Shoulder Arthritis

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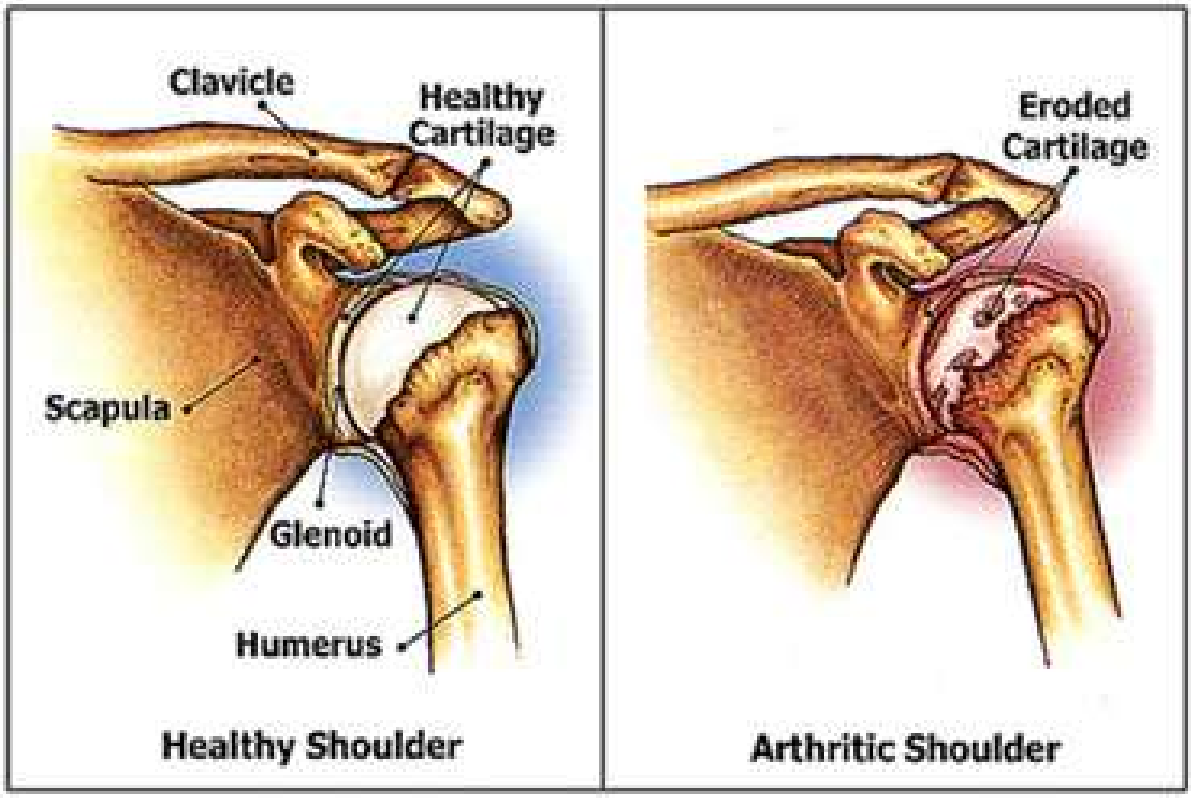

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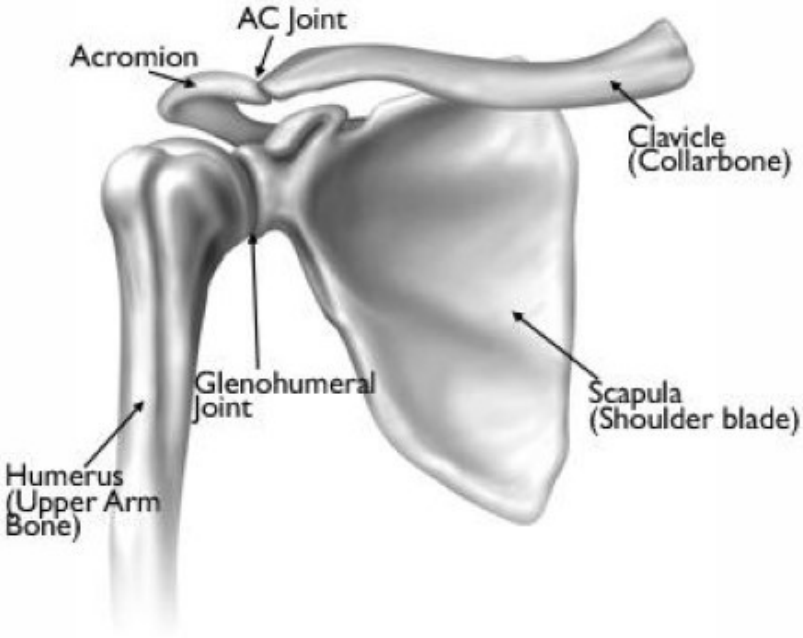
Anatomy/Description

