Discussion

In the literature there are no cases reported of false aneurysms of the ulnar artery, associated with the use of an external fixator in the radius (Cooney et al. 1980, Chamay et al. 1983, Schuind et al. 1989, Jakim et al. 1991). Salari et al. (1997) described a false aneurysm of the ulnar artery at the site of a diaphyseal fracture of both forearm bones, treated by external fixation. In our case, the most convincing explanation is that the aneurysm was caused by the pin sliding off the radius during its introduction. However, no such incident was reported in the protocol about the operation.

In the past, several treatments have been considered for ulnar pseudoaneurysms. Von Kuster et al. (1980) propose simple resection, while Martin and Manktelow (1982) and Rothkopf et al. (1990) added a vascular reconstruction. More recently, treatment by compression, possibly guided by echography, has been favored for femoral aneurysms (Altkin et al. 1989, Agrawal et al. 1992, Feld et al. 1992, Mac Glinckey and Baxter 1997). However, there are no recent reports on the treatment of ulnar pseudoaneurysms.

In our case, in view of the general state of the patient, we felt a less aggressive treatment by compression was indicated. If the treatment had failed, we could have envisaged either a selective embolization by endovascular means, or a ligature of the ulnar artery. A vascular reconstruction is necessary only if the palmar arch is incomplete.

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Iliopsoas bursitis due to *Brucella melitensis* infection—a case report

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A 51-year-old male shepherd attended our hospital because of fever and continuous left groin pain, that increased with hip motion, and had made walking impossible for the preceding 8 days. He had occasionally eaten unhygienic dairy products. The patient was afebrile and a 5 × 3 cm left inguinal mass was palpable. He also had a severe hip flexion contracture. Plain films of the pelvis revealed slight arthrosis of the left hip. The laboratory tests were: 7, 64 × 10^3 WBC/μL (62% seg-

Transverse MR image of the pelvis of our patient showing an enlarged iliopsoas bursa (arrow) caused by Brucella melitensis, that communicates with the left hip joint.

mented, 24% lymphocytes, 6% monocytes, and 8% bands), and ESR 112 mm/h. Blood routine biochemistries and urinalysis were normal. Tests of seroagglutination, rose bengal, and Coombs' test for *Brucella* were negative. Ultrasonography showed enlargement of the left iliopsoas bursa. Needle aspiration of the bursa yielded 7 mL of a seropurulent fluid. MRI showed an effusion in the left hip joint (Figure). The patient was operated on, the joint fluid aspirated, the bursa excised and the hip drained. Histologically, the surgical specimen consisted of chronically inflamed hyperplastic synovium, without granuloma formation. Biotype 3 *Brucella melitensis* was grown and identified from the synovial fluid culture. Repeated serological tests for *Brucella* showed seroagglutination 1/80, Coombs' test 1/80, and positive rose bengal. After 8 weeks of oral treatment with doxycycline (100 mg twice daily) and rifampin (900 mg daily), the patient became asymptomatic and remains so after 5 years of follow-up.

Discussion

Brucellosis is a disease with nonspecific systemic manifestations that can affect any organ. Osteoarticular involvement is the most frequent complication and commonly affects the vertebral column, sacroiliac joint and peripheral joints. The incidence of bursal disease is low.

Infectious bursitis of the superficial serous bursae (olecranal and prepatellar) is usually secondary to local contamination due to trauma, *Staphylococcus aureus* being the most commonly isolated organism of bursal disease due to *Brucella melitensis* infection. The largest published series consists of 4 cases (Johnson 1954). A thorough review of the literature revealed 18 cases of brucellar bursitis: 8 olecranal (Rotés-Querol 1957, Mousa et al. 1987, Tovar et al. 1990, Colmenero et al. 1991, González-Alvaro et al. 1994, Ochoa et al. 1995), 6 prepatellar (Johnson 1954, McDermott et al. 1994, Ochoa et al. 1995), 3 subdeltoid (Goronrdo et al. 1990, Tovar et al. 1990, González et al. 1997), and 1 trochanteric (Rotés-Querol 1957). Iliopsoas bursitis due to *Brucella melitensis* infection has not been reported previously.

In spite of its rarity, brucellosis should be considered in the differential diagnosis of cases with fever and an enlarged iliopsoas bursa, especially in areas where the disease is endemic (Mediterranean countries, Hispanic America, and the Middle East), and in patients with epidemiological risk factors for the infection.

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