



Subacromial Bursitis

What is the subacromial bursa?

The subacromial bursa is a sack-like structure the size of your palm sitting between the acromion and the rotator cuff. Its job is to reduce friction between these two structures.

What is Bursitis?

In the diseased state the bursa becomes full of fluid and inflammatory debris that is very painful. This is subacromial bursitis.

What causes Bursitis?

The major cause appears to be age-related degenerative change within the rotator cuff. Bursitis can then be precipitated by overuse (work or sport) or a traumatic event ("post traumatic subacromial bursitis").

What is a Spur?

A spur is a bony prominence that forms underneath the acromion and rubs on the rotator cuff worsening the bursitis. We used to believe the spur occurred first but we now believe it is more likely the subacromial bursitis causes the spur. If the spur is large surgical removal is often required.

What is Impingement syndrome?

Until recently we believed the main cause of bursitis was the rotator cuff rubbing or "impinging" on the acromion. We now feel age-related degenerative change is the real cause and therefore the term 'subacromial bursitis' is probably preferable.

What are the symptoms?

Aching pain in the shoulder, worse at night and with overhead activities, pain may radiate down to but not below the elbow.

What are the signs?

Tenderness over the greater tuberosity and a positive impingement sign. The photo shows how to perform an impingement test. The elbow is flexed at 90 degrees and the arm brought forward so the shoulder is at 90 degrees of forward flexion (as shown). The shoulder is then internally rotated. The test is positive when this rotation brings on sharp pain. (www.youtube.com/watch?v=3LU1xsUrKV4)

How can I tell if there is a rotator cuff tear?

Unfortunately it is very difficult as the symptoms and signs may be identical. Weakness is the classic sign of rotator cuff tears but the pain of bursitis may produce weakness even without a cuff tear.

What are the differential diagnoses?

Older patients may have osteoarthritis which will be excluded by an X-ray. Acute calcific tendonopathy will produce severe pain and restriction in movement lasting for 1-2 weeks. The calcium will be seen on a plain x-ray. It is extremely important to exclude a frozen shoulder (covered in my previous "Shoulder 2 Shoulder Update"). The vital examination is to look for passive range of motion (normal in bursitis, restricted in frozen shoulder).

What investigations do I need?

None at first. If symptoms persist a plain x-ray to show a spur and exclude other pathology.

What are the roles of ultrasounds and MRIs?

These tests are usually ordered if the pain persists longer than 3 months or other pathology is suspected. MRI is very good for excluding a cuff tear but ideally an MR arthrogram should be done. However this is an invasive test and a plain MRI can provide enough information. Ultrasounds are cheaper and non-invasive but much less reliable

How is it treated?

Over the first 3 months try rest, activity modification, paracetamol, anti-inflammatory medication and physiotherapy (stop if painful).

What if symptoms persist?

Steroid injections are very useful; at least 10mls of local anaesthetic and 1 ampule of steroid is required. See my website for an instructional video on this injection. (<http://www.terryhammond.com.au/gp-info.html>)

Can an injection be done with a rotator cuff tear?

Yes.

When is surgery needed?

If significant symptoms persist longer than 3 months.

What investigations are needed prior to referral?

A plain x-ray is needed in all patients. An MR Arthrogram is ideal but a plain MRI is a reasonable substitute. If the patient doesn't wish to have either of these an ultrasound is required.

What surgery is done?

An arthroscopic subacromial decompression is very effective with minimal morbidity. The bursitis is excised and the under surface of the acromion is shaved. See my website for a video of this operation (<http://www.terryhammond.com.au/video-of-arthroscopic-subacromial-decompression.html>)

Profile



Dr. Terry Hammond

has specialized exclusively in disorders of the adult shoulder since finishing his orthopaedic training in 2003. He has undertaken a six month travelling shoulder fellowship in the USA and Canada and an

twelve month upper limb fellowship in the world renowned Pulvertaft unit in Derby, England. Since returning to Queensland he has established his private practice in association with Dr. Chris Vertullo at Pindara Place in the grounds of Pindara Hospital, Benowa.

Contact

DR. TERRY HAMMOND
The Shoulder and Sports Medicine Centre
Pindara Place, 13 Carrara Street
Benowa Queensland 4217

Phone 07 55976024
Fax 07 55970644
Website www.terryhammond.com.au
Email mail@kneesports.com.au

PINDARA
PRIVATE HOSPITAL