The shoulder joint is a remarkably complex structure that allows a wide range of arm movement and power when it is functioning properly.
The shoulder is made up of three bones, the humerus (upper arm bone), scapula (shoulder blade) and clavicle (collarbone). The head of the humerus moves within a rounded socket like structure called the glenoid. The humerus is held into the glenoid by an arrangement of ligaments as well as muscles and tendons that are referred to as the rotator cuff.



Within the shoulder there are two joints; the acromioclavicular (AC) joint, located where the clavicle and acromion (tip of the shoulder blade) meet, and the glenohumeral joint, located where the humeral head fits into the glenoid. It is possible that both may be affected by arthritis.
The affected joint, severity and type of arthritis you have will determine the treatment approach.

What Causes Shoulder Arthritis?

There are a range of possible causes for arthritis in the shoulder, including;

- Injury/ fracture (trauma)
- Repetitive stress (overuse or overloading)
- Avascular necrosis (loss of blood supply)
- Infection
- Connective tissue disorders/ growth abnormalities
- Inflammatory causes (eg Rheumatoid arthritis)

Types of Shoulder Arthritis.

There are different types of arthritis that can affect the shoulder;

1. Osteoarthritis: Known as 'wear and tear' arthritis, the articular cartilage that covers the humeral head is worn away, leaving a rough surface with no protection between the humeral head and the glenoid, when bone on bone contact occurs it causes pain and stiffness.

2. Inflammatory (Rheumatoid) Arthritis: A chronic autoimmune disease that results in the lining that lubricates the joints (synovium) to swell, producing pain and joint stiffness. Rheumatoid arthritis causes the bone to soften and is commonly symmetrical, affecting both shoulders.

3. Post-traumatic Arthritis: Develops after injury, fracture or dislocation.

4. Rotator Cuff Tear Arthropathy: Occurs once the damaged rotator cuff fails to hold the humeral head within the gelnoid socket, resulting in the rubbing together of the humerus, acromion and glenoid, damaging the bones surface.

5. Avascular Necrosis: When the humeral head's blood supply is compromised bone cells begin to die; dead bone collapses and breaks away eroding the articular cartilage surrounding the joint. Avascular necrosis develops in stages, it begins in the humeral head and can progress further into the glenoid destroying the joint entirely.

Symptoms.

- Pain - Radiating up the neck or down the upper arm, progressively worsening and/or aggravated by activity or weather.
- Limited range of motion – stiffness, grinding, clicking or snapping sounds.

Surgical Treatment.

Arthroscopy:

In very limited circumstances Dr Dao may perform the surgery arthroscopically, otherwise known as key-hole surgery. This is done through several small incisions less than 1cm long. The underlying problem of the arthritis remains following this procedure. Arthroscopic procedures cannot cure the arthritis and further surgery is likely required in the future.

