

A REVIEW ARTICLE ON PLANTAR FASCIITIS W.S.R TO VATAKANTAKA

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ABSTRACT

Plantar Fasciitis or what is *Vatakantaka* in *Ayurveda* is a condition characterised by pain in feet, more specifically in the heel. It is a clinical diagnosis, as patients classically presents with pain that is particularly severe with the first few steps in the morning. *Ayurveda* describes the condition as *Vatakantaka*, resulting due to vitiation of *Kapha-Vata Doshas*. Although it is a self-limited condition; however, due to the severity of pain, medical attention is sought. Symptoms will ease quicker if the risk factors are adjusted and multiple treatment modalities are started as early as possible. *Ayurveda* clearly mentioned this condition as treatable. This article reviews Plantar Fasciitis w.s.r to *Vatakantaka*; presents the most effective treatment options currently available.

Keywords: Plantar Fasciitis, *Vatakantaka*, *Abhyanga*, *Agnikarma*, *Suchikarma*, *Abhyantara Eranda Snehapana*

INTRODUCTION

Plantar Fasciitis is a painful condition which is also referred to as a plantar heel pain or heel spur syndrome. In *Ayurveda*, it is described as *Vatakantaka*, particularly caused by walking on uneven surfaces or by *Ati Shrama* which produces *Ruja* (pain) in *Khaduka Pradesha* (*Parshni* or *Padajangha Sandhi*). The features of *Vatakantaka* are like Plantar Fasciitis which is caused by the inflammation of the plantar fascia due to repetitive trauma to the tissue where it is attached to the calcaneous bone. In today's world, the incidence of *Vatakantaka* i.e. Plantar Fasciitis is increasing. Men and women are equally affected. The reasons of high prevalence of this disease are wearing high heels, hard or improper fitting footwear, walking long distance, engaging in strenuous exercise for prolonged periods. Thus, it is seen as wide spreading dis-

ease condition during these days, found in people from all walks of life.

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* ^[1].

Aetiology: 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^[2]:

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 ^[3].

2. Inflammatory Arthritis like RA & Spondyloarthropathy
3. Diabetes Mellitus^[4], Hypothyroidism^[5], Osteoarthritis^[6]
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^[7].
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^[8].
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^[9].
8. Occupations requiring spending most time of the day on the feet with lot of walking, standing on hard surfaces^[10].
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^[11].
10. Overweight individuals are more at risk of developing the condition due to excessive weight impacting on their feet.

According to *Ayurveda*, this condition occurs due to the vitiation of *Kapha Dosha* along with *Vata Dosha*.

Some common causes of *Vata Dushti* –

1. Excessive exercise

2. Barefoot walking which ultimately leads to *Vata Dushti*
3. Lack of sleep
4. Mental stress leads to *Vata Kopa*

Some common causes of *Kapha Dushti* -

1. Lack of exercise
2. Excessive use of sweet, oily food leads to overweight, obesity, diabetes (one of the *Kaphaj Vikaras*).

Symptoms:

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^[12].
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.

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^[13]
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^[14].

Treatment:

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 anti-inflammatory 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 ^[15].
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 ^[16].
7. *Ayurveda* has mentioned the treatment of *Vatakantaka* under *Vatavyadhichikitsa*. Both *Bahya* & *Abhyantara Chikitsa* must be done to treat it, which include local *Ishtika Sweda*, *Valuka Sweda*, *Snehana*, *Upanaha*, *Agnikarma*, *Raktavsechana*, *Bandhana*, *Suchikarma* (*Viddhakarma*) and *Abhyantara Eranda Snehapana* ^[17].

DISCUSSION

According to *Ayurveda*, this condition is due to vitiated *Kapha Dosha* along with *Vata Dosha*. *Vata Dosha* is the main *Dosha* of the three *Doshas*. It has the func-

tions like movements in our body, neurological & motor activities. The improper walking pattern, heavy walking or making a false step on an uneven surface/ground vitiates the *Vata Dosha* at *Gulpha Sandhi Pradesha* which causes *Vatakantaka*. This vitiated *Vata* also causes *Ruja* (pain).

Considering *Vatakantaka* is the result of vitiated *Vata Dosha* along with *Kapha Dosha*, treatment for *Vatakantaka* is *Shamana* of vitiated *Vata Dosha* by *Bahya Snehana*, *Upanaha*, *Raktavsechana*, *Viddhakarma*, *Agnikarma*, *Bandhana* and *Abhyantara Eranda Snehapana*. *Snehana* and *Swedana* forms the basic lines of treatment adopted in *Vataja Vyadhi*. *Swedana* is indicated in *Vatakantaka* by *Acharya Charaka*, but *Chakrapanidatta* has specified the type of *Swedana Valuka Sweda* in *Vataja* and *Kaphaja Vyadhi*. All these are *Vata Shaman Chikitsa Upakrama*.

CONCLUSION

Plantar fasciitis w.s.r to *Vatakantaka* is a disease in the contest of *Vatavyadi* as a painful condition of heel caused by its improper placement of foot on the ground that disturbs the daily activity. It is a clinical diagnosis and a self-limited condition in majority of patients. However, it is successful treatable if more than one modality is used at the same time in the early symptoms. The treatment modalities like *Abhyanga*, *Swedana*, *Raktavsechana*, *Agnikarma* etc. are helpful in *Vatakantaka*. With the help of this treatment, we can correct the vitiation of *Vata* and can give relief to the patient.

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