

Acute Bilateral Anterior Shoulder Dislocation after an Epileptic Seizure: A Case Report

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Abstract

Bilateral shoulders dislocations are a rare clinical entity and well known to be posterior. We present the case of 19-year-old women with bilateral anterior shoulder dislocation occurring after epileptic seizure. The mechanism is more complicated and less predictable, and the management is the same as for unilateral injury.

Keywords: *Bilateral Shoulders Dislocations; Epileptic Seizure; Unilateral Injury*

Introduction

Shoulder dislocations are one of the most common orthopedics emergencies and represent 50% of all major joint dislocations. Anterior dislocation is most common and bilateral forms are very rare, usually posterior. We present the case of 19-year-old women with bilateral anterior shoulder dislocation occurring after epileptic seizure.

Case Report

A 19-year-old woman was admitted to the emergency department after an epileptic crisis. Once the seizures were controlled. Clinical examination found a typical deformation of both shoulders suggesting a bilateral anterior glenohumeral dislocation without sensory or motor deficits. Radiography and CT showed an anteroinferior bilateral dislocation with a concomitant fracture of the right greater tuberosity (Figure 1). Reduction under sedation were successful. Radiography and CT-Scan examination confirmed the reduction. The left shoulder was immobilized for 3 weeks and the right one for 6 weeks.

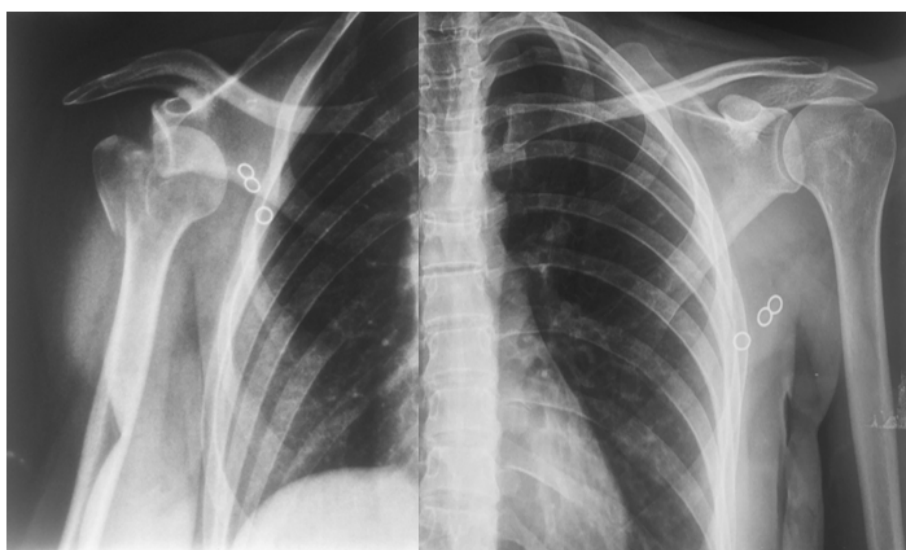


Figure 1: *Bilateral shoulders radiograph showing anteroinferior bilateral dislocation with a concomitant fracture of the right greater tuberosity.*



