Acute bilateral anterior shoulder dislocation following domestic assault – case report.

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Summary
A rare case of acute bilateral anterior shoulder dislocation in an elderly woman is presented. This injury resulted from domestic physical assault by her daughter in-law. Patient defaulted after initial treatment – a common practice by patients in our society. This case is being reported to highlight the occurrence of this rare orthopaedic emergency.

Key-words: Shoulder dislocation, Bilateral, Physical assault.

Résumé
Il s’agit d’un cas rare de la dislocation aigue de l’épaule bilatérale antérieure, chez une femme très âgée. Cette blessure est provoquée par un coups physique domestique donné par sa fille par alliance. Sujet était en état de contumace après le premier traitement - un habitude ordinaire de la part des patients dans notre société. Nous donnons le compte rendu de ce cas afin de souligner la fréquence de cette urgence orthopédique rare.

Introduction
Shoulder dislocation is a common orthopaedic emergency. It is usually unilateral and anterior in 95% of cases. Posterior and inferior shoulder dislocations also occur. Anterior shoulder dislocation may be due to a fall, road traffic accident or direct blow to the back of the shoulder.

A case of acute bilateral anterior shoulder dislocation in an elderly woman following domestic assault is here presented.

Case history
A 65-year-old woman presented at the Accident and Emergency unit of the University of Uyo Teaching Hospital, Uyo, Akwa Ibom State, Nigeria with complaints of bilateral shoulder pain and inability to lift both upper limbs. She had been physically assaulted by her daughter in-law, a few hours prior to presentation. There was no history of injury to any other part of her body. There was no previous history of dislocation of the shoulder or other joints, and no history of epilepsy or convulsions.

Physical examination revealed loss of both deltoid contours with anterior fullness bilaterally. Both arms were abducted with severe limitation of shoulder movements. There was no distal neuro-vascular deficit bilaterally. Other organ systems were essentially normal.

Plain x-rays confirmed bilateral anterior shoulder dislocation – empty glenoid cavity with the head of humerus lying medial to the glenoid. (Figure 1).

Figure 1 Both glenoid fossae empty with humeral heads lying medial to the glenoid and inferior to the coracoid process.

Figure 2 Both humeral heads contained within the glenoid fossae and joints congruent.
Treatment:
Both shoulders were reduced using Kocher's manoeuvre after administration of intravenous diazepam 10mg and pentazocine 30mg stat. Body strapping incorporating both upper limbs was applied. Redudction was confirmed by plain x-rays. (Figure 2).
She was seen in the outpatient clinic weekly until the body strapping was removed three weeks later. The patient was then referred to the physiotherapy unit for shoulder range of movement and muscle strengthening exercises.

The patient however defaulted from clinic and has not been seen since then.

Discussion
The shoulder is the most common of the large joints in the body to suffer dislocation but acute bilateral anterior dislocation is very rare. The anterior unilateral variety is the most common accounting for 95% of cases. The high incidence of dislocations in the shoulder is largely due to the relative absence of bony restraints and the extra-ordinary range of movement possible in this joint.
Bilateral anterior shoulder dislocation has been reported in patients who have epileptic seizures, drug-induced seizures, or diabetic nocturnal hypoglycaemia, and in patients who have loose joints and dislocate shoulders while engaged in voluntary movements. A few cases have occurred during certain sporting activities like weight-lifting and water-skiing. Simultaneous undiagnosed bilateral shoulder dislocation has also been described in an elderly woman.

Anterior shoulder dislocation occurs when forced extension, abduction and external rotation of the arm lever the humeral head out of the glenoid fossa. Occasionally a direct blow to the posterior aspect of the shoulder or direct traction can cause dislocation.

In the index patient, the exact mechanism of the bilateral anterior shoulder dislocation is difficult to ascertain. However, a combination of forces is most likely especially as violent arm movements by the patient may have been involved in her attempt to retaliate or protect herself from further injuries.

This case is being reported to remind the medical community of this rare orthopaedic condition especially following assault. A high index of suspicion is needed for early diagnosis.

References