

An Unusual Case of Ganglion Cyst of the Hip Masquerading as Deep Vein Thrombosis and Severe Lower Limb Edema

Li-tan Yang¹, Cheng-Han Lee¹, Po-Ting Wu²

¹Division of Cardiology, Department of Internal Medicine, National Cheng Kung University Hospital, Tainan, Taiwan

²Department of Orthopedics, National Cheng Kung University Hospital, Tainan, Taiwan

Abstract

Ganglion cysts of the hip, associated with compression of the femoral vein and severe lower limb edema, are rare. Herein, we report such a successfully treated case presenting with severe lower limb edema due to a large ganglion cyst with external compression.

Case description

This 63 year-old man with hypertension, diabetes mellitus and a stage 3 chronic kidney disease presented with unilateral right lower extremity edema for 3 months without pain, weakness, trauma histories nor other constitutional symptoms. Grossly, his right lower limb was edematous since the level of right inguinal area. The girth of right mid-thigh and mid-calf was thicker than the left by 7 cm and 6 cm, respectively. In palpation, there was a grade 2+ pitting edema without signs of muscle weakness, no focal tender points nor local heat. The skin was intact with fine turgor without erythematous change. The muscle power of both lower limbs was full. While examination of his right inguinal area, we found an obscure soft, elastic, non-painful, non-pulsatile, semi-fixed right groin mass about 5x3 cm in size. There were neither audible bruits nor lymphadenopathy. The color duplex showed a relatively deep seated cystic mass below right common femoral artery with poorly penetrated doppler waves without evidence of deep vein thrombosis and arteriovenous fistula. Computed tomography angiography with and without contrast showed an ovoid cystic lesion at the location of the iliopsoas bursa extending from the distal iliopsoas muscle to the right inguinal region. It was anterior to the right hip joint and lateral to the right femoral vessels measuring 4.5 x 3.8 x 9.2 cm, compatible with iliopsoas ganglion cyst. Four days after the excision of the ganglion cyst, the girth of right mid-thigh and mid-calf was thicker than the left by 3 cm and 4 cm, respectively. The patient had much improved leg edema. Microscopically, a cyst with dense fibrous wall without distinct synovial lining was noted, compatible with a ganglion cyst.

Discussion

Ganglion cysts are benign and can be discriminated from synovial cysts microscopically. Symptoms caused by cyst compression are very rare as illustrated here by our case as leg swelling mimicking deep vein thrombosis. Intermittent

claudication or referred pain due to femoral artery and nerve compression, respectively, had ever been reported. Surgical excision is the procedure of choice in symptomatic cases considering high recurrence rate of solely needle aspiration. In conclusion, we should consider a ganglion cyst on hip joint as a rare cause of non-thrombotic unilateral leg swelling. High index of suspicion is needed as in this case.

Figure



Left upper: A cystic mass seen in the computed tomography (arrow).

Right upper: Perioperative image showed the cystic mass.

Left lower & right lower: Preoperative and postoperative pictures showed improved right leg edema.