Figure 2: Bilateral shoulders radiograph after reduction

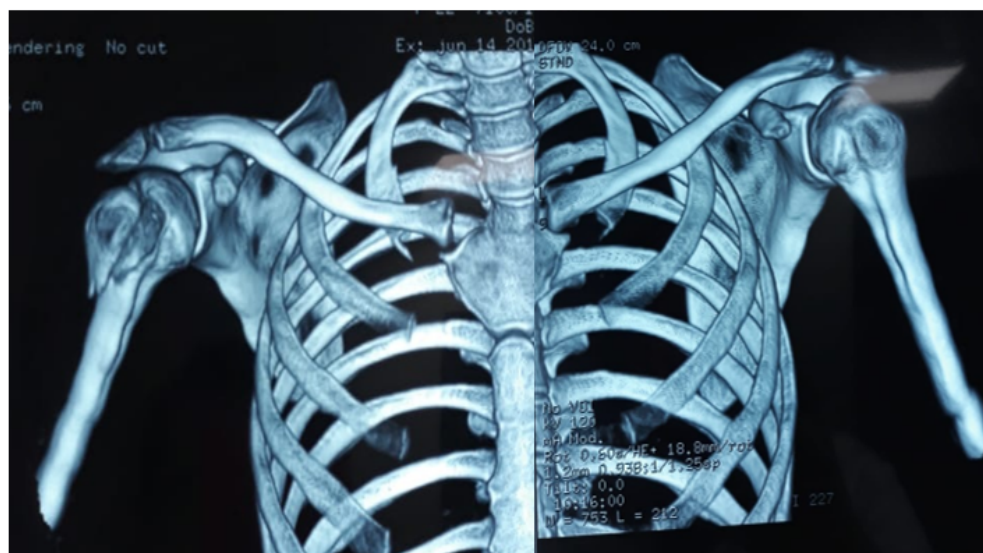


Figure 3: Bilateral shoulders CT-Scan showing a good reduction

Discussion

Bilateral shoulder dislocations are a rare clinical entity, that requires synchronous force. The first case was described in 1902 and was secondary to an excessive muscle contraction [1]. In the literature, only a few cases were published and most of them were secondary to trauma. Brown described three mechanisms: Violent muscular contractions in 49%, traumatic in 23% and atraumatic in 36% [2].

Bilateral dislocations following seizure are well known to be posterior, with powerful tonic contraction of the stronger internal rotators causing adduction and internal rotation [3]. In return, the mechanism of bilateral anterior shoulder dislocation after a seizure is more complicated and less predictable. It maybe caused by a trauma associated with loss of consciousness. Dinopoulos., *et al.* reported in their series 28 similar cases [4]. Dunlop., *et al.* reported other cases, most of them associated to a fracture, and five cases were diagnosed late [5].

Anterior shoulder dislocations can be complicated by a greater tuberosity fractures in 15%, a Bankart fractures in 20% and other complications like rotator cuff tears and neuro-vascular injuries [6-9].

The management of a bilateral shoulder dislocation is the same as for unilateral injury. After initial clinical examination and radiography confirmation, a closed reduction must be attempted early. Many reduction techniques have been described for anterior shoulder dislocation. Following successful reduction, radiography must be done to confirm the reduction and search for a secondary fracture. Shoulders need to be immobilized for 3 - 4 weeks [10-12].

Conclusion

Bilateral anterior shoulder dislocations are very rare, often posterior. Clinical examination is very important after epileptic seizure. Our case is a highly unusual bilateral, atraumatic, anterior shoulder dislocation secondary to seizure, in a 19 years-old patient known epilepsy.

Bibliography

1. Myenter H. "Subacromial dislocation from muscular spasm". *Annals of Surgery* 36.1 (1902): 117-119.
2. Brown RJ. "Bilateral dislocation of the shoulders". *Injury* 15.4 (1984): 267-273.
3. Brackstone M., *et al.* "Triple "E" syndrome: bilateral locked posterior fracture-dislocation of the shoulders". *Neurology* 56.10 (2001): 1403-1404.
4. Dinopoulos HT., *et al.* "Bilateral anterior shoulder fracture-dislocation". *International Orthopaedics* 23.2 (1999): 128-130.
5. Dunlop CC. "Bilateral anterior shoulder dislocation: A case report and review of the literature". *Acta Orthopaedica Belgica* 68.2 (2002): 168-170.
6. Sahbudin I and Filer A. "Nocturnal seizure and simultaneous bilateral shoulder fracture-dislocation". *BMJ Case Reports* (2016).
7. Wong JCT., *et al.* "Fractures complicating anterior shoulder dislocations in adults". *Israel Journal of Emergency Medicine* 7.4 (2007): 27-33.
8. Atef A., *et al.* "Prevalence of associated injuries after anterior shoulder dislocation: a prospective study". *International Orthopaedics* 40.3 (2016): 519-524.
9. Inui A., *et al.* "Shoulder fracture dislocation associated with axillary artery injury: a case report". *Journal of Shoulder and Elbow Surgery* 18.2 (2009): e14-e16.
10. Youm T., *et al.* "Acute management of shoulder dislocations". *Journal of the American Academy of Orthopaedic Surgeons* 22.12 (2014): 761-771.
11. Manoharan G., *et al.* "Acute spontaneous atraumatic bilateral anterior dislocation of the shoulder joint with Hill-Sachs lesions: first reported case and review of literature". *BMJ Case Reports* (2014).
12. DeBottis D., *et al.* "Surgical management of isolated greater tuberosity fractures of the proximal humerus". *Orthopedic Clinics of North America* 45.2 (2014): 207-218.

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