

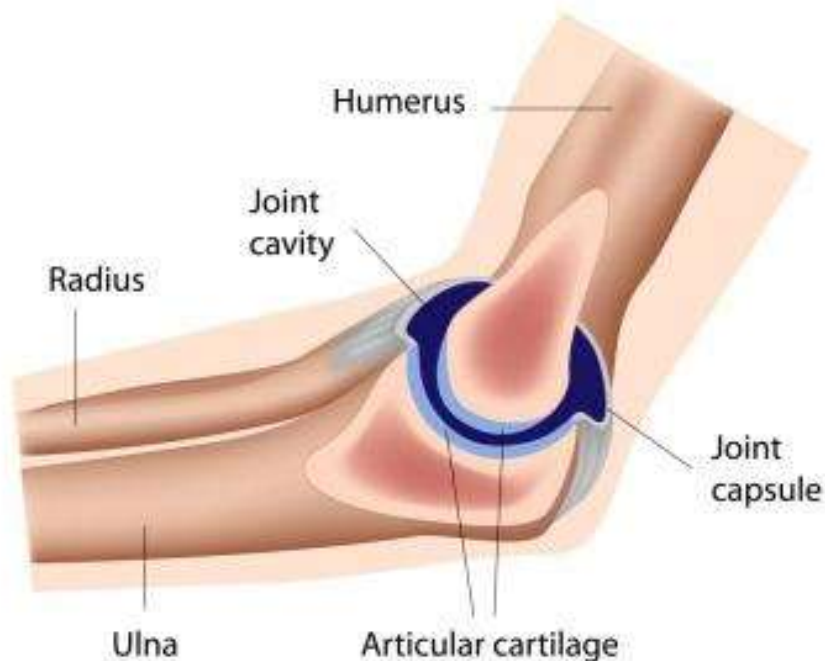
Elbow Arthritis

Dr Alan Dao

FRACS (Ortho), FA (Orth) A, MBBS, BaAppSc (Phty)

www.mysportsjoints.com.au

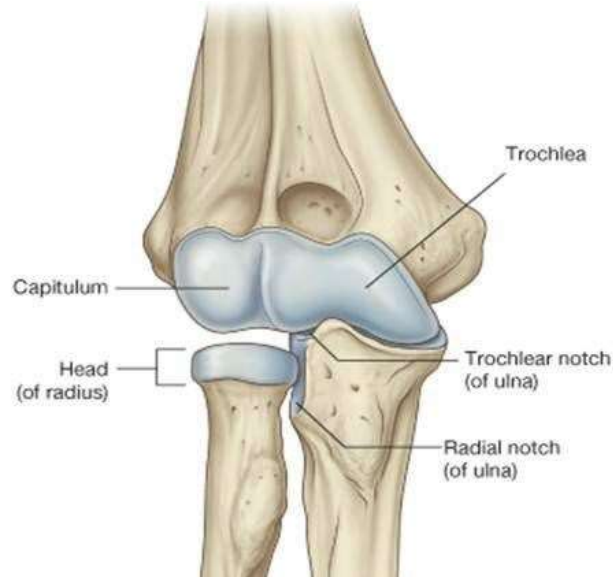
The Elbow Joint



Suite 103, 68 Eldridge Rd, Bankstown NSW 2200
Suite 11, Level 7 POW Private Hospital, Randwick NSW 2031
Suite 209, Level 2, Strathfield Plaza Office, 11 The Boulevard Strathfield NSW 2135
Phone: (02) 8078 0633
Fax: (02) 8080 4344
Email: info@dralandao.com.au

