

Siravedha (venesection therapy) in the management of Burning Feet Syndrome-A Single Case Study

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ABSTRACT:

Burning feet syndrome is characterized by a sensation of burning and heaviness in the feet and lower extremities, which is a common disorder frequently encountered by general practitioners. According to Ayurveda, this condition is akin to *Padadaha*. *Padadaha* means burning in feet, it is association of *Pitta* and *Rakta* in which *Vata* aggregates due to excess walking. A 38-year-old male patient presented with complaints of severe burning and sweating in the left foot for 9 months. The patient was treated in the outdoor department with two successive sittings of *Siravedha* (venesection therapy) each at the interval of 7 days. Then follow-up was taken after 10 months for reoccurrence. After the treatment, the symptoms of burning and sweating were completely relieved.

KEYWORDS: Burning feet syndrome, *Padadaha*, *Siravedha*, Venesection therapy.

Received: 07.05.2022 Revised: 20.06.2022 Accepted: 23.06.2022 Published: 03.07.2022



INTRODUCTION:

Burning feet syndrome is a condition that causes severe burning and aching of the feet, hyperesthesia, and vasomotor changes of the feet that lead to excessive sweating^[1] The burning can sometimes be accompanied by feeling of pins and needles or tingling in these regions.^[2] The heat and pain can be limited to the soles of the feet, but also might affect the tops of the feet, the ankles, and even the lower legs.^[3] This condition occurs more frequently in women and usually manifests itself when a person is between 20 and 40-year-old. [4] Nighttime is when almost all sufferers of this syndrome report the worst heat

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> symptoms, with the condition getting better as morning comes. There is no specific aetiology and it can occur as an isolated symptom or as part of a symptom complex ^[5] in a variety of clinical settings. In contrast to the presence of distressing subjective symptoms, the physical examination is marked by a paucity of objective signs. The pathophysiology of Burning feet syndrome is not very clear and treatment varies depending on the aetiology.^[6] It can be inherited, or it can be caused by pressure being put on the nerves. Burning feet syndrome may caused be due to hypothyroidism, diabetes



mellitus, rheumatoid arthritis, zinc deficiency, alcohol addiction, and vitamin B (specifically pantothenic acid) deficiency.^[7]

According to Ayurveda, this condition is akin to Padadaha. explained in Sushruta Samhita in Vatavyadhi [8], In Padadaha there is an association of *Pitta* and *Rakta* in which Vata aggregates due to excess walking.^[9] This condition is also categorized under the heading of Pittaja Nanatmaja Vyadhi (ailments caused due to Pitta Dosha). It also occurs as a symptom of *Pittaraktaavrit Vata* ^[10] The incidence (7%)^[11] of *Padadaha*(burning feet) is increasing day by day in today's population due to the fast life in cities. Hence in the treatment found in the Avurveda text, Sushruta mentioned that Siravedha should be done in diseases like *Padadaha, Chippa,* etc^[11]. This is a single case report of management of burning feet syndrome w.s.r to Padadaha with help of Siravedha i.e., Bloodletting therapy.

CASE REPORT:

A 38-year-old male, moderately built bus driver, presented with complaints of severe burning and sweating in the left foot for 9 months attended the Shalya OPD. The patient gradually developed symptoms of burning and sweating. The symptoms used to get aggravated during his driving occupation, summer weather, and night-time, and comparatively less in the cool weather. The patient had visited private clinics before and had taken allopathic treatments but did not get relief and had difficulty in falling asleep occasionally because of severe burning. No significant past medical or surgical history was found. On local examination of the foot, the strength was 5/5 in both lower limbs, with a negative Babinski sign along with normal tone and normal range of movement. On sensory system

examination hyperesthesia on light touch was present in left foot. There was no change in colour and mild sweating was seen on the left sole. Peripheral pulses were palpable in both limbs. The visual analogue scale (VAS) for the pricking type of pain was six. The burning sensation was severe. Blood routine, blood glucose levels, urine routine/micro and were within normal range & serological investigations HIV and HbsAg were negative.

DIAGNOSTIC FOCUS:

Based on clinical examinations patient was diagnosed with burning feet syndrome in left foot as on the right foot there were no color changes and no hyperesthesia with a negative Babinski sign. In Ayurveda this condition is known as Padadaha. As there was no history of smoking with no signs of discoloration and numbness and the peripheral pulses were palpated normal so the possibility of Thromboangiitis obliterans was excluded. Blood glucose levels were within normal range and sensory & motor examination was normal hence possibility of diabetic neuropathy was excluded.

