Fractures of the scapula

Objectives

1. Describe the anatomy of the scapula
2. Describe patterns of fracture involving the scapula
3. Describe a treatment plan for scapular fractures in children and adolescents

Discussion

Fractures of the scapula are very rare, accounting for only 5% of shoulder fractures. The scapula is flat, and relatively protected by the chest wall and overlying musculature. The spine separates the inferior and superior fossas. The acromion is the lateral projection of the spine. The coracoid process is on the anterolateral portion of the scapular neck, and the glenoid is the lateral extension of the scapular neck. The brachial plexus and axillary vessels pass anterior to the neck. The acromion, clavicle, and coracoid; together with the interconnecting ligaments, form a “superior shoulder suspensory complex”.

Fractures of the scapula generally occur as a result of severe trauma. Little is written on scapular fractures in children, so problems arising from their treatment must be rare or nonexistent. In adults, glenoid fractures account for 10% of scapular fractures, and there are some specific criteria for open reduction of these fractures, consisting of displacement of > 10mm, and/or depression of > 5 mm. It is conceivable that such injuries could occur in adolescence, and adult standards of management would apply. The reasons for operative intervention would be to preserve shoulder stability and prevent subsequent arthritis.

In summary most scapular fractures are not significantly displaced, and symptomatic treatment would be all that is necessary for the vast majority of these rare fractures in children.

References