Integra®
Shoulder Joint Replacement

PATIENT INFORMATION
Anatomy of the Shoulder

The shoulder is composed of many different bones, muscles and ligaments that allow for a large amount of motion in the shoulder joint. The two main boney structures that create the “ball and socket” of the shoulder are the Humerus and the Glenoid. The articulating surface on the humerus is called the Humeral Head and in a healthy shoulder, has a layer of cartilage that allows smooth motion over the Glenoid. In a healthy shoulder, the glenoid has a layer of cartilage, as well as a structure called the Labrum, which allows for smooth motion and fluid retention in the shoulder joint.

Arthritis is the breakdown of the bone and/or soft tissues surrounding joint spaces. Determining the cause of arthritis can be difficult. Several factors may contribute to the development of this common problem – including a previous injury, or wear and tear on the joint. Someone with arthritis may be suffering with pain, swelling, loss of function and deformity which can affect their everyday activities.

**Types of arthritis:**
- **Rheumatoid Arthritis (RA):** systemic disease that can affect any or all joint cartilage and surrounding soft tissues
- **Osteoarthritis (OA):** is a wearing away of the cartilage between the joints
- **Post-traumatic Arthritis (TA):** develops after injury to a joint
What To Expect When Your Doctor Recommends Shoulder Joint Replacement Surgery

Before the procedure – A medical evaluation will be done to determine your general health and ability to have a surgical procedure. Your surgeon will perform functionality and pain tests as well as compare surgical options for your symptoms.

During the procedure – Shoulder joint replacement is done under general anesthesia which your surgeon will explain to you prior to surgery. Your surgery will generally last 1½-2 hours, and an additional 2-3 hours is spent in a pre- and post-operative recovery room. During your surgery, the damaged cartilage will be removed and replaced with biocompatible (bone friendly) implants made from metal alloy and polyethylene (plastic).

After surgery – Following your surgery, you will typically be hospitalized 1-3 days. The bandages may be removed the day after surgery, and conservative physical therapy is started to promote blood flow and regain motion. You will be placed into a sling which must be worn for up to 6 weeks to protect your soft tissues. A physical therapist will teach you a variety of exercises to do at home that help restore motion. These will be done for 6-8 weeks and followed by a regular exercise program to promote strength for 12 months.

Recovery – Patients with a shoulder replacement require many weeks before they are able to return to lifting or repetitive movement. Talk to your doctor and physical therapist before participating in any activities that may strain, stress or cause excess movement of your shoulder. Driving can typically be resumed in 2–6 weeks as long as your doctor approves and you are not taking any pain medications. Other activities such as gardening, tennis, and golf can typically be returned to within a few months with your doctor’s approval.

Complications – While uncommon, complications can occur during and after surgery, which can include infection, nerve damage, fracture, and implant breakage. Although joint replacements are extremely successful in most cases, some patients may still experience pain and stiffness. Post-surgical activities can affect the longevity of your implant, so be sure to discuss these and other risks with your surgeon. Occasionally, these complications require additional surgery to correct.

Non-surgical treatment options – Prior to or as an alternative to shoulder joint replacement, patients may consider non-invasive options such as rest, activity changes, exercise, physical therapy, and medication and supplementation. If non-surgical options are no longer helpful for relieving pain, shoulder joint replacement surgery may be considered. However, your surgeon will determine if shoulder joint replacement is an appropriate treatment based on their expertise.
Reasons For Total Shoulder Replacement

Typically non-surgical options will be attempted and exhausted before a surgical option is considered. These can include medication, physical therapy, and/or analgesic injections into the joint space. There are many causes for the need of a shoulder replacement including but not limited to arthritis (RA, OA, TA), Trauma (fracture), and massive rotator cuff tear. Each of these symptoms may have different options for treatment.

Surgical treatment options for the shoulder:

**Arthritis (OA, RA, TA):** Pain in the shoulder caused by arthritis is typically a loss of cartilage in either the humeral head, glenoid or both. The loss of cartilage allows the bones to rub together, which can lead to a great amount of pain and swelling in the joint. To treat this condition, the shoulder joint is inspected and a determination can be made whether to replace just the humeral head or the humeral head and glenoid.

**Trauma (fracture):** Fractures in the shoulder are typically caused by a fall onto the affected arm but can also be caused by other circumstances. Fractures in the shoulder vary in type. Some fractures can be treated without surgery while others require complex surgical procedures, including shoulder replacement.

**Rotator Cuff Tear:** Rotator cuff tears can be caused by deterioration of the muscle, strain, and/or possibly a fall. These tears can lead to loss of strength and motion in the shoulder and, if untreated, cause the shoulder to move out of its natural socket. Rotator cuff tears can cause pain and swelling in the shoulder joint. If caught at an early stage, rotator cuff tears are repaired using arthroscopic procedures. Untreated or irreparable rotator cuff tears can lead to the need for a reverse shoulder replacement surgery.
Types of Shoulder Arthroplasty

1-1 Resurfacing Shoulder Arthroplasty
Single implant that replaces only the articulating surface of the humerus.

1-2 Hemi Shoulder Arthroplasty
Multiple piece humeral implant that replaces humeral head and includes a stem component for support.

1-3 Total Shoulder Arthroplasty
Uses same humeral components as a Hemi shoulder but also replaces the glenoid with a polyethylene (plastic) prosthesis.

1-4 Reverse Shoulder Arthroplasty
Multiple piece humeral and glenoid components. Unlike traditional total shoulder replacement, reverse total shoulder replacement replaces the ball and socket in reverse orientation.
Titan™ Modular Shoulder System

Reverse Shoulder Implant

Total Implant

Hemi Implant

Resurfacing Implant

For more information or to place an order, please contact:
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