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Case Report

Bilateral Glenohumeral Dislocation Observed as Rare Case

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Abstract

Anterior and bilateral glenohumeral luxation is an extremely rare pathology and little described in the literature. This paper presents a case, whose aetiology is infrequent, its resolution and subsequent evolution.

Keywords: *Dislocation; Shoulder; Anterior; Bilateral*

Introduction

Bilateral glenohumeral dislocation is an extremely rare pathology, of very low incidence, generally related to episodes of seizures due to epilepsy or electrical accidents with electrocution.

In the usual orthopedic textbooks, it is not usually mentioned and in the available bibliography only case reports can be found.

Although it is a rare pathology, it is of extreme importance, since it is very disabling for the patient, due to the immobilization that is required, in addition to the possible sequelae that the lesion could leave.

Clinical Case

A 54-year-old patient appears in the month of October 2011, in the emergency department of our hospital, for presenting pain and functional impotence in both upper limbs, predominantly of both shoulders, for having suffered a fall since her height, 24 hours evolution.

As background, it can be mentioned that the patient is in pharmacological treatment for arterial hypertension and Alzheimer's disease. It also receives NSAIDs sporadically due to degenerative dorsolumbar spine disease.

The physical examination showed pain, deformation and functional impotence of both shoulders, with a positive "epaulet" sign, without neuro-orthopedic alteration evaluable at the initial moment of the examination, with its peripheral pulses present and symmetrical.

It was performed in a corresponding radiographic examination, where an anterior and bilateral glenohumeral dislocation could be observed (Figure 1 and 2).

