

EFFECT OF AGNIKARMA ON CALCANEAL SPUR - A CASE STUDY

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ABSTRACT

Calcaneal spur is a bony overgrowth from calcaneum bone which occur when foot exposed to constant strain leads to calcium deposition in heel bone, it is painful condition. It can be correlated with *vatakantaka* according to *Ayurveda* and can be treated with *agnikarma*. A 30 years female suffering from calcaneal spur treated with five sitting of *agnikarma* without any oral medication. After first sitting pain relieved partially and after fifth sitting pain completely relieved. In *vatakantaka*, *vata dosha* got vitiated by excessive walking or walking on uneven surface accumulated in ankle joint causing heel pain. In *Agnikarma* different material like *pippali*, *aja shakrut*, *metals*, *madhu*, *tail*, *guda*, *mrutika shalaka* etc are used. *Agni* has *guna* opposite to *vata* and pacify this vitiated *dosha* by *agnikarma* and subsides the symptoms. *Acharya Sushruta* said that *agni* is more superior than *kshara* as disease treated with *agnikarma* never return and providing long term relief.

Keywords: Calcaneal spur, *Agnikarma*, *Kshara*, Calcaneum, *Agni*, *Shalaka*, *Vatakantaka*, Heel pain.

1. INTRODUCTION

The calcaneus or calcaneum (Heel) is the largest tarsal bone. It forms the prominence of the heel. It is having long axis which is directed forward, upward and laterally. It is roughly cuboidal and has six surfaces. Calcaneum form major part of skeleton of foot which provides posterior supports for bony arches. It also provides insertion to the ligament, muscle and tendons which are necessary in carrying out daily activity. Painful heel is a troublesome condition in which calcaneal spur is one of them.¹ The prevalence rate of heel pain is 59 % of the Indian population.² In *Ayurveda* Calcaneal spur can be correlated with *vatakantaka*, which is common *vatavyadhi*. In which *vata* is vitiated due to excessive walking or walking in

irregular surface, excessive pressure exerted over ankle region and *vata* accumulated in ankle region causing heel pain.³

The main symptoms which is present is pain around the spur region. Patient may complain heel pain more severe after awakening in morning and after excessive walking. On the side of heel pain, bearing weight not so comfortable. This condition may be aggravated by walking, running and lifting heavy weights.⁴ In *Ayurveda*, there are many ways to treat disease condition such as *Aushad*, *Shastra*, *Ksharkarma*, *Agnikarma*. According to *Acharya Sushruta*, *Agnikarma* having its own importance in treating diseases among others. Diseases which are treated by *agnikarma* never return.⁵

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Agnikarma is done by different methods like *Bindu*, *Vilekha*, *Pratisaran* and *Valay*^{6,7} and different materials like *Pipali*, *Aja Shakrut*, *Madhu*, *Tail*, *Panchadhatu shalaka*, *Suvrna shalaka*, *Loha shalaka* and *Mrutika shalaka*.⁸ So, in the patient of Calcaneal spur we decided to do *agnikarma* with *mrutika shalaka* by *bindu* method without any oral medication.

2. OBJECTIVE

- ◆ To study effect of *Agnikarma* on Calcaneal spur.

3. CASE HISTORY

3.1 History of Present illness

A 30 years female teacher by profession having complaints of pain in left heel region, difficulty in walking and tenderness over left heel region for six months without having any major illness condition visited to *Kayachikitsa* OPD of our Hospital. The patient developed pain in left heel after awakening in morning and pain aggravated after standing long time and after excessive walking. She had taken analgesics drug for 4 months from private hospital for this problem, but was not completely relieved. So, she came to our hospital for further treatment.

3.2 History of Past illness: NAD

3.3 Family History: Not Significant

3.4 Chief complaints and its duration

Left heel pain, difficulty in walking and tenderness over left heel for 6 months.

3.5 General Examination of Patient

General Examination -

BP - 110/80 mm of Hg, **P** - 76/min, **Sleep** - Normal, **Bowel and Bladder Habit** - Normal.

Systemic Examination

- ◆ **CVS** - S1 S2 normal
- ◆ **CNS** - conscious and oriented
- ◆ **RS** - AEBE, clear
- ◆ **P/A** - Soft, not tender, no organomegaly
- ◆ **X-ray of left foot:** Calcaneal spur extended

forward nearly 1 cm.

