

Bilateral Luxatio Erecta

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Abstract

Background: Luxatio erecta may be defined as the inferior dislocation of the glenohumeral joint and is not a common dislocation in the emergency department (ED).

Case report: A 75-year-old female patient was admitted to the ED with the complaint of falling at home. At the admission of the patient, her bilateral arms were in hyper abduction position and the patient complained of severe bilateral shoulder pain. Both elbows were flexed and there was fullness in the bilateral axilla. the patient underwent closed reduction with traction-abduction and counter-traction maneuvers to the right and then left shoulder. Normal anatomical relationship of the bilateral glenohumeral joint was observed in the post-reduction X-rays.

Conclusion: We consider that emergency medicine physicians should be familiar with the very rare cases of bilateral luxatio erecta.

Keywords: Emergency medicine, glenohumeral dislocation, inferior shoulder dislocation, luxatio erecta (MeSH Database).

INTRODUCTION

Luxatio erecta may be defined as the inferior dislocation of the glenohumeral joint and is not a common dislocation in the emergency department (ED). Moreover, bilateral cases are extremely rare (1,2). Classical clinical picture of the patient illustrates that the affected arm is abducted, the elbow is flexed, and the forearm is pronated (3).

CASE REPORT

A 75-year-old female patient was admitted to the ED with the complaint of falling at home. At the admission of the patient, her bilateral arms were in hyper abduction position and the patient complained of severe bilateral shoulder pain. Both elbows were flexed and there was fullness in the bilateral axilla. No pathological finding was detected in neurological and vascular examination. Anteroposterior X-ray study showed that the humeral heads were bilaterally inferior to the glenoid. There was not any accompanying fracture (Figure 1a and b). After procedural sedation and analgesia (PSA), the patient underwent closed reduction with traction-abduction and counter-traction maneuvers to the right and then left shoulder. Neurovascular examination after reduction was normal. Normal anatomical relationship of the bilateral glenohumeral joint was observed in the post-reduction X-rays (Figure 2a and b). Bilateral velpau bandage was performed to the patient for immobilization. The patient was discharged by

suggesting oral analgesics and an orthopedic outpatient clinic control 1 week later.

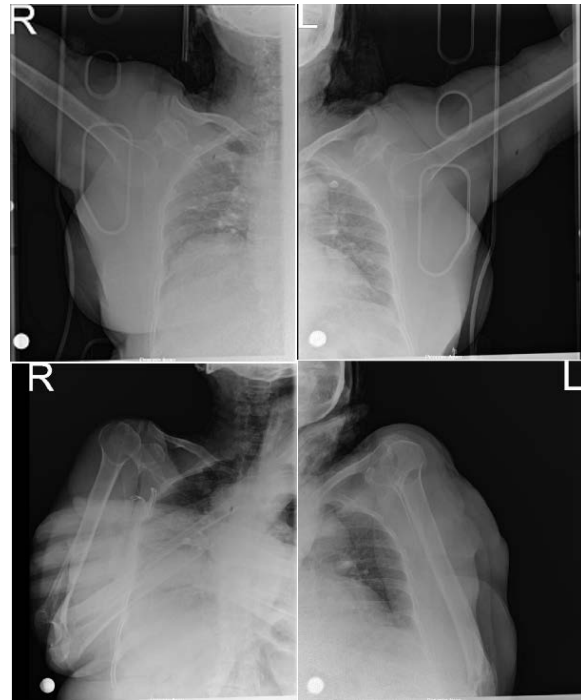


Figure 1a and 1b. X-ray showing right and left luxatio erecta.

Figure 2a and 2b. Post-reduction X-rays of right and left shoulder.

DISCUSSION

As the shoulder joint has the greatest range of motion compared to other joints in the body, dislocations of the glenohumeral joint are also common (4). Inferior dislocations are very rare among shoulder dislocations (1,4). Bilateral glenohumeral dislocation is limited to approximately 30 patients reported so far in the literature, according to a recent study (4). Since bilateral luxatio erecta is so rare, we consider that both the clinical presentation of the patients and their imaging are important for emergency medicine physicians. The mechanism is usually a

forceful and violent abduction of the proximal humerus (3). Anteroposterior and axillary lateral views radiographs are often sufficient to diagnose dislocation and exclude possible fractures, although computed tomography may also be required in some cases (4). In our patient, x-rays were sufficient for the diagnosis. Although the most common complications are soft tissue injuries (muscle tears, capsule injuries, muscle separations) and accompanying bone fractures (1), neurological damage may also be seen in a significant proportion of patients, and the most commonly affected nerve is the axillary nerve (2,4). There was not any neurovascular complication observed in our patient. After adequate anesthesia and muscle relaxation, immediate reduction should be performed and then the arm should be immobilized in adduction and internal rotation for 2-3 weeks (2,4). Appropriate sedation and analgesia levels are very important at this stage. We have used fentanyl and midazolam as PSA agents in our patient. In the presence of neurological damage or non-reducible dislocations, the option is open surgery (4).

CONCLUSION

We consider that emergency medicine physicians should be familiar with the very rare cases of bilateral luxatio erecta.

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