

AN OUTLOOK OF VATAKANTAKA THE CONTEXT OF AYURVEDA WITH
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ABSTRACT

Pain is that one symptom which alters our day to day activities, affecting the quality of life. Pain in the heel is one among such pain, which causes difficulty in walking and in turn disturbs daily routines. Plantar fasciitis is most common cause of heel pain in adults.^[1] It is estimated that 1 in 10 people will develop Plantar Fasciitis during their life time.^[2] Vatakantaka as per Ayurveda is mentioned by Acharya Sushruta in the context of Vatavyadhi as a painful condition of heel due to improper placement of foot on the ground or by walking over correlated to a calcaneal spur which is a calcium deposit causing a bony protrusion on bone often frequently associated with plantar fasciitis, a painful inflammation of tissue. It is a common condition that affects normal routine work. Plantar Fasciitis is caused due to silent and repeated injury resulting in inflammation of the plantar fascia which results in the painful heel. A heel spur is a pointed bony outgrowth of the bone of the heel (the calcaneus bone). It is attributed to chronic local inflammation at the insertion of soft-tissue tendons or fascia in the area.^[3] Heel spurs can be located at the back of the heel or under the heel, beneath the sole of the foot. Heel spurs at the back of the heel are frequently associated with inflammation of the Achilles tendon (tendinitis) and cause tenderness and pain. Agnikarma, Sneha, Swedan, & Raktamokshana is the treatment choice of Vatakantaka.

KEYWORDS: Vatakantaka, Plantar Fasciitis, Heel spurs, calcaneus spurs.**1. INTRODUCTION**

Vatakantaka is basically a Vyadhi of vitiated Vata Doshas and come under Vatavyadhi. Acharya Charak in his Charak Samhita has not mentioned directly "Vatakantaka" as a Vyadhi but he stated in his Vatavyadhi Chikitsa Adhyaya (Ch. Chi. 28)^[4] that there are number of other Vatavyadhi present which was not mentioned by him as per their site in the body and symptoms presented by them. Even though the name "Vatakantaka" is not mentioned by Acharya Charaka but as the prime symptom of Vatakantaka is pain in Gulfa Sandhi, it is concluded in Vatavyadhi. Vatakantaka is a painful disorder of ankle joint Gulf sandhi ashrita) can be correlated to signs and symptoms of plantar fasciitis / calcaneal spur. All Bruhatrayi's and Laghutrayi's accepted vatakantaka as vata nanatmajavyadhi. Aggravated vata because of exertion, walking on an irregular surface as well as due to improper placement of foot over the ground takes ashraya in the gulfa sandhi^[5,6] causes pain in padatala pradesha especially in the morning and after a long period of inactivity. Heel pain is observed in a number of conditions like Sevier's disease, Calcaneal Knob, Bursitis, Bony Spur, Pagets, Osteomyelitis, Acute and Chronic Plantar Fasciitis. Amongst these can be correlated with Plantar Fasciitis. It

is estimated that 1 in 10 people will develop heel pain in their lifetime. Incidence occurs between 40 and 60 years of age.^[7,8] The prevalence of this disease increases due to inclination towards wearing high heeled & hard foot wears, improperly fitting footwear's, engaging in strenuous exercise especially jumping, running and standing for prolong period. Vatakantaka is a painful condition of heel caused by improper placement of foot on the ground.^[9] The term vatakantaka implies pain which is like 'Prick by Thorns'. In this condition patient will have pricking kind of pain in the heels. The aggravated vata because of exertion and walking on uneven surfaces takes ashraya in heel and produces pain. As there is repeated abhighata it indicates that there will be dhusti of raktha too. As a whole we can consider involvement of vata and raktha in this condition. Raktamokshana, agnikarma, sweda are treatment told in Ayurveda along with shamana aushadis as per the dosha involved.

2. Etiology

Nidana refers to the cause of the disease. Nidana's can be aharaja, viharaja or manasika. In vatakantaka along with aharaja, viharaja is considered to be the main cause.

