

## CASE REPORT

# BILATERAL ANTERIOR SHOULDER DISLOCATION – A CASE REPORT AND REVIEW OF THE LITERATURE

C. C. R. DUNLOP

**Bilateral dislocations of the shoulders are uncommon. Of the cases which do present, the majority are posterior and occur secondary to seizures associated with epilepsy, electrocution and hypoglycaemia. Bilateral anterior dislocations are thought to be very rare. This report describes such a case which occurred following minor trauma in an elderly lady. The literature review which follows would seem to suggest that this may not be as rare as previously thought.**

**Keywords :** shoulder dislocation ; bilateral.

**Mots-clés :** luxation d'épaule ; bilatérale.

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### INTRODUCTION

Bilateral anterior shoulder dislocation is uncommon. Like other uncommon conditions, it can be easily missed if not suspected. The following case report demonstrates a typical example of bilateral shoulder dislocation as a result of trauma.

### CASE REPORT

A 91-year-old lady presented to the accident and emergency department complaining of pain in both shoulders. She was frail, normally mobile with one stick, and had been housebound over the winter months. She had ventured outside on the first good day of spring to inspect her garden. While in the garden, she lost her balance and fell to the ground.

She was unsure as to the exact mechanism of the fall but remembered trying to grab for a handrail as she fell. There was no history of any loss of consciousness or seizures. Once on the ground she

could not get back up to her feet because she was unable to support herself due to pain in both shoulders. She called out for assistance and was taken to accident and emergency by ambulance.

On presentation she was complaining of pain in both shoulders and movement was severely restricted in all directions. There was no neurovascular deficit.

Plain radiography confirmed bilateral anterior glenohumeral dislocations with an associated fracture of the inferior glenoid rim on the left (fig. 1a, b).

Both dislocations were reduced uneventfully using the Kocher technique under analgesia and sedation with 2.5mg of morphine and 4mg of midazolam. Following reduction the patient was admitted to the orthopaedic ward for further management. The right arm was mobilized after 48 hours. The left arm, which was more painful, was immobilised for a further week in a broad arm sling. No further episodes of instability ensued.

