

## REHABILITATION

After surgery, the arm may be placed in a sling for a short period of time. Passive exercise and limited use of the arm begins the day after surgery.

A tailored rehabilitation program with the physiotherapist will be arranged which will include exercises to regain range of motion of the shoulder and strength of the arm. It may take two to four months to achieve complete relief of pain.

For inquiries or appointments, please contact

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# Shoulder Impingement



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## Shoulder impingement

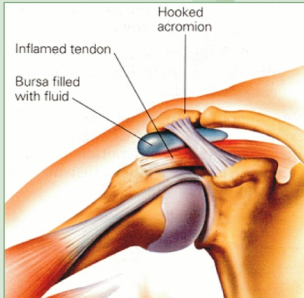
is one of the most common causes of pain in the adult shoulder. The acromion is the front edge of the shoulder blade and it sits over and in front of the humeral head (the ball of the shoulder joint).

When the arm is elevated, the acromion contacts the humeral head and pinches the shoulder tendon (rotator cuff). This causes pain and limits movement.

### CAUSE OF PAIN

The pain may come from 3 sources:

- "bursitis" or inflammation of the bursa overlying the rotator cuff tendon
- "tendonitis" or inflammation of the cuff tendon
- a tear of the rotator cuff tendon



3 sources of shoulder pain

### RISK FACTORS / PREVENTION

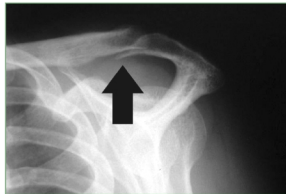
Impingement is more common in people aged 30 and above. Those who do repetitive lifting or overhead activities using the arm such as lifting or racquet games are especially at risk.

### SYMPTOMS

- The pain may develop as the result of minor trauma or spontaneously with no apparent cause.
- The pain is usually in the front of the shoulder but many patients feel that the pain also "travels" down the side of the affected shoulder. It is worse when lifting the affected arm. There may be a clicking sensation when moving the shoulder.
- Ladies would complain of difficulty buckling their undergarments and gentlemen find putting on and taking off their T shirts painful.
- Pain at night and patients may not be able to sleep on their affected shoulder. Occasionally, their sleep may be interrupted by the sharp pain when they turn in bed.

### DIAGNOSIS

X-ray of the shoulder may show a bone spur/ hook on the front edge of the acromion.



Arrow indicates the acromial bone spur/hook.

Further imaging studies, such as an ultrasound or MRI (magnetic resonance imaging) may be required to confirm a tear in the cuff tendon.

An impingement test, injection of local anesthetic into the bursa, can help to confirm the diagnosis.

### TREATMENT OPTIONS

- Initial treatment for impingement includes rest, avoidance of overhead activities and physiotherapy.
- A short course of oral non-steroidal anti-inflammatory medication may be necessary.
- Some patients may benefit from injection of local anesthetic and steroid into the affected area.

### SURGICAL TREATMENT

In cases of tendon tears and failed non-operative treatment, surgery may be required. The goal of surgery is to remove the part of the acromion (subacromial decompression) and create more space for the rotator cuff. This allows the humeral head to move freely under the acromion without pinching the tendon. This procedure is performed through small keyhole incisions.

In an arthroscopic (keyhole) procedure, two or three small puncture wounds are made. The joint is examined through a fiberoptic scope connected to a television camera. Small instruments are used to remove bone and soft tissue to "decompress" the space.



Using a bone burr to remove the acromial hook

Co-existing shoulder tendon tears can be assessed directly and repaired. With the use of keyhole incisions, the post-operative pain and discomfort is minimized. The patient is usually discharged the following day.