



COMPARITIVE CASE STUDY ON THE EFFICACY OF GOURA SARSHAPA POTTALI SWEDA ON PLANTAR FASCIITIS WITH RESPECT TO DIFFERENT TIME OF THE DAY

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Abstract

In the present era, plantar fasciitis contributes to 80% of the orthopedic heel pain disorders¹. The life style changes and work nature of modern times contribute to this statistics. Local application of ice packs, NSAIDS, steroid and even surgery are used conventionally for treatment of this condition^{2,3}. In Ayurveda, Vatakantaka simulates many features of plantar fasciitis. Para surgical procedures like Agnikarma with suitable Dahanopakarana is found to be effective but this procedure requires at least 2 sittings and more medical care.

Methodology: In this comparative study, 2 patients with plantar fasciitis were chosen for performing Sarshapa pottali sweda. In patient A, swedana karma was done in Poorvahna / early morning which is a kaphaprabudha kaala and in patient B dusk time Poorvarathri / aparahna kaala i.e. which is Kapha and vata prabudha Kaala. Duration of the process is 20 mins for 7 days for both patients. The progress in pain was assessed with foot function index on 0th day and 7th day.

Result: In patient A, the relief of pain was noted, but recurrence occurred with reduced intensity after 7 days. In patient B relief of pain was achieved within first 3 days of procedure itself and recurrence of pain was not reported.

Conclusion: Sarshapa pottali sweda is an easy and effective method for managing plantar fasciitis. Procedure is more effective when done during Vata and Kapha prabudha kaala, which is at sunset time.

Keywords : *Vatakantaka, sarshapa pottali pinda sweda*, plantar fasciitis

Introduction:

Plantar fasciitis is an inflammatory condition caused by repetitive microtears in the aponeurosis of the foot also called plantar fascia. About 11-15% of all foot symptoms may point towards plantar fasciitis and requires professional care⁽⁴⁾. In India the incidence of this condition is 10 percent of general population, 83 percent of which belongs to active working class (25 to 65 years). Incidence is more among females. Risk factors include obesity, decreased ankle flexion, shortened or tightened achilles tendon, pes planus / flat foot, pes cavus or high arch foot⁵. Typical features include heel stiffness in morning for few initial steps and after a period of inactivity.

Vatakantaka described by Acharya Sushruta is caused due to vitiation of *vata dosha* after long standing / walking on uneven surfaces⁶. It is mentioned as *snayu asthisandhigata vata vyadhi* involving the *Madhyama roga marga*. The ashraya is gulpha sandhi. The pain is predominant after rest and in morning hours. This shows the involvement of Kapha and Ama anubandha along with vata⁷. Panchakarma procedures like Basti, virechana, raktamokshana and agnikarma are mentioned in samhithas. Bahirparimarjana chikitsas like upanaha sweda, Valuka sweda Abhyanga, swedana, Ishtika sweda are found to be useful.

As a vatakaphahara, *Ama nashaka chikitsa* is a treatment protocol, choorna pinda sweda with Goura sarshapa is a treatment of choice⁸. The physiological and disease process follow the rhythmic variation in response to time and season. The diurnal tridoshic variations are closely observed and 2 different times was chosen for patient A and B. In patient A poorvahna or early morning which is Kapha prabudha Kaala is chosen as it was the period of maximum pain. In patient B, aparahna (end of day) sunset time and poorva rathri (Early hours of night) was chosen for procedure.

Materials and methods

- 2 clinically diagnosed cases of Vatakantaka (plantar fasciitis) were chosen.
- Non weight bearing Windlass test was used as diagnosis criteria due to its high specificity.
- Age group between 25 to 65 years (considering the prevalence).

Exclusion criteria

- Uric acid elevation.
- Calcaneal fracture
- Structural foot deformities were ruled out.
- Age below 25 years and above 65 years.

Goura sarshapa (<i>Brassica campestris</i> Linn.)	2kg
Cotton cloth for pottali	40cm Square cloth (8 nos)
Thread	5 feet long.
Vessels for heating pottali	1

Procedure:

Swetha Sarishapa was fried powdered and made into 250gm pottalis, 2 for each patient. Pottali sweda 20min for each patient. In patient A, sweta sarshapa pottali sweda was done early morning 6:30-7am, for In patient B at sunset time 5.30 - 6 pm for same duration 20min for both, for 7 consecutive days.

Patient is comfortably seated on the droni with feet extended. Plantar fascia was manually extended during procedure to enhance stretching of the fascia. Heat was applied to whole feet with focus on the heel region. The heat of pottali was constantly checked manually to avoid burns. Samyak swinna lakshanas were noted.

