Siravedha a para surgical approach in the management of Plantar fasciitis – A single case report

Riddhi Ganatra¹, TS Dudhamal²

¹  M.S. Scholar, 2  Associate Professor, Dept. of Shalyatantra, I.T.R.A. Gujarat Ayurved University, Jamnagar, Gujarat-361 008, India.

ABSTRACT

Plantar fasciitis is a commonly encountered disease condition that causes medial plantar heel pain. It is a self-limiting condition with appropriate treatment and cares plantar fasciitis improves within a short duration. This case report refers to the complete cure of chronic plantar fasciitis in 42-year-old women with the help of Siravedha along with Rasna Saptak Kwatha. Siravedha was done from Sira situated at 2 Angul above Kshipra Marma in Pada. Two sittings of Siravedha were performed at intervals of 15 days. 20 ml freshly prepared Rasna Saptak Kwatha orally twice a day empty stomach was prescribed to the patient for 1 month. Windlass test of plantar fasciitis became negative after 15 days of treatment. After one month of treatment, the protocol patient had significant improvement in pain, swelling, and tenderness in the heel region. The 12 months of follow-up revealed that the heel pain didn’t reoccurred during the initial few steps after rest or even after prolonged standing. This single case is an example of the practical application of Siravedha in the management of plantar fasciitis, further study is needed for confirmation and evidence-based documentation.

Keywords: Ayurveda : Plantar fasciitis, Siravedha, Vatakantaka,

Introduction

Plantar fasciitis represents the common musculoskeletal entity affecting the facial enthesis in the hindfoot. It is a chronic degenerative condition of the plantar fascia with a lifetime prevalence of 10% in the general population. Plantar fasciitis is disabling condition that represents a form of tennis elbow at the heel. It has been suggested that repetitive microtrauma at the point of insertion in the calcaneal tubercle results in plantar fasciitis. [1] The classic sign of plantar fasciitis is worst heel pain occurs after resting with initial footsteps and it lessens or resolves as they walk. Plantar fasciitis is a self-limiting condition that usually

*Corresponding Author:
Dr Riddhi Ganatra
630, 6th Floor, Department of Shalyatantra, ITRA, Opposite B Division Police Station, Jamnagar 361008

E-mail: ridsganatra21@gmail.com

Submitted: 18.11.2021  Received: 20.11.2021
Revised: 23.11.2021  Accepted: 26.11.2021
needs 6 to 18 months for resolution. In contemporary science wide spectrum of pain management modalities are available such as oral non-steroidal anti-inflammatory drugs (NSAIDs), orthotics, night splints, extracorporeal shock wave therapy (ESWT), long-acting hydrocortisone injection, and lastly plantar fasciotomy. All these treatments have their side effect with some limitations. Acharya Sushruta described the condition called Vatakantaka (painful heel) under the Vatavyadhi (disorder due to Vata) which can be correlated with the plantar fasciitis. Ayurveda has its tools and treatment for pain management and for this condition, Sushruta suggested Siravedha (blood-letting by venesection) from Sira (vein) situated at 2 Angul above Kshipra Marma in Pada. Siravedha is one of the primeval and most popular Parasurgical procedures. The purpose of this study was to confirm the practical utility of Siravedha in the management of plantar fasciitis mentioned in the classical text. Rasna Saptak Kwatha has a considerable effect on balancing vitiated Vata by its Vatamiloman property.

**Case report**

A 42-year-old, homemaker woman presented to Shalya Tantra outpatient department with 2 years history of pain in the right inferior heel. The pain is worse with initial footsteps after rest and prolonged standing. The visual analogue score (VAS) was 8 in the patient. The patient had a significant history of excessive walking with flat lathered footwear. There was no history of trauma to the heel. The patient consulted a general practitioner and underwent unscheduled analgesics and NSAIDs for 1 year. At the time of consultation in Ayurveda OPD, the patient was not taking any type of modern or Ayurveda medications.

**Clinical findings**

On general examination, the patient was fit and well oriented. There was no pallor or no icterus noted. All vitals of the patient were within normal range. On inspection, there was diffuse swelling (Grade III) and mild redness was noted in the right inferior heel region, and on palpation tenderness (Grade IV) was illustrated at the posteromedial aspect of the heel. Passive dorsiflexion of toes of right foot aggravates the pain (Windlass test positive). All routine blood investigations were within normal range. An X-ray (lateral view) of the right foot was done and there is no calcaneal spur was present and local ultrasound examination of the plantar region was done and presented an abnormal thickness of about 5.9 to 7.3 mm of the plantar fascia on the right side of the foot. **[Figure 1]**

**Diagnostic focus and assessment**

Based on clinical examinations and ultrasonography patient was diagnosed with plantar fasciitis in the right foot. In Ayurveda, this condition is diagnosed as Vatakantaka. Calcaneal spur or calcaneal stress fracture or Haglund deformity was excluded as there was no significant finding noted in an x-ray. Nerve entrapment and tarsal tunnel syndrome in the foot were not confirmed because the patient had no symptoms like burning or numbness. Heel pad atrophy was excluded by USG. Sever disease or retrocalcaneal bursitis was excluded because tenderness was not presented in the Achilles tendon region.

**Therapeutic intervention**

The patient was treated with 2 sittings of Siravedha (40 ml/sitting) at intervals of 15 days along with adjuvant ayurvedic medication. Rasna Saptak Kwatha 20 ml twice a day empty stomach orally for 1 month was given to the patient.

