

ERECTA DISLOCATION OF THE SHOULDER: A CASE REPORT

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ABSTRACT

The dislocation of the shoulder in its inferior form called erecta is a rare variety encountered especially in the young subject. We report a case of erecta dislocation in a sportsman who fell during a contact sport session. The aim of our work is to recall the mechanism of this affection as well as its clinical and therapeutic characteristics. The patient presented to the emergency room with an abducted attitude of the right shoulder, the vascular-nervous examination was normal. Radiography confirmed the diagnosis of an erecta dislocation. The patient underwent orthopedic reduction followed by Dujarier bandaging for three weeks. The long-term evolution was good.

KEYWORDS: We report a case of erecta dislocation in a sportsman who fell during a contact sport session.

INTRODUCTION

Shoulder dislocation is defined by the total and permanent loss of contact of the humeral head with the glenoid cavity of the scapula.

It is always accompanied by a vicious attitude which differs according to the anatomopathological form.

We propose to recall the so-called erecta variety, the typical form of lower dislocation.

It is one of the most urgent cases because of the vital risk of the limb (vascular and nerve compression) and also functional risk (joint deformation, instability, arthrosis).

We report the case of a dislocation erecta in a young patient who fell with his right arm in abduction. The aim of our work is to emphasize the rarity of dislocation erecta and to recall its clinical, therapeutic and evolutionary particularity.

CASE REPORT

We report the case of a 32-year-old patient who was admitted to the emergency room of the University Hospital of Rabat for pain and total functional impotence of the right shoulder that occurred during a sports session following a fall on the arm in abduction.

The clinical examination showed a deformity of the shoulder stump with the upper limb in abduction and an inability to bring the elbow to the body (Figure 1). The vascular and neural examination was normal. The

standard shoulder radiograph showed an erecta dislocation of the right shoulder with a subglenoid position of the humeral head without associated fracture (Figure 2).

The patient underwent a successful sedation reduction (Figure 3), consisting of traction in the axis of the limb with a Dujarier bondage for 3 weeks, and was referred to the physical therapy department for rehabilitation. The six-month check-up showed a limited anterior elevation of 150°, based on the UCLA scoring scale,^[1] the patient had a score of 30 points.



Figure 1: Irreducible abduction shoulder attitude.

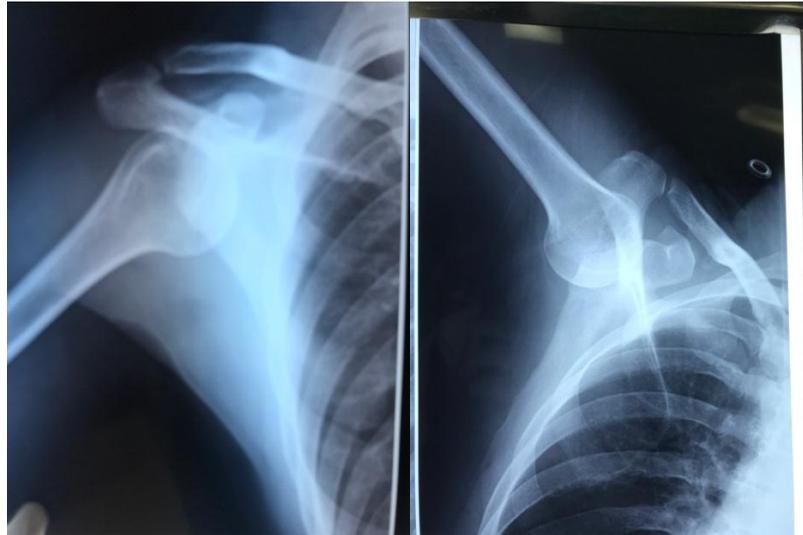


Figure 2: Subglenoid position of the humeral head.



Figure 3: Image showing reduction of the dislocation.



Figure 4: Post reduction radiograph.

