GIANT SYNOVIAL CYST CAUSING DEEP VENOUS THROMBOSIS: BRIEF REPORT

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We describe a rare complication of total hip replacement. Some 14 years after a prosthedic hip had been inserted the patient developed a giant synovial cyst which caused deep vein thrombosis.

Case report. In June 1986, an 82-year-old woman presented with swelling of the right leg which had been present for a few weeks. In 1972 a cemented Charnley-Müller total hip prosthesis had been used to replace her osteoarthritic right hip. On examination she had a warm oedematous right leg with a swelling in the groin. A radiograph was thought to be normal, but echography showed a multilocular cyst, measuring 13 × 7.5 × 5 cm. To exclude an aneurysm an arteriogram was performed, but no arterial involvement was seen. Computerised tomography, however, showed a homogeneous, fluid-containing tumour in the pelvis extending from the pelvic brim to the iliac crest (Fig. 1). After the aspiration of 200 ml of yellow serous fluid the patient had no pain and the oedema decreased.

Three months later she presented again with an increase in leg oedema. Phlebography showed deep venous thrombosis of the lower leg with compression of the femoral and iliac vein. During arthrography of the hip joint two large cysts were seen (Fig. 2) as well as loosening of the acetabular component. The hip was explored and the acetabular cup found to be lying, completely loose, in synovial tissue and fluid; there was also a perforation of the acetabulum.

During this operation, via a separate incision, the inguinal region was explored. A thick-walled cyst was found compressing the femoral artery and vein. It extended from under the inguinal ligament through the oval foramen, and was connected to the perforation of the acetabulum and to the joint capsule around the hip prosthesis. The cyst contained yellow fluid and particles of bone cement. Histologically its wall consisted of synovial and fibromuscular tissue with cystic degeneration and inflammation caused by birefringent material. The patient was given anticoagulants for the next six months, during which time the oedema subsided and she became increasingly mobile. Nine months from operation she had no complaints.

Discussion. Many complications of hip replacement have been described (Awbrey et al. 1984), but we could find no report in the recent English literature of a giant synovial cyst in the pelvis and groin compressing the femoral vein and causing thrombosis. We do not know the precise mechanism of formation of the cyst, but the possibilities include perforation of the acetabulum during the first operation, or a perforation caused by loosening of the cup.

No benefits in any form have been received or will be received from a commercial party related directly or indirectly to the subject of this article.

REFERENCE


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