CASE REPORTS

BACK PAIN, FEMORAL VEIN THROMBOSIS, AND AN ILIOPSOAS CYST: UNUSUAL PRESENTATION OF A LOOSE TOTAL HIP ARTHROPLASTY

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Symptomatic loosening of a total hip arthroplasty generally presents with groin or thigh pain. We report an unusual case of loosening of a cemented total hip arthroplasty which presented as low back pain and femoral vein thrombosis. On subsequent venography and computed tomography (CT) evaluation, a large ipsilateral iliopectineal cyst was noted to compress the common femoral vein. This was later found to communicate with and to have resulted from a loosened cemented acetabular component.

CASE REPORT

An 83-year-old man with a 2-month history of a swollen thigh, low back pain, and flank pain was evaluated by his primary care provider with real time duplex imaging of the deep venous and greater saphenous system. These were normal. However, venography was subsequently performed and revealed a deep vein thrombosis, originating at the common femoral vein in the inguinal region (Fig 1). A CT scan of the region revealed an associated iliac cyst compressing the vessel (Fig 2). Percutaneous CT-guided drainage of the cyst was performed twice, 2 months apart; however, reaccumulation of the fluid occurred. Subsequent retroperitoneal exploration, drainage, and biopsy of the mass revealed a thick-walled cystic structure present within the retroperitoneal space and extending into the inguinal region, with the base of the cyst immediately adjacent to the apex of the acetabulum. Gram stain was negative. A closed drain was inserted and the wound closed.

Histologic studies of the excised cyst wall revealed chronic foreign body reaction. The patient continued to have significant drainage from his closed drainage system, but cultures remained negative. The patient’s ipsilateral cemented total hip arthroplasty, performed 15 years prior for osteoarthritis, had been asymptomatic, though acetabular osteolysis was found on plain radiographs (Fig 3). However, no other local cause of foreign body reaction could be found. Orthopedic consultation was requested at this point. Unrecognized loosening of the total hip arthroplasty was felt to be the likely etiology of the foreign body reaction and secondary iliac cyst. A contrast study via the drain was carried out, but failed to demonstrate communication with the total hip arthroplasty. Subsequent arthrography of the hip, however, revealed communication of the joint with the iliac cyst and contrast flowed readily through the closed drain system (Fig 4).

A revision total hip arthroplasty, using uncemented components, was subsequently performed. The communicating sinus could not be located at the time of the surgery. However, the acetabular component was grossly loose. Following surgery, the patient has remained asymptomatic at the 12-month follow-up examination.

DISCUSSION

The iliopsoas bursa is a well-defined structure that has been described in the
wear debris within the bone cement interface. This results in foreign body reaction and secondary osteolysis at this junction. Additional stress concentration at the intact interface may result in fatigue fracture of the cement. Subsequent fretting wear of the cement fragments creates additional polymethylmethacrylate debris which may hasten further osteolysis and eventual failure of the joint replacement. Newer prosthetic designs and materials as well as modern cementing techniques should help minimize this complication.

REFERENCES


EDITORIAL DISCUSSION

ORTHOPEDICS: Do you think the venographic findings are due to an intrinsic filling defect from a clot or extrinsic compression?

Morrison et al: The configuration of the obstruction would suggest an extrinsic compression phenomenon. We also know from additional CT images that the cyst was in close proximity to the common iliac vein, again favoring extrinsic compression as the cause of thrombosis.

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OSTEOCHONDRODYSPLASIA

DISSECCAS OF THE TALUS PRESENTING AS AN ANKLE GANGLION

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Ganglia are sharply defined firm cystic masses closely associated with joints, bursae, or tendon sheaths. The wrist is the most common site of occurrence, although ganglia have been described in association with most joints of the body. The ankle is a rare site of occurrence with few definitive reports in the literature, representing approximately 2% of all known ganglion cases.

Much confusion exists in the literature as to the etiology, pathogenesis, histology, and nomenclature of these "simple cysts." While most would agree that trauma, repetitive stress, and inflammation are often responsi-