

Bilateral Anterior Fracture Dislocation of Shoulder

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ABSTRACT

Anterior shoulder dislocation is a common orthopaedic shoulder injury. Bilateral dislocation is rare and usually posterior. Bilateral anterior shoulder dislocation with greater tuberosity fracture is a very rare injury. This report describes a case 23 years male who presented after a week of epileptic attack. It is concluded that a musculoskeleton survey should be done in every patient following epileptic seizure.

KEY WORDS: fracture-dislocation shoulder epileptic C

INTRODUCTION:

Glenohumeral dislocation is most common dislocation and accounts for nearly 50% of all dislocations of body^[1]. Of all Shoulder dislocations, 95% are anterior and 15% are associated with fracture of greater tuberosity^[2]. Bilateral dislocation with fractures occur due to unusual muscular activity such as an electric shock or a seizures in epilepsy^[3]. Incidence of simultaneous bilateral anterior gleno humeral fracture dislocation is extremely rare and is of traumatic origin^[4&5]. Like other orthopaedics condition it can be easily missed if not suspected^[6]. We discuss here one such case for mode of injury and the factor in delayed presentation.

CASE REPORT:

A 23 years old patient of epilepsy of 4 years duration without any antiepileptic medication presented to us with bilateral external rotation deformity of the shoulder and loss of normal contour of 7 days duration. This was followed after an epileptic attack when he had a fall from a height of 3-4 feet and landed on outstretched hands. Patient was then taken



Figure 1: Pre-reduction X-Ray.

to a local hospital where he was given analgesics and antiepileptic drugs but his shoulder pain and deformity continued for which he was referred to our hospital.

The physical examination of anterior shoulder dislocation is diagnostic³ and radiograph (AP view of both shoulders Figure 1) revealed bilateral anterior dislocation with Greater Tuberosity (GT) fracture. Both shoulder were reduced in emergency under general anesthesia by traction and direct pressure on the head of humerus. The post reduction x-rays showed GT displacement of more than 1 cm, necessitating fixation of GT^[3] (Figure 2).

Screw fixation of GT was done by a lateral stab deltoid splitting incision under general

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anesthesia. Good fixation (Figure 3) was achieved and the limbs were kept in shoulder immobilizing sling for 10 days.

Physiotherapy was started and he gained full movement in 4 weeks time. He was cautioned for over head activities and advised to take regular neurophysician checkup for antiepileptic medication.



Figure 2: Pre Reduction X-Ray.

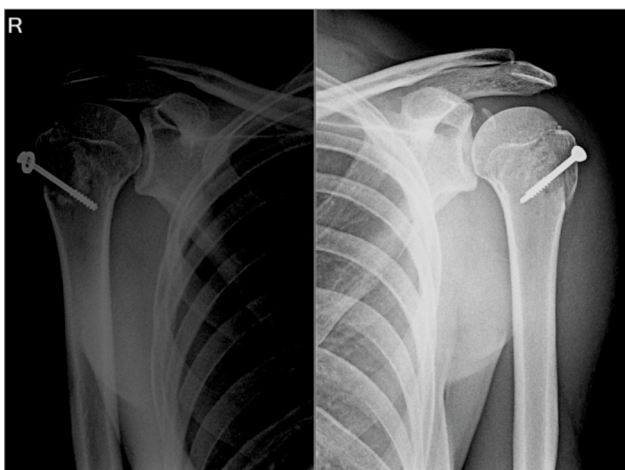


Figure 3: Post Operative X-Ray.

DISCUSSION:

The normal shoulder dislocates by direct trauma or fall on outstretched hand. The indirect force in abduction, extension and external rotation of shoulder results in anterior dislocation while axial loading of adducted and internally rotated arm produces posterior dislocation. Direct force in the form of blow on anterior side of the shoulder results in posterior dislocation.

Bilateral posterior shoulder dislocation occurs following unbalanced muscle contraction (in electric shock, epilepsy) i.e. Contraction of relatively weak external rotator and posterior fibres of deltoid are overcome by the more powerful internal rotators and succeeding adduction and internal rotation causes posterior dislocation^[7].

Bilateral anterior dislocation was also noted following Convulsive disorder^[6]. But the probable mechanism was not explained. Other authors explained bilateral anterior dislocation following seizure was not due to muscle contraction but on account of trauma by falling on floor after loss of consciousness following seizure^[7].

In the present case, trauma following seizure resulted in Bilateral fracture dislocation. The delay in seeking treatment was on account of unawareness at the primary care centre. Incidence of GT fracture in shoulder dislocation is 15%. However the present case (bilateral dislocation, bilateral GT fracture) is a very rare entity.

Management of bilateral fracture dislocation shoulder is similar to unilateral^[6]. In the present case closed reduction was followed by fixation of both the Greater Tuberosities, i.e. more than 10 mm displacement require surgical intervention^[8] which resulted in good recovery of movements with proper physiotherapy and patient cooperation. The prognosis does not differ from unilateral case but it require aggressive physiotherapy programme for better outcome in these patient^[9].

CONCLUSION:

In every patient following epileptic seizure, a proper musculo-skeleton survey should be done. Shoulder is a very vulnerable joint in epilepsy. In our opinion, awareness of this condition is of paramount importance for all the medical personnel who handle such cases. The relatives of the patient should also be made aware of this condition if pain, loss of movements or deformity continues at shoulder.

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