**Procedure of Siravedha**

**Purva Karma**

Informed written consent was taken from the pa-
tient before the procedure. The patient was advised to take Mudga Krishara while coming for the Siravedha procedure. Materials required for Siravedha such as scalp vein no 20, sterile kidney tray, gauze piece, etc kept ready after sterilization. All vitals (TPR, BP, SPO₂) of the patient was taken before the procedure. Local Snehani with Tila Taila and Nadi Svedan was performed at foot.

**Pradhana Karma**

The patient was advised to sit comfortably on the table. Tourniquet was applied above the ankle region to make the vein more prominent. A vein from the dorsal venous arch situated 2 fingers above Kshipra Marma was selected. After selecting the vein for Siravedha part was cleaned and sterilized with spirit. Then 20 no. scalp vein was inserted into the vein and let the blood flow in the kidney tray. Bloodletting was continued until it stopped by itself. (Approximately 40 ml of blood let out in one sitting).

**Paschat Karma**

After the stoppage of blood scalp vein was removed. The site of Siravedha was cleaned and sterile bandaging was done with help of a sterile gauze piece and band-aid. Post-procedure all vitals of the patient were taken. The patient was advised to take a rest for some time and then allowed to go home.

The same procedure was repeated after 15 days. [Figure 2]

---

**Therapeutic assessment**

A therapeutic assessment of the patient was done by adopting a special scoring pattern. [Table 1]

**Table 1 scoring pattern for therapeutic assessment:**

<table>
<thead>
<tr>
<th>Symptoms and signs</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Visual analog scale</td>
<td>No pain</td>
</tr>
<tr>
<td>Swelling</td>
<td>No swelling</td>
</tr>
<tr>
<td>Tenderness</td>
<td>No tenderness</td>
</tr>
</tbody>
</table>
Outcome measurements and follow up

The patient was assessed every 7 days for pain, swelling, and tenderness. At the end of 7 days, the VAS score became 05, and swelling reduced up to Grade II. Windlass confirmatory test for plantar fasciitis was negative after 15 days of treatment and the patient had no pain during initial footsteps after rest. After 21 days significant improvement was found in a patient as the VAS score became 03, the swelling was completely reduced in the patient and tenderness was grade I. [Table 2]

Table- 2: Therapeutic assessments:

<table>
<thead>
<tr>
<th>Assessment criteria</th>
<th>Before treatment</th>
<th>After 7 days</th>
<th>After 15 days</th>
<th>After 21 days</th>
<th>After 28 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain in heel</td>
<td>08</td>
<td>05</td>
<td>05</td>
<td>03</td>
<td>00</td>
</tr>
<tr>
<td>Swelling</td>
<td>03</td>
<td>02</td>
<td>02</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Tenderness</td>
<td>04</td>
<td>02</td>
<td>02</td>
<td>01</td>
<td>00</td>
</tr>
<tr>
<td>Windlass test</td>
<td>Positive</td>
<td>Positive</td>
<td>Negative</td>
<td>Negative</td>
<td>Negative</td>
</tr>
</tbody>
</table>

Since, the last 2 months patient living symptoms free and there was no recurrence of plantar fasciitis was noted.

Discussion

Plantar fasciitis is a challenging condition for a physician to treat conservatively as the heel is a weight-bearing portion of the body. Pain management modality should be considered as a cornerstone in treating such type of disease condition. Recent research suggested that women are more likely than men to experience plantar fasciitis, the exact reason for this is still unclear but probably obesity, pregnancy, or wearing unsupportive shoes affects women more than men.\(^5\)

In Ayurveda, Siravedha describes as Ardha Chikitsa or one of the supreme pain management modalities in Shalya Tantra.\(^6\) Sushruta suggested Siravedha as the first line of treatment in Vatakantaka. Ayurveda believes that any type of Vyadhi result from mainly two reasons i.e., Dhatukshya (depletion of body tissue) or Margvarana (obstruction in the natural course of Vata, etc. Dosha). Here, probably in this case vitiated Vata follows Margavranajanya Samprap提i and causes Vatakantaka. Therefore, Siravedha might be helpful for the clearance of obstruction of vitiated Vata caused by Kapha or Pitta. The vitiated Vata is the main culprit responsible for Ruja in the body that’s why Siravedha gives instant pain relief in the patient. Siravedha also helps in removing vitiated Dosha i.e., Vata, Pitta, and Kapha from the diseased place and leads to the proper function of Rasa and Rakta Dhatus which help in nourishment & proper function of that part.

Siravedha in plantar fasciitis improves the venous circulation in the foot and thus Raktavrutavata is relieved and instant pain relief is observed.\(^7\) Hence swelling and tenderness is reduced in the heel region. As per contemporary science bloodletting in plantar fasciitis might help in relieve venous congestion, improve venous circulation, and increase oxygenated blood supply to the plantar area in the foot. Thus, it produces analgesics and an anti-inflammatory effect in plantar fasciitis.\(^8\)

Rasna Saptaka Kwatha is a polyherbal formulation that has a significant role in balancing vitiated Vata along with it leads to Vatamulomana. The researchers suggested that herbs included in Rasna Saptaka Kwatha have anti-inflammatory, analgesic, and anti-arthritic properties. Thus, it helps in relieving pain and swelling in plantar fasciitis.\(^9\)

This case report presented the practical utility of Siravedha along with adjuvant herbal Ayurveda drugs in the management of plantar fasciitis. Para surgical approach in the management of plantar fasciitis gives positive outcomes without any side effects.

ACKNOWLEDGEMENTS: Not Applicable
CONFLICT OF INTEREST: Author declares that there is no conflict of interest.

SOURCE OF SUPPORT: None

References


Legends for figures

Figure 1 USG of Right-side plantar region

Figure 2 Siravedha from 2 Angul above Kshipra Marma

How to cite this article: