A COMPARATIVE CLINICAL STUDY OF EFFECT OF LOCAL *RAKTAMOKSHANA* AND DICLOFENAC SODIUM ORALLY IN THE MANAGEMENT OF CALCANEAL SPUR (PLANTER FASCITIS)

Dr. Anilkumar Ramkrishna Tarale[1], Dr Pradip S. Mohurle[2], Dr Santosh Madhukar Doifode[3], Dr Om Prakash Patel[4], Dr. Pradip Adhav[5]

[1]M.S.-Shalya Tantra,Medical Officer, District General Hospital, Khamgaon, Dist-Buldhana, Maharashtra, 444303.

[2]Lecturer, Department of Agadatantra, Vyavahar Ayurveda Evum Vidhivaidyaka, North Eastern Institute of Ayurveda & Homeopathy (NEIAH), Shillong, Meghalaya, 793018, Email: pradipsm21@gmail.com

[3]Assistant Professor, Dept. of Dravyaguna, Shri Gurudev Ayurved College, Mozari, Dist-Amaravati, Maharashtra, 444902

[4]Lecturer, Department of Homoeopathic Pharmacy, North Eastern Institute of Ayurveda & Homeopathy (NEIAH), Shillong, Meghalaya, 793018

[5]Associate Professor, Department of Shalya Tantra, Mansarovar Ayurvedic Medical College and Research Centre, Bhopal. 462042

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1.1 INTRODUCTION

Ayurveda mainly deals with treatment of *Vyadhis* and maintenance of health of human being. In Ayurveda there are eight branches namely 1. *Kayachikitsa* 2. *Balchikitsa* 3. *Grahachikista* 4. *Shalya* 5. *Shalakya* 6. *Agadatantra* 7. *Jara* 8. *Vajikaran Chikitsa*. *Shalyatantra* is an important branch of Ayurveda.[1] *Shalyatantra* trades diseases of body as well as mind with more effective methods like *Shalyakarma*, *Ksharkarma, Agmikarma* & *Raktamokshan*. *Shalya Tantra* is branch of Ayurveda that deals with Excision (removal) of various foreign bodies such as *Turna, Kashtha, Ashmari, Ashthi,* hairs, iron material, nails etc and intrauterine foetus and internal and external abscess. For *Nirharana* of this *Shalya* various methods and instruments are described by Susruta like *Yantra, Shashtra, Kshar* and *Agni*. [2]

Planter fascitis i.e. calcaneal spur is a modern disease. Which means inflammation of the planter fascia. Calcaneal spurs are the soft, bendable deposits of calcium that are the result of tension and inflammation in the planter fascia attachment to the heal. It is a frequent degenerative (wear-related) illness and is not easily treated.[3]

So for this research we have taken this unique subject to study effect of Local *Raktamokshana* in calcaneal spur i.e. planter fasciitis. Because though having all the modern facilities available then also the patients need to learn to live with the condition by managing it conservatively by special footwear, resting regularly when walking or running over long distances and professional care by podiatrist may assist. In severe condition, an anaesthetic injection may be considered all through this should be done when patients cannot tolerate the pain that is persisting even when resting the feet. Usually anti-inflammatory drugs and corticosteroids injections during acute aggravations are the main method to treat the inflammation. Despite the claims of various product manufacturers there is no cure all.[4]

In ayurveda the symptoms of planter fascitis can be correlated with *Shonitavrita* vat and even with that of *Vatkantaka* as quoted by Sushruta, the father of Indian surgery and Chakradatta and Sushruta both has mentioned the usage of *Raktamokshana* in the management of above disease.[5]

1.2 MATERIAL AND METHOD:

Type of study: Open controlled study

Place of study: The *Shalyatantra* O.P.D. & I.P.D.M.A. Podar Hospital Worli, Mumbai

Sample size: Group A : 30 patients; Group B : 30 patients

Consent: A well informed written consent of all patients included in my study will be taken before starting treatment.

Grouping: Group A : Local *Raktmokshna*; Group B : Hot fomentation & Tab. Diclofenac sodium 50mg. 1bd for 10 days.

Methodology: Group A: Standard method of *Raktmokshna* as described in Sushruta Samhita was followed. Group B: Drug was purchased from standard Pharmaceuticals.

Duration: Group A : *Raktamokshana* Once in a week for 3 weeks. Group B : for 10 days.

Follow Up : Once in a week for three weeks

INCLUSION CRITERIA : 1. Age : 30 to 75 years 2. Sex : Both male and female 3. Patients having all symptoms and ready to abide trial procedure 4. Spur of heel 5. Lower caleaneal spur 6. Upper calcaneal Spur 7. Dorsal calcaneal spur 8. Fascitis Plantaris

EXCLUSION CRITERIA: 1. Diabetes 2. Blood Dyscrasias 3. H.I.V. +ve 4. Hbs Ag +ve 5. Anaemic 6. Pregnant 7. Age below 30 years and above 75 years. 8. Fracture of any bone combining ankle joint. 9. Old fracture 10. Arthritis of ankle joint

INVESTIGATIONS: 1. X Ray foot Ap / Lat 2. If needed sonography / Doppler study / MRI 3. CBC, ESR, B.T., C.T., P.T. 4. Blood sugar : a. Fasing b. Post prandial 5. Urine : a. Routine b. Microscopic 6. HIV and VDRL 7. Hbs Ag

CRITERIA FOR ASSESSMENT: Pain while walking / standing / all-time pain, Tenderness, Swelling.

