Fracture dislocation of the humeral head associated with a fracture of the humeral shaft treated by nail Targon

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ABSTRACT
The cerebro-spinal tuberosity fractures (CT) are complex fractures. The existence of a dislocation of the head or fracture even worse prognosis. Several therapeutic alternatives have been proposed in this context. We report a case of fracture dislocation of the humeral head associated with a fracture of the humeral shaft in a matter of 79 years, treated by intramedullary antegrade nailing with self-stabilizing screws type TARGON Consolidation is achieved at 8 weeks, the fracture reduction is acceptable.

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Introduction
Five percent of all fractures are located at the proximal end of the humerus (1,2). Their morbidity in the elderly is already well known (3,4). The therapeutic management of these fractures often differs between the teams and already many publications on this topic have been published over the past 30 years. We report a case of a complex fracture dislocation of the humeral head associated with a fracture of the humeral shaft treated by TARGON nail.

Observation
It is a patient of 79 years, right-handed, suffered a fall from standing height reception on the left upper limb causing pain and total functional impairment.

On examination, the attitude of the trauma of the upper limb was typical with a deformed shoulder, arm in abduction and shortening. The pulses were present and no sensorimotor deficit.

Plain radiographs showed a fracture dislocation of the humeral head with a fracture of the humeral shaft (Fig1, Fig2). A CT scan was performed and showed a lower anterior dislocation of the humeral head fracture with complex fracture of the humeral shaft (Fig3).

Discussion
Fractures of the proximal humerus represent 4-5% of all fractures seen in emergency (5,6). Undisplaced fractures sub-
tuberosity are the most common and treatment is most often orthopaedic (5,7,8). However, the management of displaced 3 or 4 fragments fractures remains controversial (5,6,9,10). Complex fractures are difficult to treat and osteosynthesis of the shoulder is fraught with difficulties: low bone volume, comminution of the upper end of the humerus, weakening the bone osteosynthesis risk of avascular necrosis (5,11,12). Intramedullary nailing provides a solid synthesis, the price of a limited impact on the rotator cuff first. TARGON nail offers the possibility of placing four cephalic screws to secure the tuberosities come. It is however not always easy to synthesize effectively under intraoperative fluoroscopic control. The comminuted fracture character makes this gesture even more random and sometimes it is not uncommon early secondary displacement of the fracture site (13,14).

Fig 4: Postoperative radiograph control; TARGON nail with 3 cephalic screws, 2 diaphyseal screws and one for distal locking

The four proximal locking stable associated with good filling of the drum by the medullary nail, provides stabilization of the fracture and a satisfactory holding tuberosity. This stable arrangement allows early rehabilitation. Thus, even if we can hope to obtain an anatomical consolidation in 90% of cases in patients with cortical good, it is quite different for patients with osteoporotic bone (15,16).

Conclusion

So there is no one and good surgical technique for the treatment of proximal humerus fractures. Nailing allows bone synthesis using a simple surgical technique and the price of a limited first. It must however be placed in a good indication. The comminuted and osteoporotic fracture character makes it more delicate gesture. This type of fixation may represent an alternative to arthroplasty and allow early rehabilitation, guarantee a good functional recovery.

Reference