MEDI CALCANEAL NEUROPATHY IN FOOT AND ANKLE: A CASE REPORT.

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ANATOMY OF PLANTAR PINES:

Medial and lateral plantar nerves are the two major terminal branches of the tibial nerve in the lower extremity. They arise beneath the flexor retinaculum, behind the medial malleolus running deep in abductor hallucis muscle. They give rise to many small muscular and cutaneous branches. The lateral plantar branch runs beneath the fascia of abductor hallucis muscle and courses between the median portion of the cuboid plantar muscle and plantar fascia to innervate the abductor digitii minimi muscle.

The medial calcaneal nerve is the third branch of the tibial nerve but it can also arise from the plantar nerve as an anatomical variation. It lies beneath the plantar ligament dorsal to the abductor hallucis and supplies cutaneous sensation to the plantar and medial aspect of the heel.

TREATMENT OF PAINFUL HEEL SYNDROME:

CONSERVATIVE TREATMENT:

- Anti-inflammatory medications
- Local steroid injections
- Medications for neuropathic pain
- Orthotic devices which may include hard soles, non-cushioned inserts, foam rubber of plastic, heel lifts.

SURGICAL TREATMENT:

- Aimed at reducing calcaneal bone spur
- Decompression or release fascia of plantar fascia

Baxter reviewed surgical results in 26 patients that underwent surgical procedures after failure of conservative treatment for 6 months for refractory heel pain (Ref 2). Of the 34 heels that he operated on, 32 had good postoperative results. Release of deep fascia of abductor hallucis muscle and isolated neurolysis of the nerve to abductor digitii minimi muscle.

Conservative non-operative approach to compression neuropathy is recommended at least for 6 months because there is risk of inadvertent division of the plantar nerve during surgery and postoperative nerve stump neuroma may form which can be more bothersome and painful.

REFERENCES: