

SCAPULOTHORACIC DISSOCIATION

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Introduction

Scapulothoracic dissociation (STD) is rare, potentially life and limb threatening injury with high mortality rate. It has potential to be overlooked in acute setting, especially in setting of polytrauma as it has potential to divert the clinician's attention, resulting in delayed diagnosis and treatment of this devastating injury. STD is described as laterally displaced scapula with separation of ipsilateral acromioclavicular joint, disruption of ipsilateral subclavian vessels, brachial plexus and intact overlying skin. It can be seen in non-rotated chest x ray when there is lateral scapular displacement by measuring the distance between midline thoracic spinous process and medial border of scapula bilaterally more than 1cm and scapular index more than 1.29.

Case Presentation

40 years old, male, right hand dominant presented with alleged motorbike skidded with unknown mechanism of injury. Post trauma sustained, pain at right shoulder and swollen at right shoulder and arm. Upon arrival, GCS full, stable vital signs while right upper extremity showed deformity and swollen at right arm with abrasion wound over right shoulder but compartment soft, pulses palpable and sensation intact. Slightly rotated chest x ray showed displacement to lateral side of right medial border of scapula than left scapula while right humerus x ray showed closed comminuted fracture of midshaft of humerus. CT angiography on right upper limb showed complete non-opacification of proximal right axillary artery, closed comminuted fracture of right mid humeral shaft and non-displaced acromion fracture, thus confirmed STD.

Outcome

The patient had undergone right closed forequarter amputation as right upper extremities is unsalvageable.

Discussion

In STD, it needs combined clinical and imaging assessment. For clinical, it may present as compartment syndrome but STD should be the number one diagnosis while for imaging, chest x ray must be looked and measured for lateral displacement of medial border of the scapula, if there is any suspicion or diagnosis prompt for STD, CT angiography need to be proceeded to know for any opacification, as it determines the level of amputation of the upper extremities.

(347words)