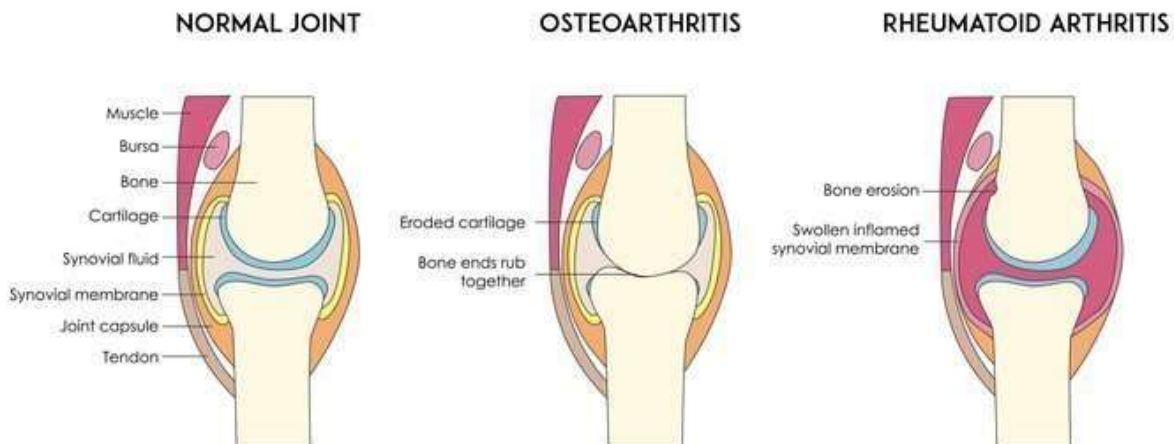
Anatomy/Description

The elbow is made up of the humerus (upper arm bone), ulna & the radius (forearm bones). The connection between the humerus and the ulna creates a 'hinge' like joint which allows for flexion and extension. The connection between the humerus and the radius provides the supination and pronation movement of the forearm. The humeral condyle is the distal end of the humerus; the lateral side is called the capitulum, the medial side is called the trochlea. The condyle meets with the trochlear notch of the ulna and the head of radius, these surfaces are covered with articular cartilage that protects the bone and allows the joint to glide.



The elbow is generally well protected from arthritis due to the fit of the joint surfaces and the strength of the surrounding ligaments. Though the elbow can be weakened by trauma and injury such as fracture or dislocation, it is more common for arthritis to occur as a result of general wear and tear.

NORMAL AND ARTHRITIC JOINTS



What Causes Elbow Arthritis?

There are a few causes of arthritis of the elbow, including;

- Dislocation or fracture (trauma)
- Repetitive stress (overuse or high pressure)
- Infection
- Inflammation (Eg Rheumatoid Arthritis)
- Connective tissue disorders/ growth abnormalities

Types of Elbow Arthritis.

There are three main types of arthritis that can affect the elbow joint; osteoarthritis, post-traumatic arthritis and inflammatory arthritis.

- I. Osteoarthritis: Known as “wear and tear” arthritis, destroys the articular cartilage between the connecting bones, resulting in pain from bone-on-bone contact.
- II. Post-Traumatic Arthritis: Can cause destruction of articular cartilage or produce loose fragments which aggravate the joint surface.
- III. Inflammatory arthritis (eg Rheumatoid Arthritis): the synovium that surrounds the joint swells and results in a narrowing of the joint space.

Symptoms.

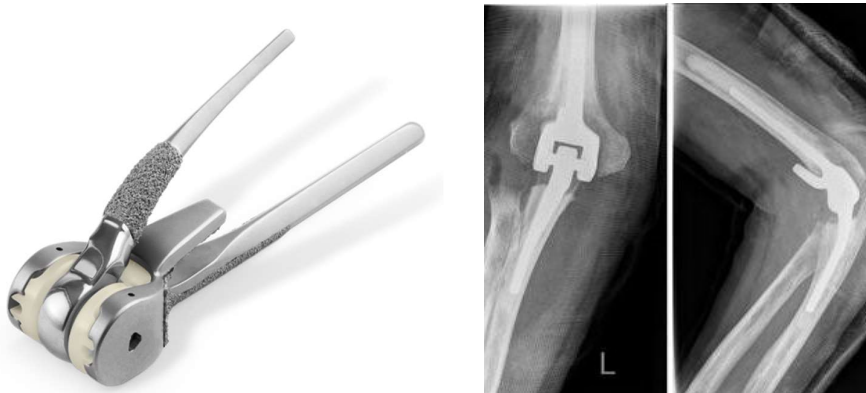
The most common symptoms of elbow arthritis are:

- Pain or a locking/ grating feeling.
- Loss of range of motion.
- Swelling, which can lead to numbness in the little finger or ring finger due to increased pressure on the ulna nerve.