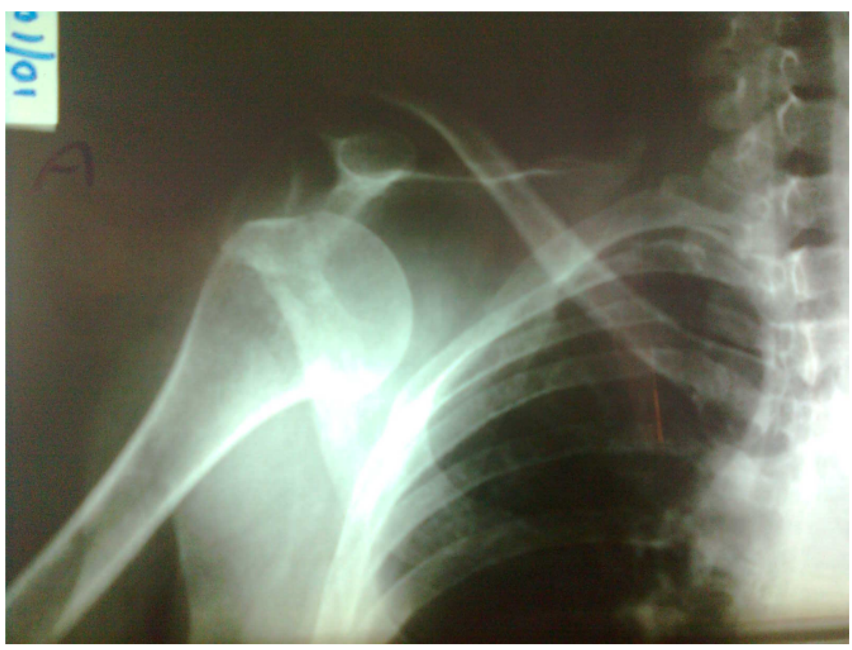

Figure 1: *Right Shoulder prior to reduction.*

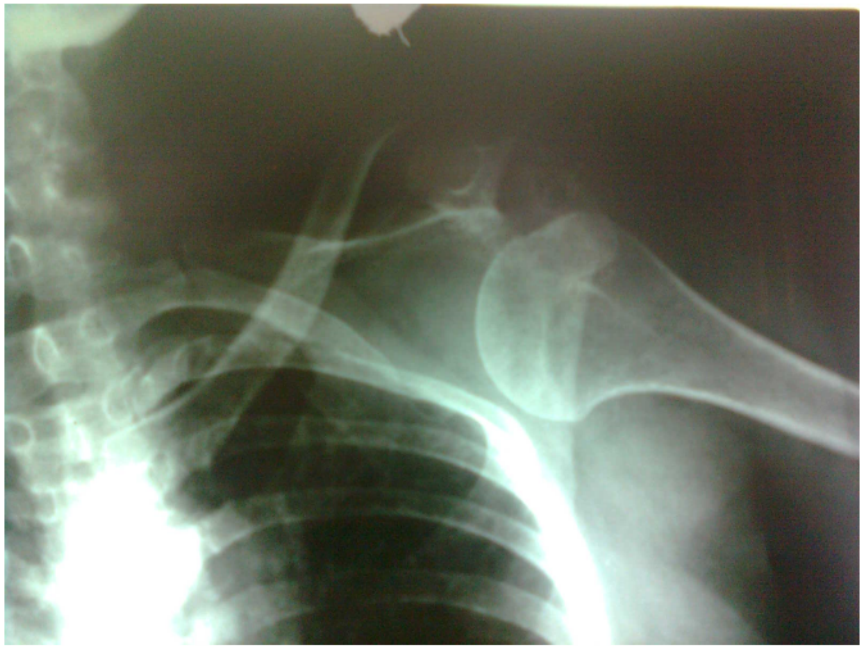

Figure 2: *Left Shoulder prior to reduction.*

Once the clinical and radiological diagnosis was made, and with the patient's consent, the treatment was started. It was placed peripherally, with hydration, analgesia and muscle relaxation. Closed reduction maneuvers were performed on both shoulders, which were effective, achieving a rapid reduction of dislocation. This reduction was verified radiologically (Figure 3 and 4) and both upper limbs were immobilized with the placement of a sling, one in each member. No bone lesions were observed, either before or after the reduction. Post reduction, the neuro-orthopedic examination showed no alterations with respect to the initial picture. There were also no changes at the peripheral vascular level.