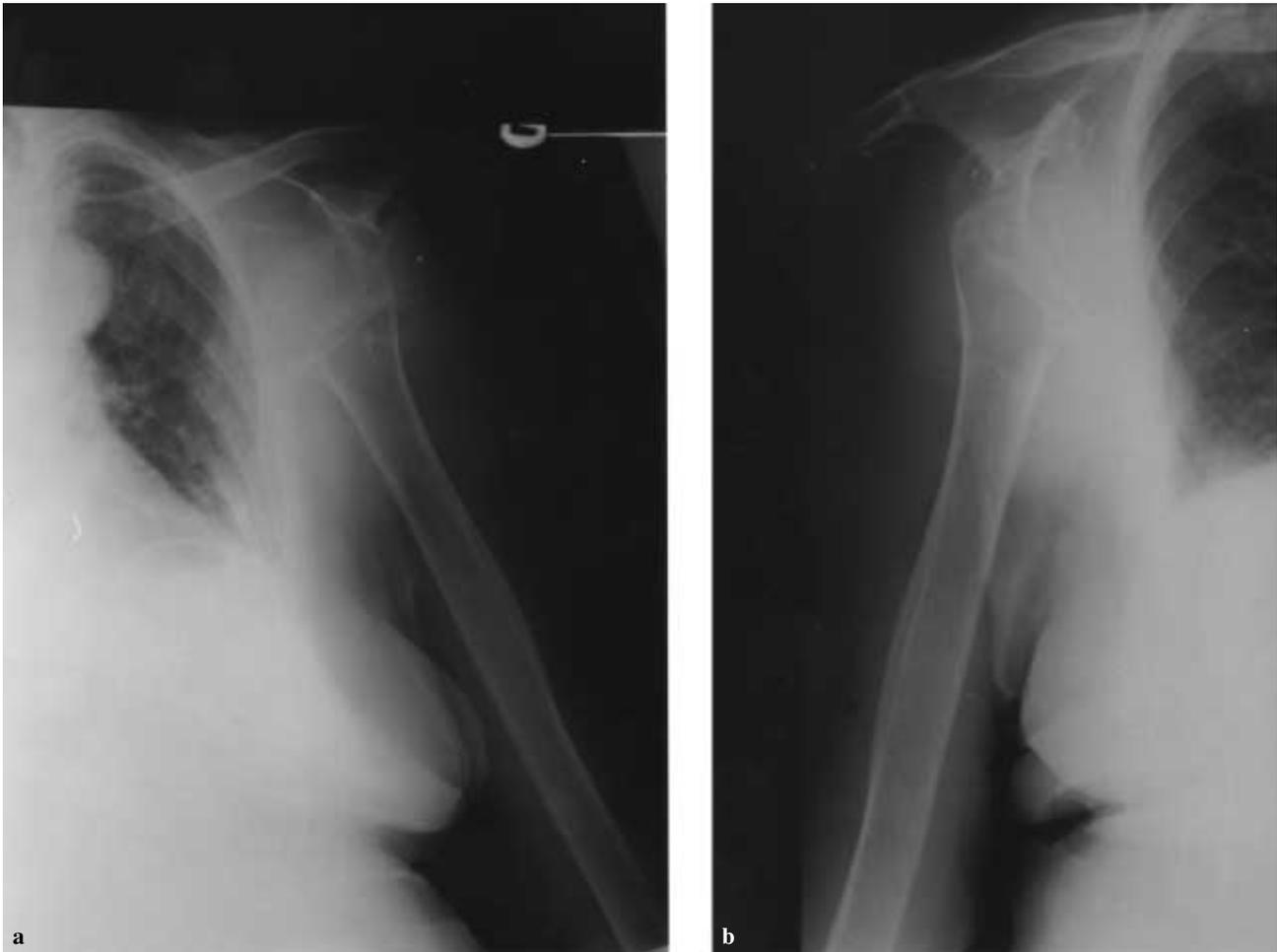
### DISCUSSION

Bilateral shoulder dislocation was first described in 1902 (12) in patients in whom excessive

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*Fig. 1 a, b.*

muscular contractions occurred as a result of Camphor overdose. This was thought to be a rare finding and prior to 1969 only 20 cases had been reported (6). Since then, however, many more cases have been reported. The abundance of recent papers would suggest that bilateral *posterior* dislocation is a recognized sequela following maximal involuntary muscle contraction such as occurs during epileptic seizures and electrocution. During a generalized seizure, the relatively weak external rotators of the humerus are overcome by the more powerful internal rotators, with the resultant adduction and internal rotation sufficient to cause posterior glenohumeral dislocation.

Bilateral *anterior* dislocation, however, is still regarded as very rare. Dinopoulos *et al.* in 1999 found that only 28 cases had been reported since 1966 (3). With the ever increasing availability of publications, a further search revealed another 13 patients reported over that period with a further three cases since then including this one (1, 2, 4, 5, 7-11, 13-18). This would suggest that bilateral anterior shoulder dislocation is perhaps not as rare as previously thought.

Unlike the posterior dislocations, the anterior dislocations occurred more commonly following trauma rather than seizures. Of note is that of the 44 cases reported, five were diagnosed late.

The principles of management are the same as those for unilateral dislocation with analgesia and adequate imaging in the first instance. Early reduction and immobilization should be followed by progressive active and passive physiotherapy. This poses obvious problems in the case of bilateral injuries when the patient may require to remain in hospital for an extended period.

This review again demonstrates the need for accurate history taking, examination and adequate imaging. This is especially the case if this injury is not as uncommon as suspected and the reported rate of late diagnosis is greater than 10%.

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### SAMENVATTING

*C. C. R. DUNLOP. Bilateral anterieure schouderontwrichting.*

Bilaterale schouderontwrichting is zeldzaam. Meestal gaat het dan nog om posterieure luxaties veroorzaakt door een cerebraal insult als bij een epileptisch toeval, electrocutie of hypoglycemie. Bilaterale anterieure luxatie wordt als zeldzaam aangezien. Dit artikel beschrijft een geval, na mineur trauma bij een hoog-bejaarde dame. Uit een studie van de literatuur blijkt het letsel toch niet zo zeldzaam voor te vallen.

### RÉSUMÉ

*C. C. R. DUNLOP. Luxation antérieure bilatérale de l'épaule : présentation d'un cas et revue de la littérature.*

Les luxations bilatérales de l'épaule sont rares. Il s'agit dans la majorité des cas de luxations postérieures qui se produisent à l'occasion de crises épileptiques ou hypoglycémiques ou encore d'une électrocution. Les luxations antérieures bilatérales sont considérées comme très rares. Nous en présentons un cas, qui s'est produit après un traumatisme mineur chez une patiente âgée. L'étude de la littérature semble suggérer que cette lésion n'est en fait pas aussi rare qu'on le croyait.