

Femoral neuropathy caused by enlarged iliopsoas bursa associated with osteonecrosis of femoral head--a case report

Taek Rim Yoon, Eun Kyoo Song, Jae Yoon Chung & Chol Hong Park

To cite this article: Taek Rim Yoon, Eun Kyoo Song, Jae Yoon Chung & Chol Hong Park (2000) Femoral neuropathy caused by enlarged iliopsoas bursa associated with osteonecrosis of femoral head--a case report, Acta Orthopaedica Scandinavica, 71:3, 322-324, DOI: [10.1080/000164700317411960](https://doi.org/10.1080/000164700317411960)

To link to this article: <https://doi.org/10.1080/000164700317411960>



Published online: 08 Jul 2009.



Submit your article to this journal [↗](#)



Article views: 740



View related articles [↗](#)



Citing articles: 1 View citing articles [↗](#)

Case reports

Femoral neuropathy caused by enlarged iliopsoas bursa associated with osteonecrosis of femoral head—a case report

Taek Rim Yoon, Eun Kyoo Song, Jae Yoon Chung and Chol Hong Park

Department of Orthopedic Surgery, Chonnam University Hospital, 8 Hak-dong, Kwangju, 501-757, Korea.
Tel +82 62-220 6336. E-mail: tryoon@chonnam.ac.kr
Submitted 99-11-27. Accepted 00-01-18

A 56-year-old man had had weakness of the right leg and pain in the right hip for 4 months. He limped and also complained of paresthesia along the anterior distal thigh. Physical examination revealed marked limitation of motion of the right hip, atrophy of the right thigh and a 4–6 cm soft tissue mass in the inguinal area. Strength of the right quadriceps muscle was fair and the knee jerk was diminished. He was a heavy smoker and alcoholic. He had no history of steroid use. The conventional laboratory data including complete blood cell count, urine analysis and liver function tests were normal. Laboratory examinations for

coagulopathy and for hypofibrinolysis were also normal. Electromyography revealed neuropathy of the right femoral nerve.

Plain radiographs disclosed diffuse mottled sclerotic changes of the right femoral head and narrowing of the joint space (Figure 1). MRI showed abnormal signal intensities in the antero-superior regions of the right femoral head consistent with avascular necrosis. An enlarged iliopsoas bursa with fluid collection which communicated with the hip joint was found (Figure 2). Contrast medium, when injected into the cyst, filled the enlarged iliopsoas bursa and hip joint,



Figure 1. Osteonecrosis of femoral head with subchondral fracture and joint space narrowing in a 56-year-old man.

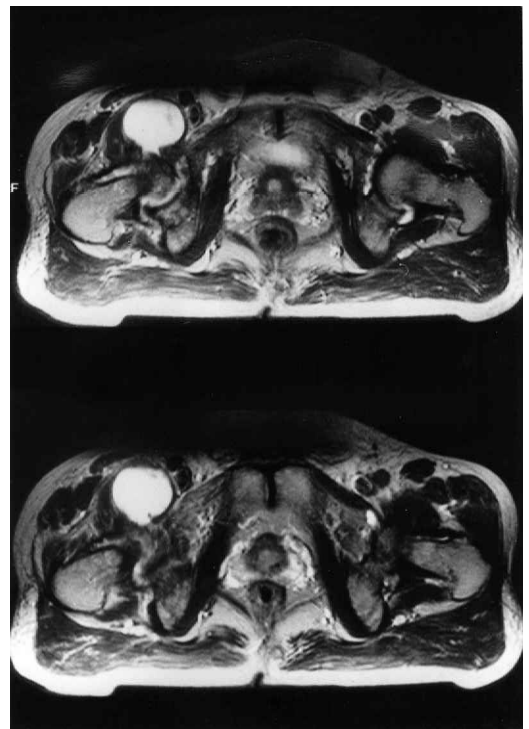


Figure 2. Abnormal signal intensities (T2-weighted axial images) of right femoral head, revealing typical avascular necrosis with an enlarged iliopsoas bursa just anterior to the right femoral head, which communicates with the joint.



Figure 3. Injection of contrast medium shows the cyst and its communication with the joint.



Figure 4. Intraoperatively: A bursa, B femoral nerve.

and showed the communication between the bursa and joint (Figure 3).

A total hip arthroplasty was performed, with excision of the cyst. The bursa was easily detected subcutaneously in the inguinal area. It was located just lateral to the femoral vessels and nerve, displacing them medially. The mass extended over the pectineal eminence down to the hip joint, revealing a direct opening into the joint. The bursa was removed. Its inner wall was smooth and shiny. On histological examination, the bursa was focally lined by synovial cells and composed of thick fibrous tissues with some areas of dystrophic calcification. The postoperative course was uneventful. The neurological symptoms disappeared 4 months after the operation. 2 years after surgery, the replaced hip was functioning well with no recurrence of the iliopsoas bursa.

Discussion

Enlargement of the iliopsoas bursa is a recognized complication associated with inflammatory diseases and osteoarthritis (Weisser and Robinson 1951, Carr et al. 1954, Coventry et al. 1959, Melamed et al. 1967, Warren et al. 1975, Penkava 1980). Recently, Cohen et al. (1985) reported iliopsoas bursitis in a 34-year-old woman receiving steroid therapy for systemic lupus erythematosus and Yoon et al. (1995) reported a similar case. 2 cases with osteonecrosis of the femoral head (Co-

hen et al. 1985, Yoon et al. 1995) and 1 case of femoral neuropathy and iliopsoas bursitis associated with osteoarthritis have been reported (Michael et al. 1982).

