the most common cause of plantar heel pain, accounting for nearly 80% of heel pain cases. It has a lifetime prevalence of approximately 10% and commonly affects individuals aged 40–60 years. It is frequently observed in runners, athletes, obese individuals, and occupations requiring prolonged standing.^[14]

Etiology

Plantar fasciitis results from repetitive micro-trauma and excessive mechanical loading of the plantar fascia, leading to collagen degeneration at its calcaneal attachment. Chronic cases are primarily degenerative rather than inflammatory.^[15]

Risk Factors

Major risk factors include obesity, prolonged standing, excessive walking or running, flat feet, high arches, tight Achilles tendon, limited ankle dorsiflexion, improper footwear, increasing age, and occupations involving prolonged weight-bearing.^[16]

Pathophysiology

Repeated stress produces micro-tears within the plantar fascia, resulting in collagen disorganisation, fibroblast proliferation, myxoid degeneration, and reduced tensile strength. These degenerative changes lead to chronic heel pain and impaired foot function.^[17]

Clinical Features

Patients typically present with sharp heel pain during the first steps in the morning, pain after prolonged rest, tenderness over the medial calcaneal tubercle, stiffness, and pain aggravated by prolonged standing or walking.^[18]

Diagnosis

Diagnosis is primarily clinical and based on characteristic history and localised tenderness over the plantar fascia insertion. Pain increases with passive dorsiflexion of the toes and prolonged weight-bearing.^[19]

Investigations

Imaging is reserved for atypical or refractory cases. Plain radiographs help exclude fractures, ultrasonography demonstrates increased plantar fascia thickness, and MRI identifies fascial degeneration and surrounding soft tissue abnormalities.^[20]

Differential Diagnosis

Conditions to be differentiated include calcaneal stress fracture, heel spur syndrome, Baxter's nerve entrapment, tarsal tunnel syndrome, Achilles tendinopathy, retrocalcaneal bursitis, lumbar radiculopathy, inflammatory arthritis, gout, and peripheral neuropathy.^[21]

Modern Management

Initial management is conservative and includes activity modification, weight reduction, stretching exercises, physiotherapy, orthotic devices, heel pads, and NSAIDs. Refractory cases may require corticosteroid injections, platelet-rich plasma therapy, extracorporeal shock wave therapy, or surgical plantar fascia release.^[22]

Ayurvedic Review

Historical Review

Heel pain resembling *Vatakantaka* has been described in the classical Ayurvedic texts under *Vata Vyadhi*. The condition is mentioned in *Sushruta Samhita*, where excessive walking on uneven or hard surfaces, trauma, and improper foot placement are considered the principal

causative factors leading to aggravated *Vata Dosha* in the heel region. Later, *Charaka Samhita* and *Ashtanga Hridaya* elaborated the principles of *Vata Vyadhi Chikitsa*, which are applicable in the management of *Vatakantaka*.^[23]

Nirukti

The word *Vatakantaka* is derived from two Sanskrit words.

- **Vata** – the aggravated *Vata Dosha*.
- **Kantaka** – thorn.

Thus, *Vatakantaka* refers to a condition in which aggravated *Vata* produces severe thorn-like pain in the heel region.^[24]

Definition of Vatakantaka

According to *Sushruta Samhita*, *Vatakantaka* is a disorder caused by aggravated *Vata* due to excessive strain, walking on uneven surfaces, or trauma, producing severe pain in the heel (*Padatala*) and difficulty in walking.^[25]

Nidana

The important causative factors include

- Excessive walking or running
- Walking on uneven or hard surfaces
- Trauma to the heel
- Prolonged standing
- Excessive physical exertion
- Improper footwear
- Activities aggravating *Vata*
- Old age and degeneration.^[26]

Samprapti

Repeated trauma and excessive stress aggravate *Vata Dosha*, which localises in the heel due to *Khavaigunya*. The aggravated *Vata* affects *Snayu*, *Asthi*, and *Sandhi*, resulting in pain, stiffness, tenderness, and difficulty in walking.^[27]

Samprapti Ghataka

- **Dosha:** Vata (predominantly Vyana and Apana Vata)
- **Dushya:** Asthi, Snayu, Majja
- **Srotas:** Asthivaha and Mamsavaha Srotas
- **Srotodushti:** Sanga
- **Agni:** Vishamagni
- **Udbhava Sthana:** Pakwashaya
- **Sanchara Sthana:** Rasavaha Srotas
- **Vyakta Sthana:** Padatala (heel)
- **Roga Marga:** Madhyama Roga Marga^[28]

Lakshana

The characteristic features include.