3.6. TREATMENT

The diagnosis was confirmed as Calcaneal spur on the basis of sign and symptoms and x-ray finding of left foot. Patient treated with *agnikarma* with *mrutika shalaka* by *bindu* method without giving any oral medication. Five sitting of *agnikarma* given to the patient continue for five days on the maximum tender point at left heel. Same procedure was carried out for five days and the patient follow up taken after eight days of treatment.

3.7. Procedure of *Agnikarma*

Purvakarma

- ◆ Patient's consent for *Agnikarma* procedure was taken.
- ◆ Maximum tenderness point at left heel was selected.
- ◆ Selected site was cleaned with normal Saline.
- ◆ *Mrutika shalaka* was heated.

Pradhankarma

- ◆ *Agnikarma* done with heated *Mrutika shalaka* on maximum tenderness point at left heel.

Paschatkarma

- ◆ After *Agnikarma* alovera was applied to reduce burning sensation.
- ◆ Vitals of patient checked before and after procedure.

4. RESULTS AND DISCUSSION

Assessment was done before and after treatment by relief of the Pain, Tenderness over heel region and Walking capacity. Table 1 shows Pain Gradation. Table 2 shows sign and symptoms gradation before and after *agnikarma*. After first sitting of *agnikarma* heel pain relieved partially and complete reduction in heel pain after fifth sitting and similarly gradual decrease in the symptoms of tenderness and difficulty in walking after fifth sitting.

Calcaneal spur is a bony overgrowth from the heel bone (calcaneum tuberosity)



which is occur when foot exposed to constant strain, calcium deposition pile up on the bottom of the heel bone that cause a spur shape deformity called as calcaneal spur.⁹In modern science the treatment of calcaneal spur include exercise, anti inflammatory drug and cortisone injection. If conservative treatment fail surgery might be necessary.¹⁰

According to *Ayurveda*, *vatakantaka* produced due to vitiation of *vata* with *anubandha* of *kapha dosha* which responsible for *shool* (pain), *stambha* (stiffness) and *shotha* (inflammation) in the heel. *Acharya Charaka* described *agni* is best management for decreasing pain.¹¹

Probable Mode of Action of Agnikarma

- ◆ In *Agnikarma*, *Agni* is introduced to the affected area by hot *shalaka*. External/physical heat is transferred to *twak dhatu* by hot *shalaka* producing *samyak dagdha vrana*. The *Ushna*, *Tikshna*, *Laghu*, *Sukshma*, *Vyavayi*, *Vikasi* and *Aashukari* properties of *Agni* helps to remove *strotoavarodha*, pacifies the vitiated *vata* and break the pathogenesis and reduces pain and inflammation.
- ◆ After *Agnikarma*, the *Ushna guna* of *Agni* pacifies the *Shita guna* of *vayu* and reduces pain. It reduces *Kaphanubandha* thereby relieving the inflammation and also causes pachan of *ama*.^{12,13}
- ◆ The *Agni* increase blood circulation at the heel region, leading to the proper nutrition of the tissue. This increase circulation helps to flush out toxins material from blood and reduce pain and local inflammation.¹⁴
- ◆ Therapeutic heat stimulates the lateral Spinothalamic tract, leading to stimulation of descending pain inhibitory fibres, causing release of endogenous opioid peptide, which blocks the transmission of pains pathway, the temperature at the applied site is increased which reduces nerve reflexes resulting in relaxation of muscle thereby causing reduction of stiffness.¹⁵

5. CONCLUSION

Agnikarma is simple, easy and economical procedure which can be performed at OPD level. It causes alleviation of *vata* thus, is helpful in reducing heel pain, stiffness and inflammation. From this Case study, we can assume that Calcaneal spur can be effectively managed with *Agnikarma*. When other *shaman chikitsa* fails.

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TABLES

Grade	Grade No
No Pain	0
Mild Pain	1-3
Moderate Pain	4-7
Severe Pain	8-10

Table 1: Pain Gradation

Sr. No.	Sign & Symptoms	Before Agnikarma	1 st sitting	2 nd sitting	3 rd sitting	4 th sitting	5 th sitting
1.	Heel Pain	8	7	5	3	1	0
2.	Tenderness over heel	5	4	3	3	1	0
3.	Difficulty in walking	6	6	5	5	3	2

Table 2: Sign and symptoms gradation before and after Agnikarma

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