Tarsal Tunnel Syndrome: A Tale of Two Obstacles

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INTRODUCTION:

Tarsal tunnel syndrome (TTS) is a compressive peripheral neuropathy of the posterior tibial nerve and its branches within the tarsal tunnel beneath the flexor retinaculum. It is often misdiagnosed as a compressive neuropathy is rare. Typical presentation would be pain and numbness over plantar aspect of the foot

REPORT:

52 years old male presented with right plantar pain associated with paresthesia over his plantar aspect.during ambulation for 6 months duration. History of right tibia fracture post interlocking removal upon union. Patient was pain free prior 6 months ago. No acquired flat foot. Upon examination, he presented with reduced sensation over posterior tibial nerve distribution and had a mass measuring 2cm x 2cm over medial aspect of the ankle. Xray imaging revealed no bony deformity.

Swelling was of smooth,soft and well circumscribed with possibility of a ganglion cyst causing compression neuropathy over the posterior tibial nerve. Excision biopsy was done and intraoperatively noticed that patient had dual pathology ,one being a ganglion cyst independent of a perineural fibrosis of the posterior tibialis tendon which is a rare occurrence.

Tarsal tunnel was also released in view to relieve the compression from both pathologies Mass was excised and sent for histopathological study resulting in 2 different pathologies.



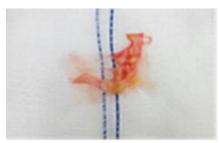


Figure 1: (Above)Preoperative x-rays with no bony deformity over tarsal tunnel region
(Below) Excised ganglion cyst



Figure 2: Left(Perineural fibrosis identified)
Right (Post excision of ganglion cyst)

CONCLUSION:

TTS is a rare form of compressive neuropathy. Most common cause is a ganglion cyst. In this case, it was a rare dual pathology:one being a ganglion cyst and the other a perineural fibrosis causing compressive neuropathy. Hence in diagnosing TTS, one should consider the above two pathology as possibility for cause of TTS.

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