

ELBOW ARTHRITIS & ELBOW REPLACEMENT

What is a cause of elbow arthritis?

By far the commonest cause of 'Inflammatory Arthritis' like Rheumatoid which causes arthritic changes to elbow. Osteoarthritis of the elbow occurs when the cartilage surface of the elbow is damaged or becomes worn. This can happen because of a previous injury such as elbow dislocation or fracture. It may also be the result of degeneration of the joint cartilage from age. The elbow is one of the least affected joints because of its well matched joint surfaces and strong stabilizing ligaments.

Anatomy

The elbow joint is a very stable & hinged joint. The ulnar nerve supplies feeling to the little & ring finger. It also supplies motor power to 15 out of 20 small muscles in hand.



Ulnar Nerve

Causes:

Osteoarthritis: (OA)

It is also known as "wear-and-tear" arthritis. In osteoarthritis is a condition that destroys the smooth lining (articular cartilage) of bone. As the cartilage wears away, it becomes frayed and

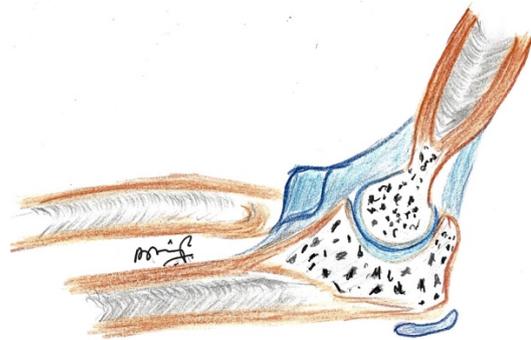
rough, and the protective space between the bones decreases. During movement, the bones of the joint rub against each other, causing pain. OA usually affects people over 50 years of age.

Rheumatoid Arthritis: (RA)

RA is a chronic disease that attacks multiple joints throughout the body. The joints of your body are covered with a lining — called synovium — that lubricates the joint and makes it easier to move. Rheumatoid arthritis causes the lining to swell, which causes pain and stiffness in the joint. Often the rotator cuff can also be damaged in patients with RA

Post Traumatic Arthritis: (PTA)

This usually follows injury to the elbow joint causing damage to the cartilage. It may occur after an initial fracture repair has been attempted.



Symptoms:

The common symptoms are pain and stiffness in the elbow especially with lifting and loading the arm. There may also be aching sensation in forearm with tingling and numbness in the ring and little fingers. These may be worsened by bending the elbow or resting on a hard surface. If the muscles are affected, then patients have clumsiness in hands. Some patients present with ulnar nerve symptoms around the elbow

Diagnosis:

The diagnosis of elbow arthritis is based on the above symptoms and usually confirmed by plain radiographs (see below). If patients have symptoms of ulnar nerve compression, then this diagnosis is confirmed using Nerve Conduction Studies (NCS)

**Treatment:****Nonsurgical Treatment**

For the early stages of osteoarthritis of the elbow, the most common treatment is nonsurgical. This includes oral medications to reduce or alleviate pain, physical therapy, and activity modification.

Corticosteroid injections are sometimes used to treat osteoarthritis symptoms. Steroid medication has typically been used with good results. Although the effects of injections are temporary, they can provide significant pain relief until symptoms progress enough to need additional treatment.

An alternative to steroids has been the injection of hyaluronic acid in various forms, called viscosupplementation. Viscosupplementation involves injecting substances into the joint to improve the quality of the joint fluid.

Surgery:

The goal of surgery is to provide pain relief and improve function.

When nonsurgical interventions are not enough to control symptoms, surgery may be needed.

By the time arthritis can be seen on X-rays, there has been significant wear or damage to the joint surfaces. If the wear or damage is limited, arthroscopy can offer a minimally invasive

surgical treatment. It may be an option for patients with earlier stages of arthritis.

Arthroscopy / Key Hole Surgery: (For more details see Elbow Arthroscopy)

For patients who are too young or too active to have prosthetic joint replacement, there are other reasonably good surgical options. If loss of motion is the primary symptom, the surgeon can release the contracture and smooth out the joint surface. Arthroscopy has been shown to provide symptom improvement at least in the short term. It involves removing any loose bodies or inflammatory/degenerative tissue in the joint. It also attempts to smooth out irregular surfaces. Multiple small incisions are used to perform the surgery. It can be done as a day case procedure, and recovery is reasonably rapid.

Elbow Replacement:

If the joint surface has worn away completely, it is unlikely that anything other than a joint replacement would bring about relief. There are several different types of elbow joint replacement available.

In appropriately selected patients, the improvement in pain and function can be dramatic. With an experienced surgeon like Prof. Singh - the results for elbow joint replacement are typically as good as those for hip replacement and knee replacement.

**Frequently Asked Questions****What are some of the possible complications?**

Complications relating to anaesthesia. Damage to nerves, vessels and bone whilst undertaking

the surgery. Later on small risk of developing venous thrombo-embolism i.e. clots in veins of legs or lungs. Infection, Bleeding, stiffness and wound healing problems can happen. Loosening of the prosthesis over time and pain may happen.

What kind of anaesthesia is used?

Majority of these cases are done under general anaesthesia with a nerve block which numbs the arm and gives excellent pain relief.

How long will I be in the hospital?

Vast majority of patients go home the following day after the surgery.

After hospital care

Will I have to wear a sling after the operation? After your surgery, you will be fitted with a plaster back slab and a high arm sling, which is for your comfort, your fingers and wrists are free for you to use them as comfortable.

Wound care: After surgery, you will have a plaster back slab. The back slab is applied to help with wound healing and is removed at 2 weeks when is the first outpatient appointment. At this stage the sutures or clips will also be removed.

Medication: You will be given a prescription for pain medication. Please start your regular medication as soon as possible after the operation.

Follow-up clinic: You will need to be reviewed in clinic after your operation. This is usually 2 weeks after surgery.

Physiotherapy after your operation.

A physiotherapist will assess you before or after your operation and will give you exercises to do when you go home, more formal physiotherapy starts after 2 weeks once the plaster is removed.

Return to Work

The time that you can return to work will depend on the nature of your work. If you are in a relatively sedentary job you may be able to return as early as 2 - 4 weeks after surgery. Following the elbow replacement, it's not advisable to carry heavy loads above 5 kgs to reduce the chances of loosening of the

prosthesis. Your doctor and physiotherapist will discuss this with you and advise you accordingly.

Leisure Activities

You should avoid sustained repetitive overhead activities for up to 4 - 6 weeks. You can usually start swimming when you are out of the sling – usually 4 – 6 weeks after surgery breast-stroke is advisable initially. Patients generally return to activities such as Golf at about 3 – 6 months. You should avoid physical contact sports like rugby or football. For specific guidance regarding sport or DIY please speak to your physiotherapist.

Driving

When you feel comfortable and have a good range of movement you can begin driving, typically at approximately 4 - 6 weeks' post-operative stage. It is advisable to check this with your insurance company and your consultant if you are unsure.

Further Information

If you have any further questions, then please ask at your clinic appointments.

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