Explanation of Procedure and/or Diagnosis

Arthritis of the elbow is a condition associated with the breakdown of cartilage in the elbow joint from previous injury, age related degenerative changes, or destructive diseases such as rheumatoid arthritis. The diagnosis of arthritis is usually done through X-Ray, although further imaging such as a CT (computed tomography) or MRI (magnetic resonance imaging) may be used to further evaluate the elbow and its surrounding structures.

The most common symptoms of elbow arthritis are: pain, loss of range of motion, grating or popping sensations, and locking of the joint. Swelling of the joint may also occur as well as deformity associated with severe disease processes. Numbness can be common with elbow arthritis in the small and ring finger. This can be due to swelling or changes of the bone causing irritation to the ulnar nerve (aka “funny bone”).

Treatment of Elbow Arthritis

Elbow arthritis is a slowly developing disease that often takes several years of degeneration before it becomes symptomatic. Initially, the disease may be treated non-surgically. This treatment consists of anti-inflammatory medication, modification of activities and cortisone injections. When this fails to control symptoms adequately, consideration for surgical treatment is given.

Arthroscopy: A minor outpatient procedure in which several small incisions are made around the elbow can be helpful in the early to mid-stages of elbow arthritis. The joint is cleaned out, loose pieces of cartilage and inflammatory tissue are removed. This is particularly helpful in younger patients with arthritis and frequently relieves pain and improves motion. This is the treatment of choice for people who require vigorous use of their arms since heavy use is not advisable after elbow replacement.

Arthroplasty (Replacement): The diseased joint is removed and replaced with metal and surgical-grade plastic parts. This requires at least an overnight stay in the hospital and is done through an open approach, typically with an incision along the back of the elbow. This restores a smooth bearing surface to the elbow which results in significant reduction in pain and improvement in motion and therefore function.
Preparing for Surgery
Patients who are scheduled for elbow replacement surgery should discontinue all anti-inflammatory (Advil, Aleve, Ibuprofen, Naprosyn, meloxicam, etc.) 7-10 days prior to surgery to decrease intra-operative bleeding. Medications that thin the blood need to be discontinued as well (aspirin, warfarin, Plavix), please consult with your primary care physician prior to stopping these medications. Many vitamins and supplements have blood-thinning properties and should be stopped as well 7-10 days prior to surgery.

Do not schedule minor procedures such as dental procedures (e.g. teeth cleaning, crowns, repairs) urologic or gastrointestinal procedures within two weeks of your elbow surgery. These procedures increase the risk of developing an elbow infection when performed near the time of your elbow surgery. If you have any questions, ask your Orthopedic surgeon.

If you develop a sore throat, significant cough or the flu within a week of your planned shoulder surgery, please inform your Orthopedic surgeon. These conditions may make your anesthesia more complicated, increase your operative and anesthesia risks and as such, require your surgery to be rescheduled.

If you develop a urinary tract infection within two weeks of your surgery, contact your family physician for treatment and please inform your surgeon. Your surgeon may want additional urine tests prior to your surgery to make sure the infection has cleared.

Dentures and contact lenses cannot be worn in the operating room. Please make sure to bring your container and solutions with you to the hospital so that they may be kept safe until the completion of your surgery.

You should have nothing to eat or drink after midnight the night prior to your surgery, except medications that you are instructed to take by our surgical team with a sip of water. We recommend you wear loose fitting clothing that is easy for you to dress into after surgery. Please leave all jewelry at home, no jewelry will be allowed on the operative arm due to risks with swelling.

What to Expect at Surgery
You will be instructed by the surgical scheduler what time to arrive to surgery, typically this is 2 hours prior to your surgery. This is important to prepare you for surgery. Nurses will prepare the surgical site and administer any medications that have been ordered. An intravenous (IV) line will be started. You will receive pre-operative antibiotics to help prevent infection. The IV will remain in until you have recovered or until you no longer need intravenous support.

Before any surgery requiring anesthesia, a short pre-operative exam will be done by an anesthesiologist. During this exam your anesthesiologist will be assessing whether you have any conditions that may affect the course of your anesthesia. You will be asked questions pertaining to any allergies you may have and medications you may be taking. The anesthesiologist will also ask about any prior anesthetics that you have had and your reaction to them. Your anesthesiologist will also ask about any previous or current health conditions as well as physical symptoms you currently have. A brief physical exam will include assessment of your heart and lungs. The anesthesiologist will also perform an exam of your airway to assure you will not have any breathing difficulty during your surgery.
Surgery typically will last 1-2 hours as patient anatomy and disease processes vary. The surgeon will speak with your family or friends that are present after surgery to give them a brief overview of the procedures that took place.

After the surgery you will be taken to the recovery room where you will awake from anesthesia. Normally you are in the recovery room 1-2 hours before going upstairs to your room on the orthopedic floor. This is an inpatient procedure and you will stay 1-2 nights in the hospital to receive post-operative care, antibiotics and pain management.

Typically the surgical arm is in a splint and elevated for 24hrs to help prevent fluid collection in the joint. After 24hrs the splint is removed and the dressing is changed. Some patients may also have a drain in place to remove fluid from the joint; this is typically removed after 24hrs as well.

A Continuous Passive Motion (CPM) machine may be ordered by your surgeon to help maintain your motion after surgery. A representative from the machine’s company will set up the machine and instruct you and the nursing staff on its use. They will also provide you with their contact information should you encounter any difficulty or malfunction of the machine.

**Care After Surgery**

Ice is applied immediately after surgery and thereafter intermittently for 20-30 minutes at a time over the first seven days. This reduces swelling and relieves pain. The incision is typically closed with staples and may take 2-3 weeks to heal. It is important to pay careful attention to the incision to look for signs of skin breakdown from resting on the incision site.

Physical therapy will be scheduled after surgery to help you regain motion; you will be instructed on when to expect to start your therapy by your surgeon or his surgical team. Lifetime restrictions on lifting and use of the elbow after replacement are a 5 pound maximum and 2 pound repetitive lifting. These are important to the longevity of your prosthesis and to prevent complications of hardware failure.

**Medications**

Take as prescribed. Narcotic pain medications such as Norco (hydrocodone) or oxycodone are used for severe pain. They can be taken up to every four hours as necessary. Most patients only require these medications for the first week. Once pain is better controlled, you may simply take Tylenol (acetaminophen) every four to six hours, not to exceed 3000 mg in one day. Take these medications with food. If you have any problems taking the medications, please stop them immediately and notify the clinic.

**Possible Complications and Instructions**

Every surgery has risks associated, as with any invasive procedure the risks associated with elbow replacement are:

- Bleeding
- Infection. Common signs of infection include increasing pain after surgery, increased redness around the incision, swelling, and drainage.
- Complications from anesthesia, including death
- Permanent or temporary nerve or blood vessel injury
- Failure of fixation
- Need for further surgery
- Damage to other tissues or fracture
- Loss of limb or function
- Recurrent instability is possible though uncommon
- A build-up of fluid in the elbow joint
- Cartilage damage
- A tear in joint tissues

Please contact our office immediately if you feel you are experiencing any of these complications.

**Questions**
The CORE Institute is dedicated to your outcome. If any questions or concerns arise, please call The CORE Institute at 1.866.974.2673.