- Severe thorn-like heel pain (*Shoola*)
- Tenderness
- Stiffness (*Stambha*)
- Pain during walking
- Difficulty in weight-bearing
- Restricted foot movements
- Pain aggravated by exertion and relieved by rest^[29]

Differential Diagnosis

Vatakantaka should be differentiated from.

- *Padadaha*
- *Vatarakta*
- *Sandhigata Vata*
- *Snayugata Vata*
- *Gulpha Sandhigata Vata*.^[30]

Prognosis

Vatakantaka is generally Sadhya when diagnosed early and treated with proper *Nidana Parivarjana*, *Shamana*, and *Shodhana Chikitsa*. Chronic or neglected cases associated with marked degeneration may become *Krichchhra Sadhya*, requiring prolonged treatment.^[27]

Ayurvedic *Chikitsa* of *Vatakantaka* (Plantar Fasciitis)

Principles of Management

The primary aim of Ayurvedic management of *Vatakantaka* is to pacify aggravated *Vata Dosha*, relieve pain (*Shoola*), reduce stiffness (*Stambha*), improve locomotor function, and strengthen the affected *Snayu*, *Asthi*, and *Sandhi*. Treatment includes *Nidana Parivarjana*, *Shamana Chikitsa*, *Shodhana Chikitsa*, *Panchakarma* procedures, local therapies, and appropriate dietary and lifestyle modifications.^[26]

Nidana Parivarjana

Elimination of causative factors is the first step in management. Patients are advised to avoid prolonged standing, excessive walking, running, walking barefoot on hard or uneven surfaces, overexertion, and exposure to cold. Weight reduction in obese individuals, the use of cushioned footwear with adequate arch support, and correction of faulty gait help reduce repeated strain on the plantar fascia and prevent recurrence.^[22]

Shamana Chikitsa

Shamana therapy aims to alleviate pain, pacify *Vata*, reduce inflammation, and promote tissue healing. Commonly used formulations include *Yogaraj Guggulu*, *Mahayogaraja Guggulu*, *Lakshadi Guggulu*, *Simhanada Guggulu*, *Dashamoola Kwatha*, *Maharasnadi Kwatha*, *Rasna Saptaka Kwatha*, *Ashwagandha Churna*. These medicines possess *Vatahara*, *Vedanasthapana*, *Shothahara*, *Balya*, and *Rasayana* properties, helping improve musculoskeletal strength and functional recovery.^[26]

Shodhana Chikitsa

Shodhana therapy is particularly beneficial in chronic and recurrent *Vatakantaka*. It eliminates vitiated *Doshas*, restores physiological balance, nourishes deeper tissues, and reduces the likelihood of recurrence. Among all *Shodhana* procedures, *Basti* is regarded as the most effective therapy for *Vata* disorders.^[26]

Role of Panchakarma

Panchakarma plays a vital role in the management of *Vatakantaka* by correcting the underlying *Dosha* imbalance while providing symptomatic relief. These procedures improve circulation, reduce pain and stiffness, nourish musculoskeletal tissues, and restore normal foot function.^[26]

Abhyanga

Abhyanga with medicated oils such as *Ksheerbala Taila*, *Mahanarayana Taila*, *Dhanwantaram Taila*, or *Sahacharadi Taila* is performed over the foot, ankle, and calf muscles. It pacifies *Vata*, improves local circulation, relieves muscle spasm, nourishes ligaments, and joints, and enhances flexibility.^[27]

Swedana

Swedana is administered following *Abhyanga* using modalities such as *Nadi Sweda*, *Patra Pinda Sweda*, or *Shashtika Shali Pinda Sweda* depending on the stage of the disease. *Swedana* relieves stiffness, reduces pain, enhances circulation, and facilitates better penetration of medicated oils into deeper tissues.^[26]

Upanaha Sweda

Upanaha Sweda involves the application of a warm medicated poultice over the heel. It provides prolonged therapeutic heat, relieves chronic pain, reduces stiffness, softens contracted tissues, and improves local blood circulation, thereby promoting healing.^[25]

Lepa

Application of medicated herbal paste prepared from drugs such as *Rasna*, *Nirgundi*, *Eranda*, *Dashamoola*, and *Shunthi* helps reduce localized pain, tenderness, and inflammation. *Lepa* also improves tissue repair and provides symptomatic relief in chronic heel pain.^[29]

