

Total Elbow Arthroplasty

What is a total elbow arthroplasty (replacement)?

Like a hip, knee, or shoulder replacement, a total elbow arthroplasty replaces your damaged, worn-out, or broken elbow with a metal and plastic implant. The goals of this surgery are:

- Relieve pain
- Improve function and motion
- Restore quality of life

When do you perform a total elbow replacement?

This replacement is performed on patients with the following problems:

- Advanced elbow arthritis either due to normal wear-and-tear or inflammatory arthritis, such as lupus or rheumatoid arthritis. A total elbow replacement is only recommended once you have failed all other conservative or non-surgical options to relieve your pain and improve motion
- Elbow fractures that cannot be fixed or are unlikely to heal due to poor bone quality. This is a more common reason for a total elbow replacement and more commonly occurs in older adults with very bad elbow fractures and poor bone that cannot be fixed.

How do you perform this surgery?

An incision is made on the backside of your elbow approximately 15cm long. The end of your humerus and upper part of the ulna are replaced with the metal implant, and the two implants are linked together with a plastic liner, like a hinge. The stems that go in your humerus and ulna are cemented into correct position. Your ulnar nerve and radial nerve are in close proximity during this surgery and protected the entire time.

What materials are used in total elbow replacements?

There are a mixture of materials used in these replacements – like total hip and knee replacements:

- Metal: Cobalt Chrome and Titanium are the two most common metals used
- Plastic: Polyethylene is the plastic liner

Will I have any long-term restrictions with my elbow?

Unfortunately, there are life-long lifting restrictions with this prosthesis. Due to the designs of the implants available and the way they are fixed to bone, they are unable to handle repetitive heavy lifting. You will have a **five-pound lifting restriction** for the rest of your life with this arm. For your new elbow to last as long as possible it is critical that you abide by these restrictions. Disregarding these restrictions will cause the implant to loosen over time potentially requiring a revision replacement surgery.

Although the lifting restriction does limit certain activities, many patients are very happy with this replacement as recovery is quick after surgery and the new elbow allows for significant improvement in motion, pain relief, and restoration of quality of life.

How long will my elbow replacement last?

For many patients, this elbow replacement will last the rest of their lifetime. Current data suggests that these elbow replacements will last for 10 years in 90% of patients and 15 years in 80-85% of patients. You have a direct role in helping get the most time out of your elbow replacement by carefully following the lifting restriction (five pounds) with your elbow replacement.

Surgery Information

Length of Stay

I prefer to keep patients in the hospital for 24 hours after surgery to ensure their pain is controlled. Most patients are ready to go home the day after surgery.

Anesthesia

You will typically receive two types of anesthesia for this surgery.

- General anesthesia: meaning you are asleep during the procedure
- Numbing medication will be provided around your surgical incision for pain control

Incisions and Dressings

Your arm will be in a splint after surgery. The splint cannot get wet. I strongly recommend bathing over showering while in a splint, if possible. Over the counter splint and cast protectors can help prevent water getting into your splint during a shower, but they are not 100% waterproof as water may get in where the bag is sealed to your arm. Your splint will remain on until you see me in clinic

Sling

When you wake up from surgery, a sling will be on your arm only for comfort while you are in a splint. You may remove the sling if you do not find it comfortable.

Pain Control

Review my "Post-operative medication" information sheet I provided or on my website. I prescribe many different medications after surgery to help control your pain in different ways.

Hand swelling is VERY common after this type of surgery. I strongly recommend you keep your arm elevated after surgery, propped up on pillows at home above heart level. I also recommend you squeeze a ball or rolled up sock to assist with decreasing the swelling in your hand.

Post-operative Appointment

I will see you at roughly the following intervals after surgery: 2 weeks, 6 weeks, 3 months, 6 months, 1 year, 2 years, 5 years, and every 5 years thereafter

After your surgery, if you do not have a first post-operative visit appointment please call our office so we can schedule to see 2 weeks after surgery.

For any concerns, please contact my office

Please call my office if you begin to experience any of the following after surgery:

- Fever above 101.5 F
- Loss of motion or new onset numbness after surgery (your nerve block will be in place for approximately 24 hours after surgery)
- Excessive bleeding that is saturating the bandages
- Increased pain, increased redness around the incision, purulent drainage (thick, white drainage with a foul odor), or persistent drainage > 4 days.

Post-operative Rehab and Restrictions

Physical Therapy or Home Therapy

Most patients regain motion very quickly after surgery and do not require physical therapy. I will recommend therapy on a case-by-case basis.

Restrictions after surgery

- Splint:
 - You will be in a splint for 2 weeks: do not get your splint wet
- Motion restrictions:
 - Once you are out of your splint there are no restrictions on your motion
- Strengthening and weightlifting:
 - **You will have a lifelong lifting restriction of no more than 5lb – this is critical to ensure your new elbow lasts as long as possible**