SHORT REPORT

A Case of Unilateral Lower Limb Swelling Secondary to a Ganglion Cyst

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Introduction

Unilateral leg swelling is a common presentation to the vascular surgery outpatient clinic. Common causes include venous insufficiency, lymphoedema and, more acutely, deep vein thrombosis. However, rarer causes should not be forgotten. We report an unusual case of extrinsic femoral vein compression secondary to a ganglion.

Case Report

A 40 year old stone mason presented to the out patients department with left calf swelling of recent onset. Reflux at the saphenopopliteal junction was detected with the hand held continuous wave Doppler and confirmed with a venous duplex scan. This revealed a normal long saphenous system and normal deep veins.

Saphenopopliteal ligation with phlebectomies were performed without clinical improvement. On review six months later, the left leg swelling had extended up to the thigh. A lymphoscintogram was normal. An ultrasound of the pelvis revealed decreased calibre left femoral and external iliac veins with a normal inferior vena cava. No cause for this was established. Subsequent venography confirmed a 2 cm long, tight (99%) stenosis of the left common femoral vein.

Fig. 1. Computerised tomogram showing cystic lesion (arrowed).
Computerised tomography of the pelvis demonstrated a low attenuation lesion posteromedial to the common femoral artery, displacing this forward and compressing the femoral vein (Fig. 1). More detailed clinical examination revealed that an ill-defined swelling was palpable just below the medial half of the inguinal ligament.

On the basis of these findings, the left groin was explored. Intra-operatively a cystic swelling posterior to the common femoral vein and artery was found (Fig. 2). This was compressing the vein medially and displacing the artery antero-laterally. The cyst appeared to arise from the muscle sheath of adductor longus at its insertion into the inferior pubic ramus. Histology showed a cyst wall composed of fibrous connective tissue and devoid of an epithelial lining, consistent with a ganglion cyst. Removal of the cyst resulted in resolution of the swelling.

Discussion

Extrinsic femoral vein compression due to joint related cysts has been previously described. Five cases of compression due to a synovial cyst from the hip joint and one case compression secondary to a postoperative lymphocele have been reported. Ganglion-induced femoral vein compression, as here, appears to be an unreported phenomenon.

This case serves as a reminder that when presented with unilateral leg swelling in which the common causes have been excluded, surgeons should not ‘throw in the towel’. Further investigation may prove rewarding, both for the patient and the surgeon.

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References


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