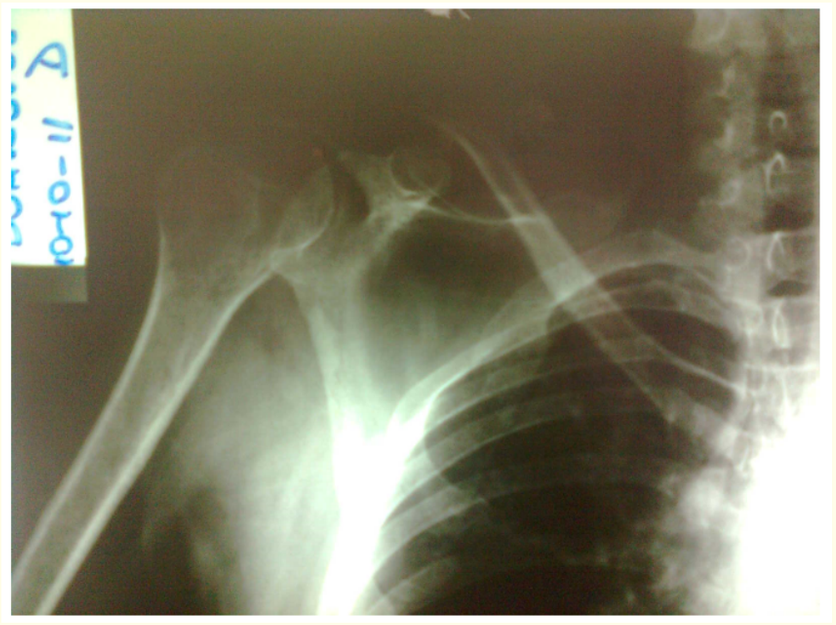

Figure 3: *Right Shoulder after reduction.*

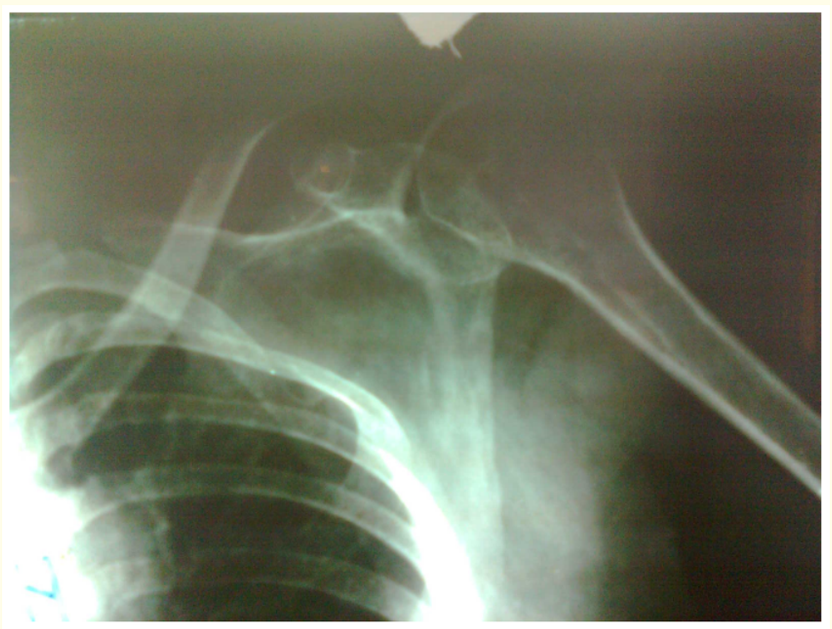

Figure 4: *Left Shoulder after reduction.*

The immobilization was maintained for a period of 2 - 3 weeks. Then the immobilization was withdrawn, and the rehabilitation started, in a controlled and progressive manner. The patient is currently finishing her rehabilitation, achieving a range of functional bilateral mobility and returning to her usual life.

The first reported case of bilateral shoulder dislocation was in 1902, by Mynter, in a patient who suffered a seizure, secondary to an overdose of camphor [3] (used abusively or in accidental poisoning can cause confusion, irritability and neuromuscular hyperactivity).

Although the presentation of this pathology is extremely rare, that is why it is still important, mainly because of the consequences that it could leave in both upper limbs.

In general, this type of dislocation is seen in seizures, electrical accidents with electrocution and high-energy traumas [4].

Cases (even more rare) have been reported due to sudden traction of both upper limbs by motorcycle, cleaning of cement mixers, seizures due to hypoglycemia, intense physical exercise, etc [3,7].

In the literature there are usually no reliable statistics on percentages of existing cases, since most of the published works are case reports [2,5-7].

In 1999, Dinopoulos., *et al.* found only 28 cases reported since 1966. Dunlop., *et al*. presented 44 cases only, found in the available literature [1].

Approximately 10% of these cases are not usually diagnosed initially, for which late treatment is usually more difficult, with a greater probability of sequelae [1].

For a correct diagnosis, in addition to a thorough physical examination, it is necessary to use images, mainly Rx. in two planes (strict and axial scapula front).

In general, the treatment of bilateral shoulder dislocation is the same as unilateral dislocation (analgesia, relaxation, reduction and immobilization), taking into account in each case its particularities (existence or not of associated fracture, neurovascular injury, rotator cuff injury, etc).

It is always convenient to carry out in these cases a detailed clinical history, describing signs and symptoms before and after the reduction maneuvers.

With respect to the type of immobilization and its duration, it will depend on the associated lesions, the patient's age, the possibility of recurrence, etc.

We present a case of bilateral anterior glenohumeral dislocation without associated fracture, in a middle-aged woman, without a high-energy traumatic history, with 24 hours of evolution.

It is an extremely rare pathology, not always diagnosed, very disabling, with possible disastrous sequelae for the patient, which requires immediate treatment for its best evolution.

After a correct diagnosis and treatment, the necessary period of immobilization was completed, subsequently completing the rehabilitation stage. A range of functional mobility was achieved, introducing the patient in an adequate and progressive way to her habitual life, without requiring, except in exceptional circumstances, assistance from third parties.

Conflict of Interests

No benefit of any kind was obtained by the author for the realization of this work. The right of patients to privacy and confidentiality has been guaranteed.

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