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LUXATIO ERECTA - INFERIOR DISLOCATION OF SHOULDER - A VERY RARE CASE SCENARIO

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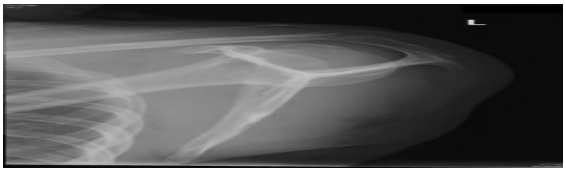
Abstract : Luxatio erecta or inferior dislocation of shoulder is a rare presentation. The patients present with an abducted shoulder. This dislocation has a high incidence of neurovascular injury. Immediate closed reduction under proper sedation should be attempted. We present a case of luxatio erecta with greater tuberosity fracture treated at our hospital.

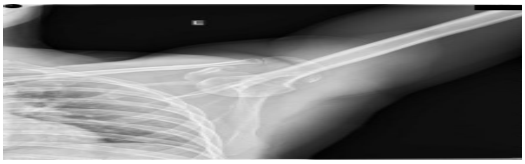
Keyword : Luxatio erecta, abduction, neurovascular injury, greater tuberosity

1. Introduction

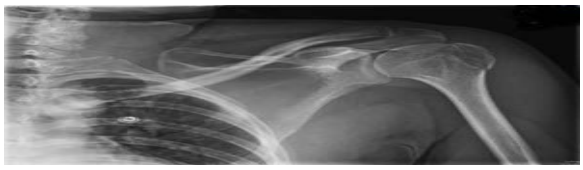
Although shoulder dislocations have been seen very frequently, inferior dislocation of shoulder (luxation erecta) constitutes only 0.5% of all shoulder dislocations. Inferior dislocations result from forceful hyperabduction of the shoulder or forceful direct axial loading of an abducted shoulder. The patients come to the emergency room with the hand up position in the affected side. This report describes a patient with this rare presentation, emergency management and final outcome.

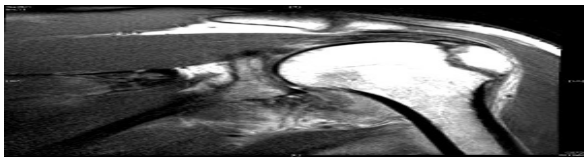
2. Case Presentation A 39 years old gentleman presented to our accident and emergency with complaints of pain and inability to use his left upper limb. He gave an alleged history of a skid and fall while riding a two wheeler. On examination, there was diffuse swelling around his shoulder joint which was in 160 degree abduction and external rotation. Arm was lying by the side of the patients head and elbow was in a flexed position.

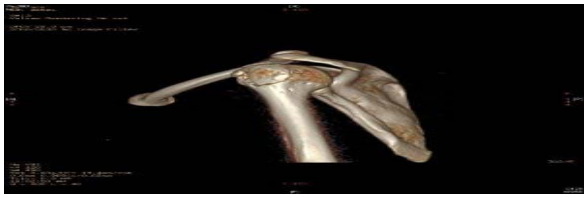


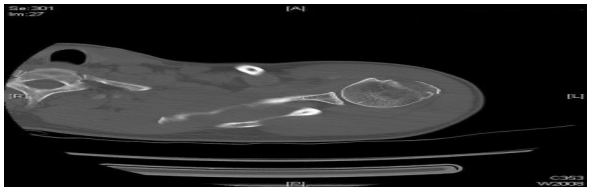


Under adequate sedation, the shoulder dislocation is reduced in a two staged maneuver. We initially displaced the head antero-inferiorly and then reduced using traction counter traction method. The reduction was confirmed by repeat x rays,CT scan and mri.

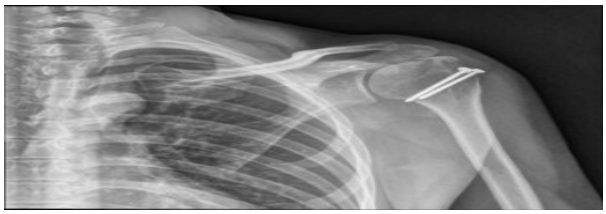






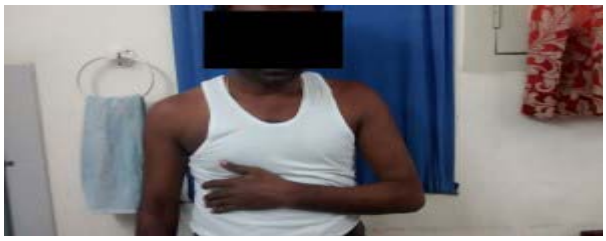


Post reduction, he did not have any neurovascular deficits. The large displaced greater tuberosity fracture was managed electively. He underwent open reduction and fracture was fixed with two cancellous screws. He was immobilized in a broad arm sling for pain relief. Post operative protocol- 6 weeks pendulum exercises follwed by slow progression to range of movements by 2 months.



Post op follow up 3 months :

Our patient had 100 deg forward flexion, full internal rotation, 30 deg of external rotation, 90 deg of abduction after 3 months follow up.



3.Discussion :

Patients with an inferior dislocation of shoulder present with a typical limb attitude. The affected arm is held over the head with shoulder in abduction and external rotation, elbow flexion and arm locked in an overhead position. Pain and restricted range of shoulder joint movements is the main complaint. Any attempt to passively move the arm will result in severe pain. The neurovascular status of the affected extremity assessment and documentation is mandatory in any type of dislocation both pre and post reduction. The normal round contour of the shoulder will be lost and head of humerus might be palpable in the axilla. The normal incidence of luxation erecta is 0.5%. The Incidence of GREATER TUBEROSITY fractures along with luxatio erecta is 37%. The incidence of ROTATOR CUFF injuries along with luxatio erecta is 12%. Neck of humerus fracture is seen in 20% of the patients.Incidence of neurovascular injury is 60%(axillary nerve being the most common).The incidence of brachial artery injury and axillary vein thrombosis is 3.3%. In our patient the greater trochanter was fractured and was displaced and hence open reduction and internal fixation was done.Our patient did not have any ROTATOR CUFF musles injuries.

After radiographic confirmation and documentation, closed reduction should be done by an orthopaedician under adequate sedation/anaesthesia. Various maneuvers have been described for reducing a luxatio erecta - traction counter traction and two step method. Initially traction counter traction method should be attempted and incase reduction not possible, then a two-step maneuver of first manipulating the head anteroinferiorly and then second step of traction counter traction. Other methods of reduction include overhead traction inline with the humeral shaft under fluoroscopic guidance as described by W.J.Mallon et all. It is important to note that traction always precedes extension of the arm to prevent humeral head from impinging on the inferior glenoid.

4.Conclusion:

Luxatio erecta is a very rare phenomenon. These injuries have a very high prediliction for neurovascular injuries. Hence they should be assessed properly and treated accordingly, failure of which can lead to devastating complications.

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