DISCUSSION

The erecta type dislocation was first described in 1895 by Middeldorpf and Scharm.^[2,3]

Erect dislocation is a rare form of shoulder dislocation, with an estimated incidence of 0.5% of all shoulder dislocations.^[4]

Gagey *et al.* described this mechanism in 32 experimental erecta dislocations,^[5] by a simple external rotation elevation of the limb. Often a background of ligament hyperlaxity has been reported in several series.^[6,7] Sports accidents represent the most frequent etiology after road accidents.^[8,9]

The clinical picture was pathognomonic in our patient with a drop mechanism on the abducted arm, the irreducible attitude of the abducted shoulder and the humeral head palpable under the glenoid against the rib cage.^[10,11]

The reduction of the dislocation by the traction-counter traction technique successfully performed shows the effectiveness of the technique: it consists of a traction of the arm in the axis of the limb while the assistant applies a counter support on the thorax. The arm is then brought back in adduction, internal rotation and an immobilization elbow to the body is kept for 3 weeks. A post-reduction radiograph was taken to confirm the reduction and to detect any iatrogenic fracture.

In our patient, no vascular or nerve complications were reported, although in the series by Mallon *et al.*,^[12] cases of injury to the axillary artery and brachial plexus were observed due to the proximity of the glenohumeral joint to these elements, with 86 observations, with injury to the axillary nerve in 60% of cases and injury to the axillary artery in 3% of cases. Garcia *et al.* reported a case of bilateral dislocation erecta complicated by thrombosis of the axillary artery that required anticoagulant treatment.^[13]

The prognosis of the dislocation erecta was good in our patient, given the UCLA score obtained at the sixth month, but for other authors.^[14] the prognosis was less good, especially when a fracture was associated with it.

CONCLUSION

The dislocation erecta is a rare lesion. It should be considered in front of any shoulder dislocation in hyper abduction because it can be taken for an anterior dislocation. Associated lesions are not rare, especially fractures of the major tubercle. The prognosis is usually favorable. Non-bloody reduction is the technique of choice and rehabilitation must be early.

RÉFÉRENCES

1. Amstutz HC, Sew Hoy A, Clark IC. UCLA anatomic total shoulder arthroplasty. *Clin Orthop Relat Res.*, 1981 Mar- Apr; 1(155): 7-20.
2. Jon R, Davids MD, Richard D. Luxatio erecta humeri. *Clin Orthop*, 1990; 252: 145-9.
3. Nakagawa Y, Umegaki S, Sakurai G, Ozaki J, Nakagaki K. Luxation erecta of the shoulder. *J Shoulder Elbow Surg*, 2006; 17: 110-7.
4. Grate Jr I. Luxatio erecta: a rarely seen, but often missed shoulder dislocation. *Am J Emerg Med*, 2000; 18: 317-21.
5. Gagey O, Gagey N, Boisrenoult P, Hue E, Mazas F. Experimental study of dislocations of the scapulohumeral joint. *Rev Chir Reparatrice Appar Mot.*, 1993; 79(1): 13-21.
6. Memahon PJ, Tibone JE, Lee TQ. The inferior band of the glenohumeral ligament: biomechanical proprieties. *J Shoulder Elbow Surg.*, 1998; 7(1): 467-7.
7. Wen DY. Current concept in the treatment of anterior shoulder dislocation. *J Emerg Med*, 1999; 17(1): 401-7.
8. Dahmi FZ *et al.* Luxation erecta de l'épaule (à propos de huit cas). *J de chirg de la main*, 2008 Sep; 27(4): 167-70.
9. Gordon I *et al.* Results of treatment of luxatio erecta. *Jse.*, 2009; 07(1): 062.
10. Davids JR, Talbott RD. Luxatio erecta humeri a case report. *Clin Orthop Relat Res.*, 1990; (252): 144-149.
11. Freundlich BD. Luxatio erecta. *J Trauma*, 1983; 23(5): 434-436.
12. Mallon WJ, Bassett FH 3rd, Goldner RD. Luxatio erecta: the inferior glenohumeral dislocation. *J Orthop Trauma*, 1990; 4(1): 19-24.
13. Garcia R, Ponsky T, Brody F, Long J. Bilateral luxatio erecta complicated by venous thrombosis. *J Trauma*, 2006; 60(1): 1132-4.
14. Sewecke J, Sokratis V. Bilateral luxatio erecta: a case report and review of the literature. *Am J Orthop*, 2006; 35(1): 578-80.