

## Original Article

## Plantar fasciitis treated with injection two types of corticosteroid injection — a prospective randomised study

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Plantar Fasciitis a chronic degenerative process causing medial heel pain. Which is very common and disabling? Patient usually complains of heel pain particularly on first few steps after rest. Though it is a self limiting disease which usually improves one year, patient seek medical attention for painful heel in early stage. Different modality of treatment available for plantar fasciitis. We compared results of local injection of Methyl prednisolone vs Injection of Triamcinolone Acetonide locally.

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**Key words :** Plantar Fasciitis, methylprednisolone, Triamcinolone.

Plantar Fasciitis is the most common cause of heel pain in of adults<sup>1</sup>. It is a degenerative diseases caused by micro tears at proximal attachment of Plantar Fascia due to bio mechanical over use. Etiology may be more due to chronic degenerative process, so few authors termed it as plantar fasciosis.

### DIAGNOSIS

It's mainly clinical which is based on history and physical examination. Typical history is pain on first few steps after taking rest and improving with ambulation again deteriorating with prolonged standing activity.

Imaging – plain radiography showing calcaneal spurs are neither diagnostic nor support it for establishment of Plantar Fasciitis.

Ultrasonography or MRI are rarely done in recalcitrant Plantar Fasciitis.

### MATERIAL AND METHOD

The patient positioned in lateral position with affected foot down. The maximum tender part was identified which is at medial border of foot. Under strict aseptic condition Injection needle was inserted perpendicularly deep down to avoid injecting into fat pad.

One group was injected with 40 mg of Injection Methylprednisolone (MPS) and another group was injected with 40 mg of triamcinolone (TMC) mixed with one ml of 1% Injection Xylocaine. The medicine was pushed slowly (Fig 1). The patient was instructed to avoid strenuous activity for about 2 days.

A prospective Randomized study was done over a period of six months .

In our institution we compare the result of injection MPS Versus injection TMC in 58 cases of Plantar Fasciitis in whom conservative management including rest ice com-

press NSAID orthosis or stretching exercise failed<sup>2</sup>. Injection was given at proximal attachment of plantar fascia at maximum area of tenderness. The patients were assessed on the basis of VAS score at 6 weeks, 3 months, and 6 months after treatment.

In a six month follow up both the group shows comparative result and there was no significant differences in between two groups in terms of VAS score.

In two cases of injection of MPS group and one case of TMC group plantar fasciotomy was to be performed due to poor outcome.

### DISCUSSION

Plantar fasciitis is not an uncommon orthopaedic problem in general population. The genesis of pain is multifactorial<sup>4</sup>. Plantar Fasciitis is a self-limiting disorder, so conservative trial should be considered. corticosteroid injection was used in acute and chronic Plantar Fasciitis where physical modalities fails to improve the symptoms. Plantar fat pad atrophy, hypopigmentation and rare complication is plantar fascia rupture were described in literature<sup>5</sup>.

Lemont *et al* reviewed histologic findings from 50 cases of heel spur surgery for chronic plantar fasciitis. They have found myxoid degeneration with fragmentation and degeneration of the plantar fascia and bone marrow vascular ectasia. They concluded that “plantar fasciitis” is a degenerative fasciosis without inflammation, not a fasciitis and suggested to review the use of corticosteroids in Plantar Fasciitis<sup>7</sup>. Acevedo *et al* also in their series but also



Fig 1 — Usual area of maximum tenderness

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noted that original heel pain disappeared by rupture<sup>8</sup>.

#### CONCLUSION

There are various methods of treatment available in literature for treatment of Plantar Fasciitis. we have compared efficacy on clinical basis of two types of corticosteroid injection and found no significant differences between them. However plantar fasciitis should be treated by tailoring treatment to an individual's risk factors and preferences<sup>9</sup>.

Conflict of interest : NIL

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