Assessment of samyak swinna lakshana:

SAMYAH SWINNA LAKSHANA	PATIENT A	PATIENT B
<i>sheeta kshayam</i>	+	+
<i>shoola kshayam</i>	+	+
<i>anganam mardavam</i>	+	+

Observation and results

Assessment of result using Foot Function Index

Assessment of patient A on 0th and 7th day:

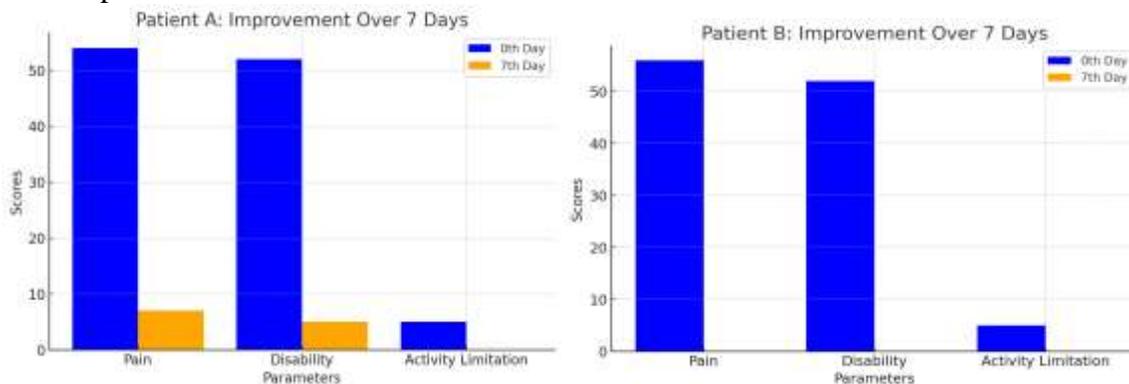
PARAMETER	0TH DAY	7TH DAY
PAIN	54/90	7/90
DISABILITY	52/90	5/90
ACTIVITY LIMITATION	5/50	0/50

Assessment of patient B on the 0th and 7th day:

PARAMETER	DAY 0	DAY 7
PAIN	56/90	0/90
DISABILITY	52/90	0/90
ACTIVITY LIMITATION	5/50	0/50

In patient A, pain reduced from 60 percent to 7percent, disability reduced from 57 percent to 5 percent, activity limitation improved from 5 percent to nil. There was a significant reduction in pain but recurrence with mild intensity was reported by patient on 12th day after treatment.

In patient B, pain reduced from 62 percent to nil, disability reduced from 57 percent to nil, and activity limitation from 10 percent to nil.



Discussion:

Vatakantaka is a common vatavyadhi of modern time with gulpha sandhi as its ashraya. Nidana include shrama, and walking on uneven surface. On close observations, the nature of pain was more during morning hours and after a period of inactivity. This indicates Kapha samsarga and ama anubandha along with vata. Vatakaphahara, Amanashaka, shotha shodahara procedure is choosen as the mode of treatment.

Any snehana procedure by virtue of its unctuous quality is likely to worsen the imbalance of Kapha dosa and pathogenesis of Ama. In contrast Swedana procedures helps in rectification of the above imbalance. So pottali sweda is choosen as the sudation technique best suitable for this condition.

Sarshapa - both Goura and Rakta variety is useful in ama nashana due to tikshna guna, ushna veerya and Katu vipaka. But Goura sarshapa has katu thikta rasa and teeksna snigdha guna in addition to Rakta variety with Katu rasa and thikshna guna. So Goura sarshapa is more effective when rasa panchaka of the 2 drugs are compared. These properties make it efficient in kapha vata roga and useful in shola and amaharana.

The Tridosha siddhanta and its influence on biorhythm and diurnal variations on human physiology and pathology is taken into consideration. This cyclic variations of Tridosha influences Agni, Shareerabala and vyadhi avastha of the patient.

TIME	VATA	PITHA	KAPHA
DAY	Aparahna	Madhyahna	Poorvahna
NIGHT	Apara rathri	Madhayama rathri	Poorva rathri

Early hours of the day is a Kapha dominant kaala .It is the time when maximum pain is experienced. So in patient A, morning hours 6-7 am was choosen for treatment. In patient B, sunset time between 5-6pm was choosen for treatment. This is a Vata and Kapha dominant kaala. Both doshas are having equal action on the vyadhi. So on observation, it was found that patient B got better relief of pain .The pain was almost no.

l from 3rd day onwards. It can be understood that sunset hours is the best time to treat vata kapha anubandha vyadhi with sweda sarshapa pottali sweda.

Conclusion:

Sarshapa portali sweda is a simple and effective procedure which can be done on op basis. The best time for doing performing this procedure is at dusk / sunset times. The efficacy of the treatment is such that patient can experience absence of pain within 3 days of treatment. Clear understanding diurnal variations of tridosha and its logical application on the vyaadhi avastha plays a key role here so that treatment can give fast and better relief to the patient.

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