Anterior subluxation of the shoulder with biceps tendon interposition

Palanca D, Bueno AL, Larriba A, Modrego J, Seral F

Department of Surgery, University of Zaragoza
University Hospital "Lozano Blesa" of Zaragoza, Spain.

Correspondence:
Antonio Luis Bueno Lozano, Cmno. Monasterio de Santa Fe, 6-8, n°52 50410-Cuarte de Huerva (Zaragoza), SPAIN
E-mail: 1058@cai.svalero.es

Abstract
We present a case in which an inveterate subluxation of the humeral head persisted after the reduction of a fracture-dislocation of the shoulder. This was due to interposition of the long head of the bicipital tendon.

Résumé
Nous présentons un cas d'une subluxation invétérée de la tête humérale persistante après la réduction d'une fracture-luxation de l'épaule. La cause était une interposition du tendon du long biceps.
Introduction

Case-Report
A 21 year-old male suffered a traffic injury, presenting with an open tibial fracture and an anterior dislocation of the right shoulder with the humeral head medial to the coracoid process and with a fracture of the greater tuberosity (Figure 1). A closed reduction was performed followed by a normal anteroposterior radiological control (Figure 2). After 8 weeks we noticed an incongruity of the glenoid-humeral articulation (Figure 3). The MRI showed the existing lesions (Figure 4). Surgical treatment was performed through a deltopectoral approach and we found interposition of the long head of the bicipital tendon, which surrounded the humeral neck and head maintaining the subluxation.

Discussion
Interposition of soft tissues after posttraumatic anterior dislocation of the shoulder is rare, and only a few references are found in the literature. McLaughlin [4] first noted that a medial displacement of the humeral head in relation to the coracoid process might indicate an interposition of the bicipital tendon. We are aware that given the circumstances of a polytraumatised patient with a severe open fracture, this kind of lesion is usually missed especially when only a minor displacement is present. We suggest that after a glenohumeral dislocation with pronounced displacement of the humeral head, a possible interposition of the tendon of the biceps, the torn rotator cuff or the subscapularis muscle should be ruled out. We also recommend looking for the McLaughlin's sign in this type of shoulder dislocation.
Legends

Figure 1: Anterior dislocation of the right shoulder with the humeral head medial to the coracoid process (McLaughlin's sign), and with a fracture of the greater tuberosity.
Figure 2: Radiological follow-up after 8 weeks.
Figure 3: Radiological follow-up after 8 weeks. Incongruity of the glenohumeral articulation is especially noted.
Figure 4: MRI shows an inveterate subluxation of the humeral head due to the interposition of the long head of bicipital tendon.
References


