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Commentary

Luxatio-Erecta (Inferior Shoulder Dislocation): Emergency Medicine Recognition and Management

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Introduction

Luxatio Erecta, a specific term for inferior glenohumeral dislocation, is a rare condition, estimated to occur in 1 out of 200 (0.5%) of all glenohumeral joint shoulder dislocations (<u>Nho *et al.*</u>, 2006). It is also very commonly associated with neurovascular injury (<u>Brady, Knuth, & Pirrallo, 1995</u>). In addition, it comes with a classic presentation: the arm held "erect" in a fully abducted position. Thus, diagnosis can be conducted from the doorway of an exam room.

Case Presentation

A forty-seven years old male patient was lifting a heavy object while climbing up slippery stairs with his handheld against the wall to prevent falling. He suddenly felt a pop sensation over his left shoulder. Since then, the patient had pain and could not move the shoulder while the hand was persistently held upward, in fixed abduction with the hand placed at the back of the head. The diagnosis was made by clinical examination and confirmed by x-ray. The emergency physician and senior medical officer made immediate manipulative reduction under procedural sedative analgesia. The last outcome, which is satisfied with a full range of motion on his left shoulder. Additionally, the successful reduction was confirmed by an x-ray. The patient was discharged with an arm sling and referred to the outpatient orthopaedic clinic for follow-up.

Discussion

Out of all the dislocations, inferior dislocations of the shoulder are the least accounted for. The usual mechanism of injury is trauma, including sports injuries and falls, accounting for up to (44%) (Mallon, Bassett, & Goldner, 1990). The most common mechanism and pathophysiology of the traumatic cause of an inferior dislocation is sudden hyper abduction of an already abducted arm, causing the upper part of the humerus to press under the acromion and push the humeral head out inferiorly from the shoulder joint itself. Another mechanism in trauma although uncommon is direct weight/pressure onto the joint from above via an abducted arm with the elbow extended and forearm rotated internally. The distinguishing feature of a Luxatio Erecta shoulder dislocation is the abducted position of the humerus bone parallel to the spine of the scapula (Sud & Ranjan, 2021). The presentations can be obvious if one knows to pick up the signs and is aware of the condition as the patient will be holding the arm upright and unable to put the arm down. After the diagnosis of luxation erecta is made, there is a need for emergency reduction under procedural sedation and analgesia.

Conclusion

Emergency doctors need to identify the hallmark presentation of inferior shoulder dislocation. While diagnosis is relatively easy, clinicians must manage it correctly to avoid complications. This case report aims to create awareness among emergency doctors about Luxation Erecta despite its rare occurrence.

Conflict of Interest

The authors declare that they have no competing interests.

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