A Ganglion Causing Tarsal Tunnel Syndrome

I. J. A. MACFARLANE, S. N. DU TOIT

SUMMARY

A 24-year-old Indian man presented with a ganglion arising from the subtalar joint of the left foot, causing a tarsal tunnel syndrome. Relief of the signs and symptoms was complete 6 weeks after excision of the ganglion. As far as can be ascertained, this has not been reported previously.

S. Afr. Med. J., 48, 2568 (1974).

Tarsal tunnel syndrome is a complex of symptoms affecting the foot, and is due to a compression neuropathy of the posterior tibial nerve within the fibro-osseous tunnel that lies beneath the flexor retinaculum on the medial aspect of the ankle. The compression lesions may be partial or complete, may involve the motor or sensory fibres to a varying degree, and can produce altered sympathetic activity resulting in coldness and cyanosis distally.

Causes include post-traumatic fibrosis due to fracture, an accessory or hypertrophied adductor hallucis muscle, tenosynovitis, spontaneous causes (trauma, weight gain, fluid retention and the connective tissue changes of ageing), or, as in this case, an expanding lesion under the flexor retinaculum.1-4

Department of Orthopaedic Surgery, King Edward VIII Hospital and University of Natal, Durban

J. A. MACFARLANE, F.R.C.S. S. N. DU TOIT, M.B. CH.B., M.CH.ORTH.

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CASE REPORT

A 24-year-old Indian male clerk presented on 10 February 1973 with a painful swelling inferior to the medial malleolus of the left ankle which had been present for 5 weeks. There was no known cause, and he had not been injured.

Examination showed a firm swelling 2,5 cm in diameter, and 2,5 cm inferior to the medial malleolus of the left ankle. There was a loss of sensation to light touch and pinprick over the medial third of the left foot. Nerve trunk tenderness was not present and there was no loss of power. Normal circulation was present. X-ray films showed a soft-tissue swelling on the medial aspect of the left subtalar joint, but no fracture was seen.

A provisional diagnosis of a ganglion beneath the flexor retinaculum was made, and at operation on 22 February 1973 this diagnosis was confirmed.

The flexor retinaculum was divided, displaying a 2,5-cm diameter ganglion arising from the subtalar joint deep to the peroneal tendons, with the posterior tibial vessels stretched over the superficial aspect. The ganglion was pressing on the posterior tibial nerve, which lay deep to it. The nerve was, however, macroscopically normal. The posterior tibial vessels were then retracted and the ganglion excised. Histology confirmed the diagnosis.

Recovery of sensation was gradual but was complete 6 weeks after the operation, and to date there has been no recurrence.

REFERENCES

- Edwards, W. G. (1969): J. Amer. Med. Assoc., 207, 716.
 Joubert, M. (1972): S. Afr. Med. J., 46, 507.
 Keck, C. (1962): J. Bone Jt Surg., 44A, 180.
 Lam, S. J. S. ((1967): Ibid., 49B, 87.