THERAPEUTIC INTERVENTION:

The patient has been treated with 2 sittings of *Siravedha* i.e., 1^{st} sitting and 2^{nd} sitting on 8^{th} day. Earlier the patient was given conservative medicines and local applications but no any significant results were noted and Acharya has mentioned the *Padadaha* entity very first in the indications of *siravedha*, so keeping this in mind the particular therapeutic intervention was carried out.

Method of Siravedha:

Informed written consent was taken from the patient before starting of procedure and the treatment protocol



was explained to the patient in brief. All the vitals like pulse, BP, Spo2 were checked and ensured within normal limit. The patient was advised to take Krushara 1 hour prior to Siravedha. All the sterile materials required for Siravedha was kept ready. (Figure1) Part preparation with performing Snehana and Naadi swedana on below-knee was done. Then he was made to sit on a stool of the height of the knee. Tourniquet was tied on the left lower leg and Siravedha was done with an 18 G from near the Kshipra Marma (located exactly between the web between the great toe and first toe) of left foot. Around 40 ml of blood was let out during both the sittings (Figure2). Then tight bandaging was done after stopping bloodletting. The patient was observed upto half an hour for any complications. This same procedure was repeated after 7 days. Total 2 sittings of *Siravedha* were done.

OUTCOME AND FOLLOW UP:

After 7 days (1st sitting), there was a considerable reduction in burning and 6 to 4 on the VAS scale, and the burning sensation reduced from severe to moderate. After 14 days of treatment i.e., 2 sittings, the patient had significant relief in burning sensation from moderate to mild and the VAS scale was reduced up to grade 2. The patient was observed for the next 15 days with follow-up after 30 days and 10 months. The burning sensation completely reduced from VAS 2 to 0.

After completion of the treatment protocol patient was assessed for any recurrence of symptoms. The patient got complete relief from symptoms and there was no recurrence of symptoms within 10 months of the follow-up period.

Clinical images:



Figure 1: Material of Siravedha



Figure 2: Procedure of Siravedha



DISCUSSION:

The burning feet syndrome is also named Grierson-Gopalan syndrome and the reason for burning feet is sensory neuropathy. The symptoms seen are burning feet syndrome which is a condition that might be correlated to Padadaha. While narrating about the disease Padadaha Acharva mentioned specifically that due to *Chankramanadi*(excessive traveling) ^[12] is the main Hetu(cause) of disease. Samprapti of the Padadaha may be associated with Vata when in association with *Pitta* and *Rakta* produces a burning sensation in the foot ^[13]. Hence, this is a condition where Vata and Pitta play a major role in the causation of the disease. The symptoms of hyperesthesia and burning indicate the involvement of the *Rakta* in the *Samprapti* too.

Patient has an occupational history of continuous bus & truck driving along with the habit of alcoholism, both these factors lead to vitiation of Pitta and Rakta in the body. The left foot of the patient would continuously come in contact with the heating surface of the truck during driving which can be considered an addon factor for making Khavaiguniya (A favourable site for lodgement of vitiated Dosha) in the Pada region. Therefore, here through Margaavranajanya Vatavyadhi Samprapti patient developed Padadaha. Siravedha is the choice of treatment in Margaavranjanya Vyadhi Acharya Sushruta has and also mentioned Siravedha in the line of treatment in *Padadaha*^[14] in which site mentioned is two fingers above the Kshipra Marma which means from the dorsal venous arch of the foot. ^[15]

Therefore, keeping this in mind intervention was adopted as explained i.e., *Siravedha* to combat the *PittaRaktadushti Avrana* along with *Vata Dushti*. Studies suggested that at the peripheral level bloodletting therapy expels the blood with а high concentration of burning pain-producing substances, improving local circulation & helping to repair damaged tissue.^[16] Hence, the modality was executed successfully in this case & can be used in similar cases of Padadaha. However, this is a single case study; further study can be extended to original research work on a significant number of patients to establish a definitive protocol for the management of Padadaha.

CONCLUSION:

A single case report demonstrates that *Siravedh*a(venesection) is an effective procedure to manage symptoms of *Padadaha*.

LIMITATION OF STUDY:

The study would be more scientific if the nerve conduction study would have been taken before the procedure. As this is a single study so for its scientific validation the same protocol may be tried in more numbers of patients of *Padadaha*.

CONSENT OF PATIENT:

Informed written consent of the patient was taken for procedure and publication of the images without disclosing the identity of a patient.

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CONFLICT OF INTEREST: Author declares that there is no conflict of interest.

GUARANTOR: Corresponding author is guarantor of this article and its contents.

SOURCE OF SUPPORT: None

HOW TO CITE THIS ARTICLE:

Dhalani K, Ganatra R, Dudhamal TS. *Siravedha* (venesection therapy) in the management of burning feet syndrome-A Single Case Study. Int. J. AYUSH CaRe. 2022; 6(2):178-182.