According to acharya vagbhata the nidhana is said to be excessive srama^[10] and according to acharya sushruta, keeping the foot on uneven surfaces is said to be the aetiology. Since there will be repeated abhighata either because of excessive srama or because of keeping the foot on uneven surface; it can be considered that there will be raktadhusti as well.^[11]

Although the aetiology is not clear, however, there are varieties of different data on proposed risk factors that lead to repeated micro trauma of the plantar fascia suggested as follows^[12]:

1. Excessive sudden weight load on the foot due to obesity or pregnancy. It has been observed that when the body mass index (BMI) is $> 25\text{kg/m}^2$, there is twofold increased risk of Plantar Fasciitis.^[13]
2. Inflammatory Arthritis like RA & Spondyloarthropathy
3. Diabetes Mellitus^[14], Hypothyroidism^[15], Osteoarthritis^[16]
4. The most common cause of Plantar Fasciitis is tight Achilles tendon (the tendon connecting the calf muscle to the heel) prolongs flexion of the foot causes shortening of the plantar fascia. Therefore, when the individual stands, it stretches the plantar fascia & accelerates pain.^[17]
5. Mechanical imbalances of the foot problems are due to the foot itself or excessive walking in the shoes with poor arch support including flip-flops or soft soles has been attributed to Plantar Fasciitis. Foot & arch problems includes; pes planus (flat feet), pes cavus (high arches) & reduced dorsiflexion of the ankle (equines gastrocnemius). Such risk factors increase the risk of Plantar Fasciitis.^[18]
6. As a person gets older the plantar fascia becomes less like a rubber band & more like a rope which does not stretch very well. The fat pad on the heel becomes thinner & can't absorb much of the shock caused by walking, which damages the plantar fascia & may cause it to swell, tear or bruise. Person may notice a bruise or swelling on their heel.
7. Long distance running especially running downhill or on uneven surfaces.^[19]
8. Occupations requiring spending most time of the day on the feet with lot of walking, standing on hard surfaces.^[20]
9. Some changes in activities such as a sudden jump, starting a new running program or even changing of footwear can easily place the tissue in repeated stress over a short period.^[21]
10. Overweight individuals are more at risk of developing the condition due to excessive weight impacting on their feet.

3. Aetiopathogenesis

The local Vayu enraged by making a false step on an uneven ground, finds lodgement in the region of the ankle (Khudaka, instep according to the others), thus giving rise to a disease which is called Vatakantaka.

4. Prodromal Symptoms

In classics, Purvaroop of Vatakantaka is not available. According to Acharya Charaka avyakta lakshanas is considered to be the Purvaroop for all Vata vyadhi.^[22]

According to Vijaya-rakshita in commentary on Madhava nidana Avyaktham means 'Na Ati Abhivyaktham' and those symptoms which are not exhibited clearly are known as Poorvaroop. So mild symptoms of vatakantaka can be considered as purvaroop.^[23]

5. Symptoms

Pain is said to be the main clinical presentation in vatakantaka. In all the classical texts, in roopavastha similar symptoms of vatakantaka is mentioned; i.e ruja(pain). Even though there is similar opinion in the clinical presentation of vatakantaka as pain, there is difference of opinion in the site of the pain mentioned by different acharyas. According to acharya sushruta, the site of the ruja is mentioned as khudaka pradesha whereas acharya vagbhata mentioned ruja at gulfa sandhi. Since vatakantaka can be correlated to plantar fasciitis, the site of pain in plantar fasciitis is told to be in the medial tubercle of calcaneum.

1. The most reported symptom of Plantar Fasciitis is described as 'first-step pain' or 'post-static dyskinesia', which is pain or irritation at the heel rising after a period of non-weight bearing or inactivity. Such as rising from bed in the morning, standing for several hours, or driving the car for a prolonged period.^[24]
2. Pain is usually worse in the morning as the fascia tightens up overnight. After a few minutes, it eases as the foot gets warmed up.
3. Pain occurs on pressing the inside of the heel & sometimes along the arch.
4. Stretching the plantar fascia may be painful
5. As the condition becomes more severe, the pain can get worse throughout the day, if activity continues.
6. Sometimes there may also be pain along with the outside border of the heel. This may occur due to off-loading the painful side of the foot by walking on the outside border of the foot. It may also be associated with the high impact of landing on the outside of the heel, if the person has high arched feet.

6. Investigation

1. Laboratory investigation performs to rule out underlying endocrine and inflammatory conditions.
2. X-rays are required to rule out other causes of heel pain, specifically calcaneal stress fractures^[25]
3. MRI is performed on patients who are resistant to treatment, to exclude alternative diagnosis that were not observed on the X-ray, such as a calcaneal stress fracture, calcium deposit, or soft-tissue tumour.^[26]

7. Prognosis

The prognosis of any disease, mainly depends on various factors namely the strength of the hetu, strength of the prakupita dosha, the site of the disease, severity of the disease and the chronicity of the disease along with other factors like age, strength of the patient, lifestyle. Vatavyadhis are said to be asadhya according to acharya yogarathnakara and it should be managed without giving any assurance. According to acharya charaka, recent origin vyadhis without any upadravas in strong patients are said to be curable.

