ISSUES IN ROTATOR CUFF TEARS

The cause of rotator cuff pathology is still widely debated. Bigliani's classification of the shape of the acromion related cuff tears to the Type 3 acromion. Personal observation and a search of the literature suggest Type 3 acromions are rare and more than 90% of patients with cuff problems have a Type 1 or 2 acromion. The supraspinatus outlet view alone may not demonstrate the spur as well as the anteroposterior view with 30° of inferior inclination and the former may not demonstrate the acromioal pathology well. Evidence therefore suggests cuff tears may be the final outcome of ischaemic degeneration of the tendon. The acromial spur may be a contributory factor. Trauma as a cause of cuff tears may not be recognized as well as it should and major accidents in the young patient who presents with shoulder pain and a normal a normal x-ray should lead to investigations for cuff tears. Shoulder dislocations in the middle age associated either with post reduction pain or weakness should lead to cuff tear investigation.

Tell tale signs on plain radiographs of cuff pathology include sclerosis and osteophyte formation on the greater tuberosity reversal in the shape of the acromion and in the late stages decrease in the acromio humeral interval. Ultrasound is comparable to the MRI in diagnostic accuracy and the 3D ultrasound may be more reliable in differentiating partial from full thickness tears. Muscle atrophy and fatty degeneration in the muscle that may predict a poor outcome from surgery may be better visualized with the MRI.

Major irreparable cuff tears pose a dilemma. Muscle transfers have not demonstrated superior results. Besides debriding the major tear and accompanying that with an acromioplasty with or without resection of the degenerated acromioclavicular joint one has to take care to preserve the CA ligament. It is often possible to take the ligament down from the undersurface of the acromion before acromioplasty and reattaching the ligament back to the acromion on the way out.

Open repairs of cuff tears with acromioplasty have stood the test of time and durability have been shown in long term follow-ups.