

Elbow Arthritis Surgery: What You Need to Know

Elbow arthritis occurs when the cartilage in the joint wears away, causing pain, stiffness, and swelling. This can result from aging, injury, or conditions like rheumatoid arthritis. When non-surgical treatments such as medications, injections, or therapy no longer help, surgery may be recommended. Common procedures include **arthroscopic or open elbow joint debridement and contracture release (osteocapsular arthroplasty)** to clean out and restore motion the joint, and **elbow arthroplasty**, such as radial head arthroplasty or total elbow arthroplasty, to replace part or all of the joint. Below, we explain the surgery, recovery, potential complications, and expected outcomes to help you feel informed.

Description of the Surgery

Elbow arthritis surgery varies based on the extent of damage and your needs. Here's how the common procedures are performed:

- **Arthroscopic or Open Debridement and Contracture Release (Osteocapsular Arthroplasty):**

This procedure removes scar tissue and releases tightness to improve motion and reduce pain. For **arthroscopic**, the surgeon makes several small incisions (less than ½ inch) around the elbow, using a tiny camera (arthroscope) and tools to remove bone spurs, loose cartilage or bone fragments, and scar tissue, and to release the stiff joint capsule. For **open**, a larger incision is made, often on the back or side of the elbow, to achieve the same goals with a direct view. The incisions are closed with stitches, and a dressing is applied. This is ideal for mild to moderate arthritis with stiffness.

- **Radial Head Arthroplasty:**

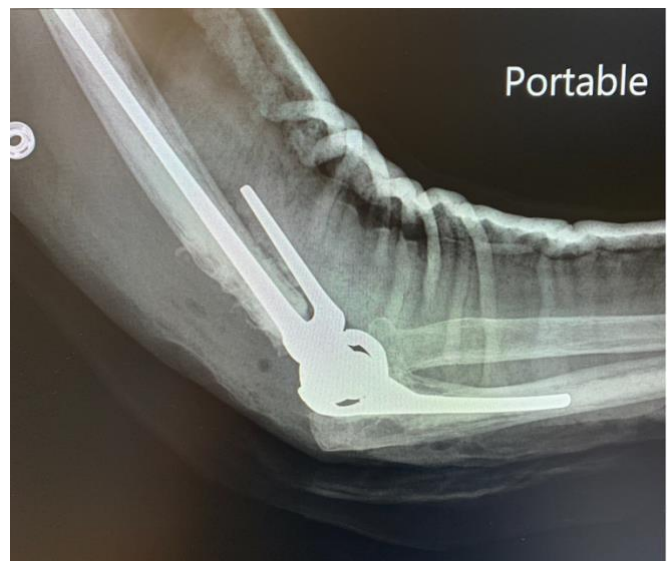
This replaces the radial head (top of the radius bone) when arthritis or injury damages it beyond repair. The surgeon makes an incision (2-3 inches) on the outer elbow, removes the arthritic radial head, and inserts a metal implant to restore smooth joint motion. The incision is closed, and a dressing is applied, sometimes with a splint. This is used when arthritis is limited to the radial head.

- **Total Elbow Arthroplasty (TEA):**

This replaces the entire elbow joint for severe arthritis. The surgeon makes an incision (approximately 6 inches) on the back of the elbow, removes the damaged ends of the humerus and ulna, and implants a hinged metal-and-plastic prosthesis to form a new joint. The incision is closed, and a dressing is applied,



Source: stryker.com



sometimes with a splint. This is typically reserved for older, less active patients or those with very advanced disease.

These surgeries are performed under general anesthesia with regional anesthesia (numbing the arm). They take 1-3 hours and are usually outpatient, meaning you go home the same day.

What to Expect During Recovery

Recovery varies by procedure, with arthroplasty requiring more caution than debridement. Here's a general timeline:

- **Immediately After Surgery:**
Your elbow will be in a dressing with a sling or splint. Mild to moderate pain, swelling, or stiffness is normal, manageable with prescribed pain medication or over-the-counter options like ibuprofen. Keep your arm elevated to reduce swelling. Work on finger motion exercises (from a tight fist to full extension) to minimize stiffness.
- **First 1-2 Weeks:**
Stitches are removed within 10-14 days. You will be referred to an occupational or physical therapist to work on motion exercises as the first phase of your rehabilitation. You are encouraged to work on finger and shoulder movements, as well, to minimize stiffness.
- **Weeks 3-6:**
You will work with your occupational or physical therapist on motion exercises to minimize stiffness in the elbow, as well as hand, wrist, and shoulder. Light activities like writing, typing, or daily tasks may resume with care.
- **Weeks 6-12:**
You will work on strengthening exercises as your motion improves and you enter your next phase of rehabilitation. Most patients can resume full activities between 3-4 months. For TEA patients, activity is restricted (no lifting over 5-10 pounds with the operative arm long-term).
- **Full Recovery:**
Complete healing generally occurs between 6-12 months after surgery.

Follow your surgeon's guidance on postoperative exercises, therapy, and activity limits.

Potential Complications

These surgeries are generally effective, but risks exist. These are uncommon and often treatable:

- **Infection:** Redness, swelling, or drainage at the incision site may indicate an infection, often treatable with antibiotics.
- **Nerve or Blood Vessel Damage:** Rarely, nearby structures may be affected, causing numbness or weakness, usually temporary. Permanent injury or deficit is rare.
- **Stiffness:** Motion may remain limited, though therapy helps minimize this. Most patients see significant improvement in their motion by 3-6 months after surgery. Significant stiffness after 6 months may require additional treatments, such as aggressive therapy, special splints, or surgery, to improve.

- **Implant Issues (Arthroplasty):** The radial head implant or TEA prosthesis may loosen or wear out over years, possibly needing revision surgery. It is also possible to develop an infection or fracture the bone around the prosthesis, which may also require revision surgery.
- **Joint Instability:** Rarely, the elbow may feel unstable after debridement or arthroplasty, requiring additional surgery.

Contact your doctor if you experience severe pain, fever, or signs of infection after surgery.

Expected Outcomes

Elbow arthritis surgery aims to reduce pain and improve function, with results varying by procedure:

- **Pain Relief:** Most patients experience significant pain reduction within weeks to months.
- **Improved Function:**
 - **Debridement/Contracture Release:** Restores 50-75% of normal motion, ideal for active patients with moderate arthritis.
 - **Radial Head Arthroplasty:** Preserves forearm rotation and elbow motion for localized arthritis.
 - **Total Elbow Arthroplasty:** Provides a pain-free joint with limited lifting capacity (5-10 pounds), best for severe cases in less active patients.
- **Long-Term Results:** Between 70-95% of patients (depending on patient-specific factors) report satisfaction after surgery. Debridement reduces symptoms caused by the arthritis, while arthroplasty implants may last 15-20 years or more.

Success depends on arthritis severity, procedure choice, and therapy adherence.

Final Notes

Elbow arthritis surgery can relieve pain and restore elbow use, tailored to your condition. If you have questions about which option is right for you, discuss them with your surgeon. We're here to support you every step of the way!