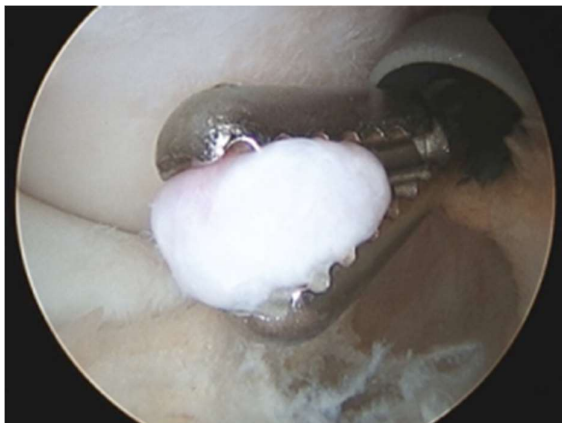
Treatment.

The initial management for arthritis typically includes activity modification, analgesia, medication (eg treatment of Rheumatoid arthritis), injections and exercise therapy. Once conservative treatment is exhausted then surgical intervention may be considered. There are two surgical options; total elbow replacement and elbow arthroscopy. The choice of surgery will depend on the extent of damage to the joint, your normal activity levels and your age. Total elbow replacements have a limited lifespan as the components can wear out with usage and revision surgery may then be required, however revision surgery is never as successful as the initial replacement procedure.

1. Total elbow replacement is where the joint is replaced with metal and plastic components to remove the arthritic joint surfaces. It is typically for people who are older and generally less active so that there is lower demand and wearing of the new joint surfaces. There is a lifelong restriction on the amount of weight that can be loaded through the affected arm which is typically about 5kg at the most. Dr Dao would perform the surgery with a 10 to 15cm incision along the back of the elbow. He will then carefully locate the nerves and blood vessels before cutting out the arthritic joint and replacing it with stemmed components in the humerus and ulna bones and a special plastic bearing component to allow movement of the joint. The wound will be closed with skin stitches and adhesive wound dressings. Your arm will be placed in a sling after the surgery and an ice pack is often applied in recovery to help defuse swelling and ease pain.



2. Elbow arthroscopy allows debridement of the joint and removing any excess bone (osteophytes), loose cartilage or bones fragments which can be typically found in elbow arthritis. This will help to improve pain, range of motion and function. However, this technique cannot repair the arthritis. Dr Dao performs arthroscopic surgery, known as key-hole surgery, through several small incisions less than 1cm long. The arthroscope is a thin instrument containing a miniature video camera and light. It is inserted through a small incision in the elbow. Using small instruments Dr Dao is able to remove any loose bone/ cartilage fragments or damaged tissue within the joint. This procedure aims to release the stiffness and smooth over the joint surfaces. The wounds 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 temporarily but you should start moving your elbow as soon as possible after the surgery in order to maintain the improved range of motion.



Recovery and Follow Up After Elbow Arthroscopy.

As soon as possible following surgery you should start moving your fingers, wrist and shoulder. 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. An exercise program is important to your recovery and begins soon after your surgery, he will likely refer you to physiotherapy to help with this. After six to eight weeks following surgery, Dr. Dao will review you again to assess your progress. Dr. Dao will advise you about return to work and normal activities.

Recovery takes time and depends on the type of surgical repair. It usually takes several months (possibly up to a year) for strength and comfort of your elbow to return.

Frequently Asked Questions.

Q: Will the elbow heal by itself?

A. Arthritis does not heal itself, there are options that offer temporary pain relief, however the condition will not revert back and is likely to gradually progress with time.

Q: Will I need surgery to cure the arthritis?

A. For less severe cases there are non-surgical treatment options such as oral medications, activity modification, physiotherapy or corticosteroid injections. If there are loose bodies causing catching or locking of the elbow then arthroscopic surgery may be indicated to remove these loose bodies and debride the joint to help with the symptoms. However, if your condition further deteriorates then a total elbow replacement may be necessary to remove the arthritis.

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, return of bony spurs, further worsening of the arthritis requiring further surgery, risk of bleeding and stiffness in the elbow. 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 elbow resolve?

A. Though most patients experience 85- 95% pain relief and restored range of motion, the pain and discomfort can take up to 6 months to improve. In some cases the pain may not resolve over the long term due to the underlying arthritis.

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

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