8. Upasaya

Specific upashaya and anupashaya is not mentioned. Since Vatakantaka is a Vatavyadhi ushna upachara may give upashaya. And considering nidana shrama, vishrama may give upashaya to the pain.

9. Samprapthi

Due to the nidanas, Vata gets vitiated and lodges in Gulphasandhi and produces Padaruk (khuddakaashrit) in heel. The nidanas like vishama pada and shrama may leads to vataprakopa. Because of abhighata due to placing the pada in uneven surfaces, the vata swarupa rakta dushti happens. i.e marga of vata gets blocked by prakupita rakta, Vata gets aavrata by rakta, in this way aavrata vayu does dhushana of rakta of complete shareera.

Table 1: Showing the Samprapti ghataka of Vatakantaka.

Dosha	Vata
Dooshya	Mamsa, Rakta
Srotas	Raktavah asthivaha
Srotodusti	Sanga, Vimargaman.
Agni	Rakta dhatvagni Mamsa dhatvagni Ama Rakta dhatvagni janya, Mamsa dhatvagni janya
Roga Marga	Madhyama
Udbhavasthana	Pakvashaya
Vyaktasthana	Gulphasandhi, padatala Adhishtana Gulphasandhi, padatala

10. Chikitsa

The general treatment protocol is explained for the vyadhavyadhis in all the Ayurvedic classical texts. The general treatment told for Vatavyadhis are Snehana, svedana, and basti. Charaka has advised dravyas with madhura, amla, lavana, snigdha and ushna properties and upakramas like snehana, swedana, asthapana and anuvasana basti, nasya, abhyanga, etc. Among all of the above asthapana and anuvasana basti is told the best treatment for vata. Methods Veshtana, trasana, madya, sneha siddha with deepana and pachana drugs, mamsarasa and anuvasana basti pacify the vata. In Ashtang Samgraha ritucharya of Hemant ritu is indicated in vatavyadies. According to Sushruta shirobasti, shirosneha, snaihik dhumapana, sukhoshna gandusha is advised for the treatment of vatavyadhies. In *Vangasena*

Samhita, *Chakradatta*, *Gadanigraha* and *Bhaishjyarnavali*. They have stated *Rakthamokshana*, *Pana* of *Erandathaila* and *Daha* with *Soochi* as line of treatment of Vatakantaka *Siraveda* is considered as a treatment of Vatakantaka by *Acharya Susruta* and *Vagbhata*. *Siraveda* is told to be done 2 Angula above *Kshipramarma* with *Vreehimukha Shastra*. According to *Acharya Dalhana* after doing common *Vatavyadhi* treatment, if symptoms still persists, *Shonithavarana*, has to be done. In *Charaka samhitha*, in Indications of *Sweda Vatakantaka* is told.

Treatment for Plantar Fasciitis is divided into numerous categories;

1. Conservative care like patient education, orthotics, soft tissue massage, ice and heat therapy, strengthening exercise, etc.
2. Extra-corporal Shock Wave Therapy (ESWT)
3. Medications – The most common antiinflammatory agents are cryotherapy (ice) followed by non-steroidal anti-inflammatory drugs (NSAIDs). They are helpful in decreasing both, acute pain and swelling, thus they decrease the pain temporary but not curatively. No studies were found evaluating the effectiveness of NSAIDs alone as it is a multifaceted approach.
4. Corticosteroid injections (CSI)
5. Surgery – The most common procedure is a partial plantar fasciotomy which could be open, percutaneous, or endoscopically. Closed is preferred from the open method due to the short recovery time. The success rate of surgical release is variable 70– 90% and the recovery range from several weeks to few months.
6. Nutritional Supplementation – The following additions supplements to the diet have been recommended to ease the pain: Vitamin C, Zinc, Omega- 3-Fatty acid and Glucosamine. Thus, keeping in mind that there is no evidence behind it, and if an individual chose to use it, it will be in addition to the conservative therapy under the doctor supervision.

11. CONCLUSION

Vatakantaka is the Vatvyadhi, It is mostly found in Female patients. Pain in heel is the main symptom of Vyadhi. It can consider to calcaneus spur or Plantar Fasciitis or Heel spurs In modern science. Snehana, svedan, Basti, Raktamokshana & Agnikarma is the main treatment of Vatakantaka.

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