Visual Analogue Scale: The VAS was used to help out assessing the severity of pain. Patients were asked to locate a finger at any of the numerical over the scale and the severity of pain was assessed according to that for which the numerical are labelled.[6]

1. **For Pain -** Grade 0: No pain; Grade 1: Mild Pain- 1 to 2; Grade 2: Moderate- 3 to 6; Grade 3: severe- 7 to 10 2.
2. **For Tenderness** - Grade 0: No tenderness; Grade 1: mild; Grade 2: moderate, Grade 3: Severe 3.
3. **For Swelling**- Grade 0: No tenderness; Grade 1: mild; Grade 2: moderate; Grade 3: Severe

Symptom Score: 1 to 3 = mildly symptomatic; 4 to 6 = moderately symptomatic; 7 to 9 = severely symptomatic

1.3 OBSERVATION:

To evaluate and compare the result of local *Raktamokshana* in calcaneal spur i.e. planter fasciitis with Diclofenac sodium orally, Total 30 patients were enrolled in each group.

In Group A out of 30 patients 12patients were complains of pain in right heel comprising to 40.00%, 09 patients were complaining of pain in left heel comprising to 30.00%, 09 patients were complaining of pain in Both heels comprising to 30.00%. In Group B out of 30 patients 14 patients were complains of pain in right heel comprising to 46.67%, 13 patients were complains of pain in left heel comprising to 43.33%, 03 patients were complains of pain in Both heels comprising to 10.00%.

In Group A out of 30 patients 24 patients were found Calcaneal Spur present in X-ray of affected heel comprising to 80.00%, 06 patients had No Calcaneal Spur present in X-ray of affected heel comprising to 20.00%. In Group B out of 30 patients 20 patients were found Calcaneal Spur present in X-ray of affected heel comprising to 66.67%, 10 patients had no Calcaneal Spur present in X-ray of affected heel comprising to 33.33%.

1.4 RESULT

After *Raktmokshana*, decrease in pain, tenderness and swelling was observed in the patients of planter fasciitis. In follow up study no patient reported with complaint of recurrence in group A.

In group B most of the patients after completing the scheduled dose of Tab. Diclofenac Sodium (i.e. 50 mg orally twice daily for 3 consecutive weeks), complaint of pain; such patients after 3 weeks were shifted on *Raktmokshana* and after

Raktmokshana these patients shows significant relief in complaints.

1.5 DISCUSSION

According to Ayurveda pain in heel is due to *Margavrodhjanya Samprapti* of *Vata Dosha.* Here *Margaavrodha* of *Vata* is because of *Raktadhatu*. As all the signs and symptoms match with symptoms of *Shonitavritta Vata*.

Siravedha when done removes the vitiated blood from the vein, the *Margaavrodha* of *Vata* has been removed and *Vata* gets its own way to move. Hence the *Sampraptibhang* occurs and pain due to *Shonitavritta Vata* becomes less. All the symptoms get reduced after *Raktmokshana*. It has been seen that no medicinal treatment was required along with *Raktmokshana* while treating calcaneal spur i.e. Planter fasciitis.

Planter fasciitis can be correlated with *Vatkantaka* and *Shonitavritta Vata* and the site of *Raktmokshana* mentioned in classics is 2 *Angul* above the *Kshipramarma* as a treatment of *Vatkantaka*. According to Acharya Sushruta, anatomically *Kshipramarma* are 4 in body, out of which 2 are located in lower limb and 2 in upper limb. [7]The location of *Kshipramarma* is at juncture of greater toe and second toe of foot and at the joint of thumb and index finger in upper extremities. *Vatkantaka* is related to pain in heel and according to Sarth Yog Ratnakara *Vatkantaka* is related to *Gulfa Sandhi* i.e. ankle joint. Though *Raktamokshana* is contraindicated in the treatment of *Vatvyadhi* as *Dhatukshaya* itself can cause *Vatprakopa*, but then also in *Margavrodhjanya Vata* i.e. *Shonitavritta Vata Raktmokshana* is indicated.

1.6 CONCLUSION

It can be concluded that patients undergone *Raktamokshana* had greater significance of cure rate than with modern therapy. *Raktmokshana* treatment in Planter fasciitis is cheaper, easy and instant relief pain management therapy. Thus, it can be concluded as with optimistic view that this study will not only generate interest in enquiry but also useful to determine the efficacy of *Raktamokshana* in Calcaneal spur i.e. Planter fasciitis and other diseases also.

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