BRIEF REPORTS

TRANSCONDRALE FRACTURE DISLOCATION OF THE SHOULDER

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Transcondral fracture-dislocations of the shoulder are rare. Accurate reduction and rigid fixation are required to ensure revascularisation and healing of the ischaemic fragment. We report the satisfactory outcome of a transcondral fracture dislocation of the shoulder seven years after internal fixation.

Case report. A 20-year-old man was catapulted from his motorcycle at 80 km/hour, and presented with severe pain in his right shoulder. On examination there was flattening of the shoulder contour with a posterior bulge and abrasions. No active or passive movements were possible, but neurological examination was normal and the wrist pulses were palpable.

Radiographs showed posterior dislocation of a superomedial fragment of the humeral head (Fig. 1). This was confirmed by CT (Fig. 2).

Fig. 1a

Fig. 1b

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Through a standard deltopectoral approach, subscapularis and the anterior capsule were released from the lesser tuberosity, and the large osteochondral fragment, carrying about 60% of the articular surface, was found firmly wedged behind the posterior rim of the glenoid. When this had been dislodged, an anatomical reduction was achieved with fixation by two counter-sunk, 4 mm AO cancellous screws.

Recovery was uncomplicated; after eight weeks the patient had regained a normal range of movement. A bone scan after six months was reported to show revascularisation of the osteochondral fragment.

Seven years later, the patient had no complaints, a full range of movement and worked as a labourer. Radiographs suggested revascularisation with no joint-space narrowing (Figs 3 and 4).

Discussion. Osteochondral fracture-dislocation involving most of the articular surface of the humeral head is rare, but Wilson and McKeever (1949) described a similar injury in a young epileptic patient which was not diagnosed for 20 days. Excision of a fragment comprising one-third of the articular surface gave a very poor result. Blasier and Burkus (1988) described two cases of osteochondral fracture associated with posterior dislocation, but in one the fragment included the lesser tuberosity, allowing extra-articular

Fig. 2

Fig. 3

Fig. 4

fixation. The second had a comminuted impaction fracture. Mitchell and Shepard (1980) provided evidence from rabbit experiments which suggested that rigid fixation of intra-articular fractures allows repair of the articular cartilage as well as the bone. MacNamee, Bunker and Scott (1988) reported successful outcomes after fixation with Herbert screws in 45 osteochondral fractures in various joints of the body, but none of these was in the shoulder.

The excellent result in our case after seven years can be attributed to the early operation and to rigid fixation. At the time of the operation the small size of the bone fragment precluded rigid fixation by a transosseous route. We intended to remove the screws once union had been established,

but because of his excellent functional result, the patient refused further surgery.

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KNEE PAIN AFTER TIBIAL NAILING: DOES THE ENTRY POINT MATTER?

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Locked tibial nails are now commonly used for the treatment of open and closed tibial fractures (Klemm and Börner 1986; Court-Brown, Christie and McQueen 1990;

Court-Brown, Keating and McQueen 1992). Early complications are few but some authors have drawn attention to a high incidence of troublesome anterior knee pain after rehabilitation (Court-Brown et al 1990; Koval et al 1991). We have reviewed our experience with the operation to determine whether nail entry point has an influence on the development of knee pain.

Patients and methods. Between July 1990 and December 1991, 124 tibial fractures in 121 patients were treated with locked nails but 14 were lost to follow-up. This left 110 fractures in 107 patients (79 male, 28 female); 65 were closed and 45 were open (10 Gustilo grade I, 16 grade II, and 19 grade III). Reamed Gross-Kempf nails were inserted and locked.

The site of nail insertion was recorded for 101 fractures.

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