Basti

Basti is considered the *Ardha Chikitsa* for *Vata* disorders and is the cornerstone of treatment in chronic *Vatakantaka*. Medicated decoctions and oils administered through *Niruha Basti* and *Anuvasana Basti* eliminate aggravated *Vata* from its principal seat, nourish *Asthi*, *Majja*, and *Snayu Dhatus*, improve flexibility, relieve chronic pain, and prevent recurrence.^[26]

Agnikarma

Agnikarma is a specialised para-surgical procedure indicated in chronic localised heel pain. Controlled therapeutic heat applied over the tender area relieves pain, improves local blood circulation, reduces muscle spasm, accelerates tissue healing, and provides rapid symptomatic relief. It is particularly useful in patients who do not respond adequately to conservative therapies.^[25]

Pathya–Apathya

Proper dietary and lifestyle modifications are essential for successful management. Patients should consume warm, freshly prepared, easily digestible foods, milk, ghee, green gram, garlic, ginger, sesame, and foods that nourish the musculoskeletal system. Adequate sleep, regular oil massage, moderate exercise, weight control, and the use of appropriate footwear are encouraged. Dry, cold, refrigerated, processed, and excessively spicy foods should be avoided, along with prolonged standing, excessive exercise, walking barefoot, and exposure to cold environments, as these aggravate *Vata* and delay recovery.^[26]

DISCUSSION

Plantar fasciitis is the most common cause of chronic heel pain and significantly affects mobility, occupational performance, and quality of life. The condition develops due to repetitive mechanical stress on the plantar fascia, leading to micro-tears, collagen degeneration, and progressive impairment of foot biomechanics. Although conventional medicine has traditionally considered plantar fasciitis an inflammatory disorder, recent evidence indicates that chronic cases are predominantly degenerative in nature. This understanding provides an opportunity to correlate the disease with the Ayurvedic concept of *Vatakantaka*, a condition characterised by severe heel pain caused by aggravated *Vata Dosha*.

From the Ayurvedic perspective, the clinical presentation of plantar fasciitis closely resembles *Vatakantaka*, which is described under *Vata Vyadhi*. Continuous walking on uneven surfaces, prolonged standing, excessive physical exertion, trauma, and improper foot placement are considered the primary etiological factors. These factors aggravate *Vata Dosha*, which localises in the heel due to *Khavaigunya* and affects the *Snayu*, *Asthi*, and *Sandhi*, producing severe pain, stiffness, tenderness, and difficulty in walking. The classical description of thorn-like pain in *Vatakantaka* closely corresponds with the characteristic morning heel pain experienced by patients with plantar fasciitis.

The pathophysiological correlation between modern medicine and Ayurveda is noteworthy. In modern science, repetitive mechanical overload causes microscopic injury and degeneration of collagen fibers within the plantar fascia. Similarly, *Ayurveda* explains that repeated stress and trauma provoke *Vata*, resulting in degeneration of musculoskeletal tissues and impaired locomotion. The involvement of *Snayu* in *Ayurveda* closely resembles the pathology of ligamentous and fascial degeneration described in contemporary medicine. Likewise, *Asthi*

Dhatu Kshaya and *Vata Prakopa* explain the chronic degenerative changes observed in longstanding plantar fasciitis.

One of the major advantages of *Ayurveda* is its holistic approach. Instead of focusing only on symptomatic relief, treatment aims to eliminate causative factors, restore *Dosha* equilibrium, strengthen musculoskeletal tissues, and prevent recurrence. *Nidana Parivarjana* forms the cornerstone of management by correcting lifestyle and occupational factors that contribute to continuous stress on the plantar fascia. Weight reduction, proper footwear, avoidance of prolonged standing, and modification of physical activities play a vital role in reducing disease progression.

