SURGICAL INDICATIONS

THE SHOULDER IMPINGMENT SYNDROME

The bursa is a normal tissue located between the shoulder joint and the acromion, in the sub-acromial space. The bursa a fluid filled sac that helps the rotator cuff tendons glide under the acromion without rubbing against it. The impingement syndrome describes the condition when the rotator cuff tendons excessively rub against the under surface of the acromion and cause the bursa to enlarge and become painful.

Bursitis responds very well to the non operative treatment and most patients will see their pain decrease substantially with 4-6 months of this treatment.

Non operative treatment includes avoiding painful activities and rest, occasional use of ice and anti-inflammatory medication (Advil or Motrin), physiotherapy treatment and the sub acromial injection of cortisone (1 to 3 times) (which may shrink and cure the bursitis).

The operation is reserve for patients that:
Have failed non operative treatment and have severe symptoms. It is also suggested for those that can only avoid severe symptoms by restricting most physical work. Severe symptoms include pain at night that disturbs sleep, pain at rest, and pain that prevents the ability to work. Severe pain is typically equal or greater than 5 on 10 in intensity and interferes with many daily activities.

Those that have minor (0-3/10) or infrequent pain are best treated non operatively because surgery often fails to improve this kind of pain and may occasionally worsen it.

CALCIFIC TENDINITIS

Calcific tendinitis describes the situation when the rotator cuff tendons calcify with overuse. The calcification may hurt, may increase in size and contribute to or create an impingement syndrome. Calcific tendinitis is often associated to a bursitis. The non operative treatment consists in treating the bursitis (see above) and occasionally removing the calcium via a calcific lavage (a procedure done in radiology if the painful calcium is bigger than 1 cm). Often the calcific tendinitis is not painful and does not lead to an impingement syndrome. It is in this case left alone as it is has no long term consequences and often resorbs by itself over time.
The operation is reserved to those that have significant pain and have failed non operative treatment and consists in performing an acromioplasty plus or minus concomitant calcium removal.

ACROMIOCLAVICULAR ARTHRITIS

The Acromioclavicular joint (AC joint) may become painful with overuse or following trauma (like a dislocation). The non operative treatment is the same as that for bursitis and also works in the majority of cases. The operation, reserved for those that have significant symptoms that have failed conservative treatment, consists in removing the distal 1cm of clavicle. An autogenous tendon graft stabilization is added if the AC joint had become painful after a chronic dislocation.

THE ROTATOR CUFF TENDON TEAR

The torn rotator cuff represents a hole in the tendon of the rotator cuff muscle of the shoulder. Most often this hole is small and will never cause any problems to the patient (the equivalent to a hole in a pant pocket that is situated high in the pocket, is small, and never causes objects to fall through it).

Sometimes the hole causes pain and leads to a bursitis and sometimes the hole is caused by or associated to an impingement syndrome.

The initial treatment is the same as that of the impingement syndrome, works as well in the majority of cases after 4-6 months. The operation is reserved to those who have significant pain, have failed at least 3 months of non operative treatment, and consists in reattaching the tendon to the bone. The acromioplasty is also performed if the surgeon sees a tight space between the tendon and the acromion or signs of rubbing between the two surfaces. The more the patient is active (high activity is often associated with an age younger than 60) especially with overhead activities, and the bigger the hole, the more likely the conservative treatment will help but not be sufficient to avoid the need for operative intervention.

A complete tear in the rotator cuff in patients under 40 should be followed by a second MRI one year apart to make sure the tear is not enlarging rapidly. Enlarging rotator cuff tears in the young should, even when asymptomatic, be considered for operative fixation.

SUPERIOR LABRAL TEARS (SLAP)

The Labrum is a fibrocartilaginous rim that surrounds the glenoid edge. The labrum helps stabilise the shoulder among other things. Superiorly, the labrum principally serves as the attachment site for the long head of the biceps tendon. Sometimes over use or trauma can cause the labrum to tear superiorly. When it does this it is called a SLAP tear (Superior Labrum Anterior to Posterior tear). The non operative treatment used for impingment syndrome also works for SLAP tears in the majority of cases. The operation, reserved for those with severe pain that have failed conservative treatment, consists in repairing the labrum to the glenoid or tenodesing the biceps on the humerus. *The operation only helps certain subpopulations however.* **Only labral tears associated with instability, or with a paralabral cyst, or in those that are younger than 40 years old do well after surgery**.

SHOULDER INSTABILITY

The first time shoulder dislocator should be treated with non operative means consisting of 1 week of immobilisation and 6 weeks of physiotherapy.

The shoulder that still hurts two months after the dislocation merits an ArthroMRI and an evaluation with an orthopedic surgeon. The shoulder that redislocates a second time within a short period of time from the first dislocation (ex. within 1 to 2 years), merits an ArthroMRI and an operation to stabilize the shoulder.