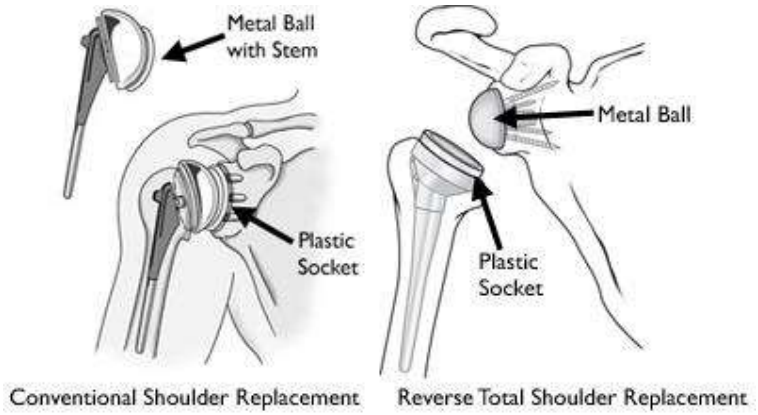
The arthroscope is a thin instrument containing a miniature video camera and light. It is inserted through a small incision in the shoulder. Using small instruments Dr Dao is able to debride (clean out) the inside of the joint and smooth over any rough surfaces. The wound will be closed with skin stitches and small adhesive dressings.

An ice pack is often applied in recovery to help defuse swelling and ease pain. Your arm will be placed in a sling or shoulder immobilizer.

Arthroplasty:

Shoulder joint replacement (Arthroplasty) is indicated when the arthritis within the glenohumeral joint has progressed to the point where there is significant pain and articular cartilage loss. The procedure involves replacement of the damaged component with an artificial prosthesis.
The options for this surgery include:

- Hemiarthroplasty: This means that only *half* of the shoulder joint is being replaced- just the humeral head (ball).
- Total Shoulder Arthroplasty: Both the humeral head (ball) and the glenoid (socket) will be replaced.
- Reverse Total Shoulder Arthroplasty: Both the humeral head (ball) and the glenoid (socket) will be replaced, but they will be on opposite sides to the usual anatomy. The socket will be created in the head of the humerus and the ball will be created within the glenoid. A reverse shoulder replacement is indicated for those people whose rotator cuff is no longer intact but they have full function of the deltoid muscle. This approach has become increasingly popular, effective and longer lasting.



The wound will be closed with skin stitches and an adhesive dressing will be applied, your arm will be placed in a shoulder sling.

Recovery and Follow Up After Procedure.

As soon as possible following surgery you should start moving your fingers, wrist and elbow. A post-operative appointment will be made for you to see Dr. Dao in approximately 14 days. Your sutures will be removed at this consultation. You will continue to wear a sling for 6 weeks following an arthroplasty procedure.
An exercise program is important to your recovery and begins soon after your surgery. During the first 6 weeks post-surgery do not lift anything heavier than 500 grams. Driving is not recommended as the position and movement may damage the surgical site. After six weeks, Dr. Dao will remove your sling and start with gentle exercises that gradually help you regain shoulder movement. At 3 months you will start stretches and strengthening exercises to help restore function of the shoulder. You will learn ways to avoid shoulder problems in the future. Dr. Dao will advise you about return to work and normal activities.

Recovery takes time and depends on the type of surgery performed. It usually takes up to one year for strength and comfort of your shoulder to return. There will still be improvement up to 2 years following surgery.

Frequently Asked Questions.

Q: Will the arthritis heal by itself?

A. No, once the articular cartilage has been worn down, the bone produces spurs known as osteophytes in an attempt to heal itself- these osteophytes however further aggravate the joint.

Q: Will I need surgery?

A. There are a few non-operative treatments that should be the initial course of action; including activity modification, physiotherapy and/or corticosteroid injections. However, most people only experience pain relief in the short term as the arthritis generally progresses with time. Failing conservative measures, surgery is then recommended.

Q. Is there any risks associated with the surgery?

A. All surgery has risks. Dr. Dao will discuss this with you, including but not limited to: anaesthetic risks, the risk of wound infection or deeper infection which may require further surgery, slow healing, joint instability, persistent pain or stiffness, wound scarring, the risk of bleeding and fracture. There is also a risk of the damage to nerves and blood vessels close to the surgical area.

Q. Will the pain and discomfort in my shoulder resolve?

A. The pain and discomfort will probably take a few weeks to months to resolve. In unusual cases the pain may not resolve over the long term.

Q. What do I do if there is severe pain, discharge, increased swelling, worsening flexibility, inability to move the shoulder or any urgent concerns following surgery?

A. During business hours, please contact the rooms on 8078 0633 or outside business hours please attend your local emergency department.