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CASE REPORT

A rare case of Bilateral Anterior Dislocation of the shoulder

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ABSTRACT

We report an unusual case of simultaneous bilateral anterior dislocation of the shoulder following fall in a bathroom. There was no associated fracture, and no motor or sensory deficit. The dislocation was treated by closed reduction under intravenous sedation, followed by immobilisation for four weeks.

Key Words: Anterior dislocation, closed reduction, Kocher's manoeuvre.

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Introduction

The shoulder joint dislocation is the most common type of joint dislocation. Anterior dislocation has a higher incidence than posterior dislocation. Bilateral shoulder dislocations are rare[1] and mostly they are posterior, being caused by seizures or electrical accidents. All the reported bilateral anterior dislocations were mostly found to be associated with fractures. The one which we present here, is a bilateral anterior shoulder dislocation without any fractures. Only very few of such cases have been reported in the literature so far.[2],[3]

Case Report

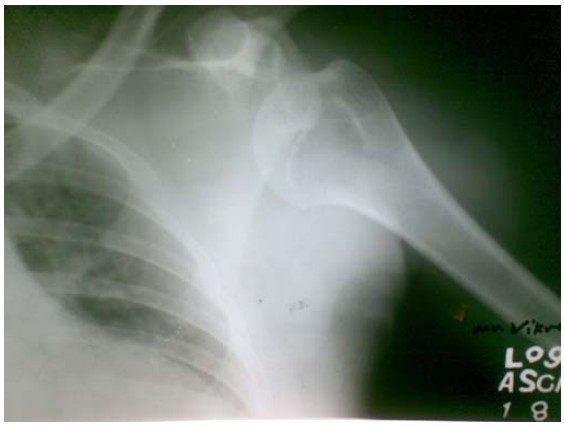
A 35 year old male presented to our emergency department with complaints of pain and deformity in both the shoulders. There was an unusual cause for it. In rural India, the bathrooms are very small. The patient described that while he was taking bath, his feet slipped and he fell down in the bathroom. In order to prevent the fall, he pressed on the adjoining walls of the small bathroom with his hands. As a result of that, there was abduction, extension and external rotation movement of both of his shoulders and subsequently, anterior dislocation.

The clinical features were suggestive of a bilateral anterior dislocation with no neurovascular injury [Table/Fig 1].

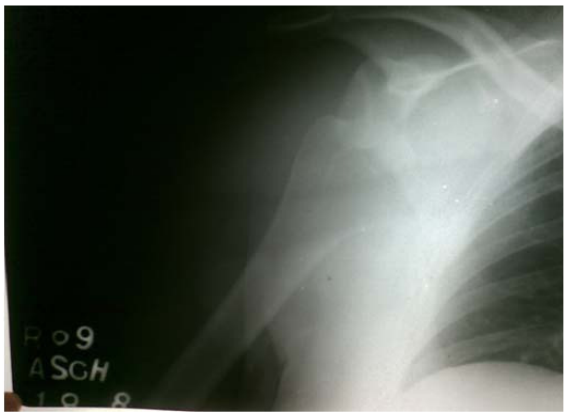
[Table/Fig 1] – Patient with Bilateral Anterior dislocation of shoulder

There were no evidences which were suggestive of any generalized ligamentous laxity. The radiographs confirmed the diagnosis of bilateral

anterior shoulder dislocation without any fractures.[Table/Fig 2] and [Table/Fig 3]



[Table/Fig 2]: X-ray showing anterior dislocation of left shoulder joint



[Table/Fig 3]: X-ray showing anterior dislocation of right shoulder joint

Both the dislocations were reduced one after the other by Kocher's manoeuvre under sedation. The reduction was accomplished successfully without difficulty.

Discussion

Posterior dislocations account for only 4% of all shoulder dislocations, while anterior dislocations (95%) are far more common.[4] Inferior shoulder dislocations occur in only 0.5% of the cases.

The combination of the abduction, extension and external rotation forces which are applied to the arm may result in an anterior dislocation. Axial loading of the adducted, internally rotated arm may produce a posterior dislocation and it may result from violent muscle contraction by electrical shock or convulsive seizures.[5],[6]

Simultaneous bilateral anterior dislocation of the shoulder occurs rarely and the mechanism of the injury is usually the same as seen in unilateral shoulder dislocation which is secondary to trauma.

Acute dislocation of the glenohumeral joint should be reduced as quickly and gently as possible. The various methods of closed reduction are the Stimson's, Kocher's and the Milch techniques. Kocher's manoeuvre is a widely practiced method which is used to reduce the dislocated shoulder and this was our preferred technique. The patient was placed in a bilateral shoulder immobilser for four weeks and after this, he was referred to a physiotherapy department for 3 months. The final stage of rehabilitation involved a good return of the patient to his daily activities.

According to literature, bilateral anterior dislocation was first reported by Mynter in 1902, in patients with excessive muscle contractions which were secondary to a camphor overdose.[7] This was thought to be a rare finding and prior to 1969, only 20 cases had been reported.[5] Bilateral Anterior dislocation however, is still regarded as rare. In 1999, Dinopoulos et al. found that only 28 cases had been reported since 1966.[8] Anterior dislocation without fracture is far more rare. Only very few of such cases have been reported so far in the literature. Crosswell and Smith reported a case of bilateral anterior dislocation of the shoulder without any fractures in a bench-pressing athlete.[3] Sandeep Singh and Sudhir Kumar reported a case of sequential bilateral anterior dislocation, in which the left shoulder dislocated first due to trauma, followed by the atraumatic dislocation of the right shoulder.[2] Howard Felderman and Richard Shih reported bilateral anterior dislocation in a 44 year old woman, which occurred while she was doing chin up exercises.[9] Turhan and Demirel reported bilateral anterior glenohumeral dislocation in a horse rider.[10] Our case of the patient trying to prevent a fall in a small Indian bathroom is the first of its kind.

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