Staple (1972) first demonstrated an enlarged iliopsoas bursa with arthrography. Warren et al. (1975) showed the communication between the iliopsoas bursa with an arthrogram in a 69-year-old woman with hip arthrosis. Injection of contrast medium directly into the cyst seems to be a simple and accurate method for depicting the enlarged bursa and for detecting joint communication as well. In our case, this was also well shown with MRI.

Carr C R, Berley F V, Davis W C. Pigmented villonodular synovitis of the hip joint. *J Bone Joint Surg (Am)* 1954; 36: 1007-13.

Cohen J M, Hodges S C, Weinreb J C, Muschler G. MR imaging of iliopsoas bursitis and concurrent avascular necrosis of the femoral head. *J Comput Assist Tomogr* 1985; 9: 969-71.

Coventry M B, Polley H F, Weiner A D. Rheumatoid synovial cysts of the hip. Report of three cases. *J Bone Joint Surg (Am)* 1959; 41: 721-30.

Melamed A, Bauer C A, Johnson, J H. Iliopsoas bursa extension of arthritic disease of the hip. *Radiology* 1967; 89: 54-8.

Michael H L, Rand M V, Raymond H C. Femoral neuropathy caused by an iliopsoas bursal cyst. A case report. *J Neurosurg* 1982; 56: 584-6.

Penkava R R. Iliopsoas bursitis demonstrated by computed tomography. *AJR* 1980; 135: 175-6.

Staple T W. Arthrographic demonstration of iliopsoas bursa extension of the hip joint. *Radiology* 1972; 102: 515-6.

Warren R, Kaye J J, Salvati E A. Arthrographic demonstration of an enlarged iliopsoas bursa complicating osteoarthritis of the hip. *J Bone Joint Surg (Am)* 1975; 57: 413-5.

Weisser J R, Robinson D W. Pigmented villonodular synovitis of iliopectineal bursa. A case report. *J Bone Joint Surg (Am)* 1951; 33: 988-92.

Yoon T R, Rowe S M, Chung J Y, Moon E S, Song E K. Enlarged iliopsoas bursa concurrent with idiopathic necrosis of the femoral head: A case report and review of the literature. *J Orthop Surg* 1995; 3 (1): 71-5.

Dislocating medial head of triceps—awareness of the condition could avoid inappropriate surgery—a case report

Erman Y Melikyan and Frank D Burke

Pulvertaft Hand Centre, Derbyshire Royal Infirmary, London Road, Derby DE1 2QY, U.K. Tel +44 1332 254-751.

E-mail: emelikyan@yahoo.com

Submitted 99-09-14. Accepted 00-01-19

A 62-year-old man was referred to our unit by his general practitioner with the preliminary diagnosis of a cyst on the medial aspect of his left elbow. On clinical examination, he was found to have a painful snapping beyond 70° of elbow flexion. Ulnar nerve dislocation was implicated as he had pain radiating down the ulnar side of his forearm. A soft tissue mass was palpable above the medial epicondyle, which was initially thought to be a lipoma pushing the ulnar nerve forward. An ultrasound scan failed to show a discrete abnormal mass and the conclusion of the report by the radiologist was that an accumulation of subcutaneous fat could be responsible for the swelling. His ulnar nerve symptoms had vanished at this stage, but the discomfort from the clicking sensation over the medial side of the elbow still persisted. We decid-

ed to perform an exploration with the presumptive diagnosis of a dislocating anomalous medial head of triceps leaving the option open for an anterior transposition of the ulnar nerve.

Operative findings

No lipoma was visible. The ulnar nerve was being pushed anteriorly by a large anomalous medial head of triceps (Figure 1) and they dislocated together in flexion (Figure 2). There were in effect two clicks on passive flexion of the elbow, the first caused by the ulnar nerve and the second by the dislocating medial head of triceps moving across the medial epicondyle. A wedge of muscle was excised, the tendon partially divided on its medial side, rolled in and sutured. Flexion did not cause any dislocation of the triceps at the end of

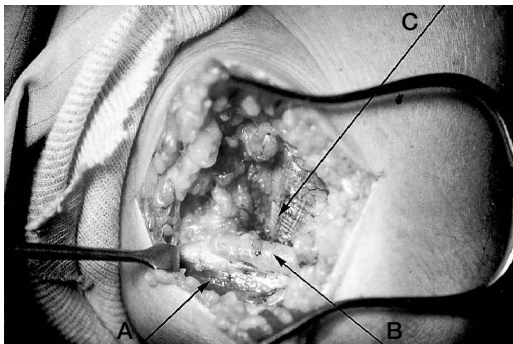


Figure 1. Medial aspect of the left elbow in extension with anterior up and posterior down. Large anomalous medial head of triceps (A) behind the ulnar nerve (B) pushing it anteriorly. Arrow marked C points at the medial epicondyle.

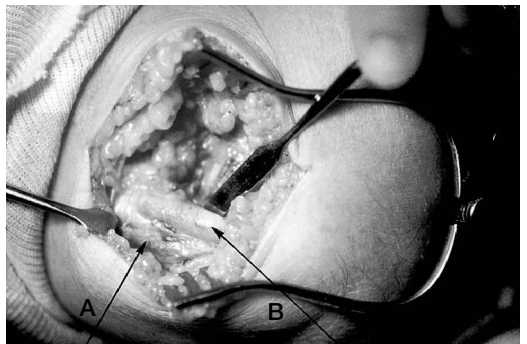


Figure 2. Same elbow as in Figure 1 in flexion. Both the medial head of triceps (A) and the ulnar nerve (B) are dislocating anterior to the medial epicondyle. The tip of the instrument lies beneath both structures on the medial epicondyle.