Panchakarma therapies occupy a central position in the management of *Vatakantaka*. *Abhyanga* improves local circulation, nourishes muscles and ligaments, reduces stiffness, and pacifies aggravated *Vata*. *Swedana* relieves muscle tightness and enhances flexibility by reducing stiffness around the heel and ankle. *Upanaha Sweda* and *Lepa* provide sustained local analgesic and anti-inflammatory effects, thereby improving functional mobility.^[34]

Among all *Panchakarma* procedures, *Basti* is regarded as the most important treatment for *Vata* disorders. Since the principal seat of *Vata* is the *Pakwashaya*, *Basti* acts systemically by eliminating aggravated *Vata* and restoring physiological balance. In addition to reducing pain, *Basti* nourishes *Asthi*, *Majja*, and *Snayu Dhatus*, thereby promoting tissue repair and reducing recurrence. This systemic mode of action distinguishes Ayurvedic management from purely local therapeutic approaches.^[32]

Agnikarma is another unique and valuable modality in the treatment of chronic heel pain. Controlled therapeutic heat stimulates local circulation, relieves muscle spasm, interrupts chronic pain pathways, and accelerates tissue healing. In clinical practice, *Agnikarma* often provides rapid pain relief, making it particularly beneficial in chronic or treatment-resistant cases of plantar fasciitis.^[35]

Internal Ayurvedic medicines possessing *Vatahara*, *Shothahara*, *Vedanasthapana*, and *Rasayana* properties further complement external therapies. These formulations reduce pain, improve tissue nutrition, strengthen ligaments and bones, and support regeneration of damaged connective tissue. When combined with *Panchakarma* procedures and right rehabilitation exercises, they contribute to long-term functional recovery.^[31]

An integrative approach offers several advantages over isolated treatment modalities. While modern interventions primarily focus on pain reduction and biomechanical correction, Ayurveda emphasizes correction of the underlying Dosha imbalance, tissue nourishment, and prevention of recurrence. This holistic management not only alleviates symptoms but also enhances overall musculoskeletal health, improves gait, restores daily activities, and promotes a better quality of life.^[33]

Despite encouraging clinical outcomes, high-quality multicentric randomized controlled trials with larger sample sizes, standardized treatment protocols, and long-term follow-up are still required to establish stronger scientific evidence regarding the effectiveness of Ayurvedic interventions in plantar fasciitis. Future research should also explore objective outcome measures, imaging-based assessment of fascial healing, and integrative treatment protocols combining Ayurveda with evidence-based rehabilitation. Such studies will help strengthen the role of Ayurveda in the comprehensive management of plantar fasciitis and facilitate its wider acceptance in contemporary clinical practice.

CONCLUSION

Plantar fasciitis is a common degenerative musculoskeletal disorder that causes chronic heel pain and functional limitation. Its clinical features closely correlate with the Ayurvedic condition *Vatakantaka*, a *Vata Vyadhi* characterized by severe heel pain and difficulty in walking. Ayurvedic management, including *Nidana Parivarjana*, *Shamana Chikitsa*, *Panchakarma* procedures (especially *Basti* and *Agnikarma*), *Abhyanga*, *Swedana*, and appropriate internal medications, offers a holistic approach by relieving pain, improving function, promoting tissue healing, and reducing recurrence. An integrative approach combining Ayurvedic principles with modern rehabilitation may provide effective, safe, and sustainable management of plantar fasciitis while improving patients quality of life.

REFERENCES

1. Goff JD, Crawford R. Diagnosis and treatment of plantar fasciitis. *Am Fam Physician*, 2011; 84(6): 676-682.
2. Buchbinder R. Plantar fasciitis. *N Engl J Med*, 2004; 350(21): 2159-2166.
3. Wearing SC, Smeathers JE, Urry SR, Hennig EM, Hills AP. The pathomechanics of plantar fasciitis. *Sports Med*, 2006; 36(7): 585-611.
4. Martin RL, Davenport TE, Reischl SF, McPoil TG, Matheson JW, Wukich DK, et al. Heel pain—Plantar fasciitis: Revision 2014. *J Orthop Sports Phys Ther*, 2014; 44(11): A1-A33.

