Functional Outcome of Endoscopic Plantar Fasciotomy

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Summary:
Plantar fasciitis is the most frequent cause of plantar heel pain. Historically, open treatment has been recommended, but more recently endoscopic plantar fasciotomy (EPF) has produced promising results. Forty-one patients (49 feet) were evaluated. An AOFAS Hind Foot Scale was used for analysis. Pain resolved completely in 37 feet, decreased in 11 feet, and increased in 1 foot. The mean postoperative AOFAS Hindfoot score improved 39 points. EPF is an effective operation with reproducible results.

Introduction:
Background: Plantar fasciitis is the most frequent cause of plantar heel pain. The majority of cases of plantar fasciitis can be treated non-operatively, however, a small number of patients remain refractory to non-operative treatment and operative intervention is indicated. Historically, open treatment has been recommended, but more recently endoscopic plantar fasciotomy (EPF) has produced promising results.

Methods:
Methods: Forty-eight patients (56 feet) were identified. Forty-one patients (49 feet) were available for follow up. There were 15 men and 26 women, with an average age of 53.8 (range 42 to 68). The mean follow-up time was 49.5 months (range 6 to 142). An AOFAS Hind Foot Scale was used for analysis. The influence of gender, duration of symptoms, severity of symptoms, and bilateral verses unilateral release were examined.

Results:
Results: Pain resolved completely in 37 feet, decreased in 11 feet, and increased in 1 foot. The mean postoperative AOFAS Hindfoot score improved 39 points (54-93, p< 0.001). Patients with severe symptoms achieved higher mean improvement than the moderate symptom group (p=0.005). Patients with symptoms greater than 24 months trended towards lower mean improvement and lower post operative AOFAS Hindfoot scores. Both gender and laterality did not significantly influence outcome. There was one superficial infection, one 3rd and 4th metatarsal stress fracture in the same patient, and transient lateral hindfoot pain in five patients.

Conclusions:
Conclusions: EPF is an effective operation with reproducible results, low complication rate, and little risk of iatrogenic nerve injury with proper technique.