5. Lim AT, How CH, Tan B. Management of plantar fasciitis in the outpatient setting. *Singapore Med J*, 2016; 57(4): 168-171.
6. Riddle DL, Schappert SM. Volume of ambulatory care visits and patterns of care for patients diagnosed with plantar fasciitis: A national study of medical doctors. *J Am Podiatr Med Assoc*, 2004; 94(3): 229-234.
7. League AC. Current concepts review: Plantar fasciitis. *Foot Ankle Int*, 2008; 29(3): 358-366.
8. Thomas JL, Christensen JC, Kravitz SR, Mendicino RW, Schuberth JM, Vanore JV, et al. The diagnosis and treatment of heel pain: A clinical practice guideline—Revision 2010. *J Foot Ankle Surg*, 2010; 49(3 Suppl): S1-S19.
9. Schwartz EN, Su J. Plantar fasciitis: A concise review. *Perm J*, 2014; 18(1): e105-e107.
10. Sushruta. *Sushruta Samhita. Chikitsa Sthana*, Chapter 4 (Vata Vyadhi Chikitsa). Yadavji Trikamji Acharya, editor. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
11. Agnivesha. *Charaka Samhita. Chikitsa Sthana*, Chapter 28 (Vata Vyadhi Chikitsa). Yadavji Trikamji Acharya, editor. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
12. Vagbhata. *Ashtanga Hridaya. Nidana Sthana and Chikitsa Sthana (Vata Vyadhi)*. Arunadatta, commentator; Hari Sadashiva Shastri Paradkar, editor. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
13. Drake RL, Vogl AW, Mitchell AWM. *Gray's Anatomy for Students*. 5th ed. Philadelphia: Elsevier, 2023.
14. Riddle DL, Schappert SM. Volume of ambulatory care visits and patterns of care for patients diagnosed with plantar fasciitis. *J Am Podiatr Med Assoc*, 2004; 94(3): 229-234.
15. Buchbinder R. Plantar fasciitis. *N Engl J Med*, 2004; 350(21): 2159-2166.
16. Lim AT, How CH, Tan B. Management of plantar fasciitis in the outpatient setting. *Singapore Med J*, 2016; 57(4): 168-171.
17. Wearing SC, Smeathers JE, Urry SR, Hennig EM, Hills AP. The pathomechanics of plantar fasciitis. *Sports Med*, 2006; 36(7): 585-611.
18. League AC. Current concepts review: Plantar fasciitis. *Foot Ankle Int*, 2008; 29(3): 358-366.
19. Martin RL, Davenport TE, Reischl SF, et al. Heel pain—Plantar fasciitis: Revision 2014. *J Orthop Sports Phys Ther*, 2014; 44(11): A1-A33.
20. Schwartz EN, Su J. Plantar fasciitis: A concise review. *Perm J*, 2014; 18(1): e105-e107.

21. Thomas JL, Christensen JC, Kravitz SR, et al. The diagnosis and treatment of heel pain: Clinical practice guideline. *J Foot Ankle Surg*, 2010; 49(Suppl 3): S1-S19.
22. Goff JD, Crawford R. Diagnosis and treatment of plantar fasciitis. *Am Fam Physician*, 2011; 84(6): 676-682.
23. Sushruta. *Sushruta Samhita. Chikitsa Sthana, Vata Vyadhi Chikitsa Adhyaya*. Yadavji Trikamji Acharya, editor. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
24. Monier-Williams M. *A Sanskrit-English Dictionary*. Delhi: Motilal Banarsidass; Reprint 2014.
25. Sushruta. *Sushruta Samhita. Chikitsa Sthana, Chapter 4*. Yadavji Trikamji Acharya, editor. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
26. Agnivesha. *Charaka Samhita. Sutra Sthana and Chikitsa Sthana*. Yadavji Trikamji Acharya, editor. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
27. Vagbhata. *Ashtanga Hridaya. Nidana Sthana*. Hari Sadashiva Shastri Paradkar, editor. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
28. Sharma PV. *Ayurveda Ka Vaijnanika Itihasa*. Varanasi: Chaukhambha Vishvabharati, 2016.
29. Sushruta. *Sushruta Samhita. Nidana and Chikitsa Sthana*. Yadavji Trikamji Acharya, editor. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
30. Agnivesha. *Charaka Samhita. Chikitsa Sthana, Vata Vyadhi Adhyaya*. Yadavji Trikamji Acharya, editor. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
31. Sharma PV. *Dravyaguna Vijnana. Vol. II*. Varanasi: Chaukhambha Bharati Academy, 2019.
32. Agnivesha. *Charaka Samhita. Siddhi Sthana*. Yadavji Trikamji Acharya, editor. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
33. Vagbhata. *Ashtanga Hridaya. Sutra Sthana*. Hari Sadashiva Shastri Paradkar, editor. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
34. Agnivesha. *Charaka Samhita. Sutra Sthana, Swedadhyaya*. Yadavji Trikamji Acharya, editor. Varanasi: Chaukhambha Surbharati Prakashan, 2022.
35. Sushruta. *Sushruta Samhita. Sutra Sthana, Agnikarma Vidhi Adhyaya*. Yadavji Trikamji Acharya, editor. Varanasi: Chaukhambha Surbharati Prakashan, 2022.