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TOTAL SHOULDER ARTHROPLASTY

Total shoulder arthroplasty is a well-established surgery for restoring comfort and function to the arthritic shoulder. In this procedure the arthritic ball is replaced by a smooth metal ball fixed to the arm bone (humerus) by a stem that fits within it. The arthritic socket (glenoid) is resurfaced with high-density polyethylene prosthesis. Among the different surgical options this procedure appears to provide the most rapid and complete improvement in comfort and function for shoulders with arthritis. Success requires technical excellence of the surgery and a commitment to the exercise program until the desired range of motion can be achieved comfortably.

What Is Shoulder Arthritis?

Shoulder arthritis is a condition in which degeneration, injury, inflammation or previous surgery destroys the normally smooth cartilage on the ball (humeral head) and socket (glenoid).

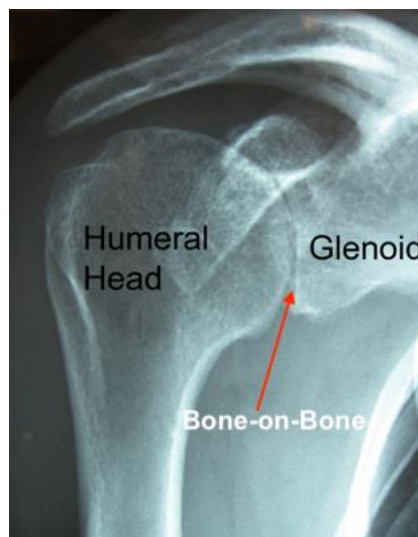
How Is Shoulder Arthritis Diagnosed?

Carefully standardized X-rays reveal the loss of the space between the humeral head and glenoid that is normally occupied by cartilage, leaving bone on bone contact. CT scans and MRI studies can be helpful in providing additional information about bone quality and the soft tissues surrounding the shoulder joint in preparation for surgery.

Normal Shoulder X-ray

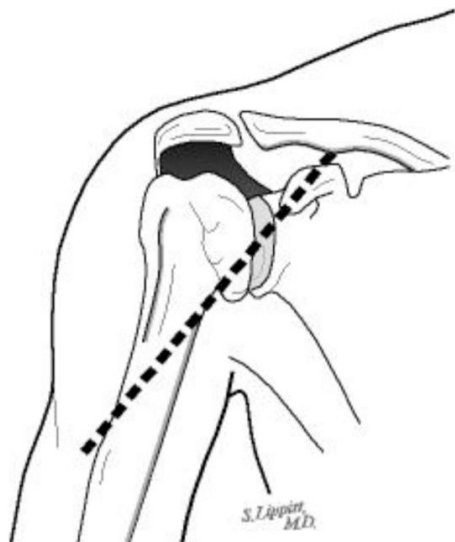


Shoulder with arthritis



How Is a Total shoulder arthroplasty Performed?

After a general or regional anesthetic, this procedure is performed through an incision between the deltoid and the pectoralis major muscles on the front of the shoulder. It includes release of adhesions and contractures and removal of bone spurs that may block range of motion. Our team of surgeons, anesthesiologists, and surgical assistants usually perform this procedure in less than two hours. The arthritic surface of the ball is replaced with a metal ball with a stem that is press fit down the inside of the arm bone (humerus) so that only the smooth surface extends from the bone.



What Happens Immediately After Surgery?

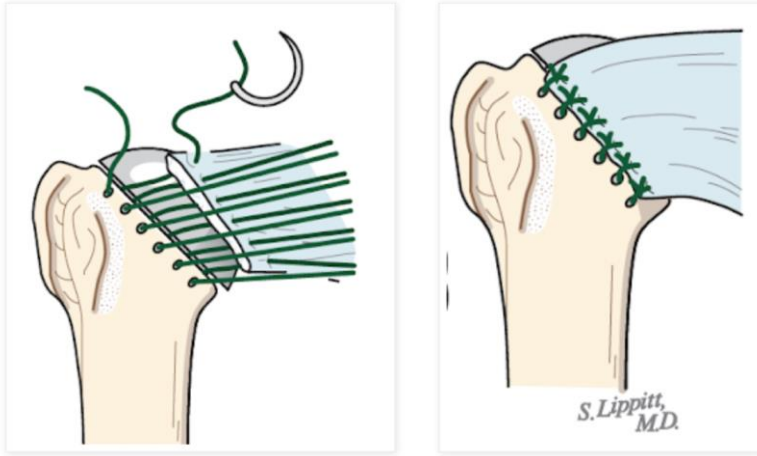
The pain from this surgery is managed by the anesthetic and by pain medications. Oral pain medications (such as hydrocodone or Tylenol with codeine) are usually sufficient after the day of surgery. You may decide to go home the day of surgery or be admitted to the hospital for one day. This will depend on your overall health and your overall comfort following surgery.

What is the Rehabilitation Process After Surgery?

The shoulder rehabilitation program is started on the day of surgery. The patient is encouraged to be up and out of bed soon after surgery and to progressively reduce their use of narcotic pain medications. Patients are to avoid lifting more than one pound, pushing and pulling for six weeks after surgery. Driving is recommended only after the shoulder has regained comfort and the necessary motion and strength. This may take several weeks after surgery. For this reason, patients usually require some assistance with self-care, activities of daily living, shopping and driving for approximately six weeks after surgery. Management of these limitations requires advance planning to accomplish the activities of daily living during the period of recovery.

For the first 6 weeks of the recovery phase, the focus of rehabilitation is on forward elevation of the shoulder.

Strengthening exercises are avoided during the first 6 weeks so as not to stress the subscapularis tendon repair before it heals back to the bone (see below). Later on, once the shoulder is comfortable and flexible, strengthening exercises and additional activities are started. Some patients prefer to carry out the rehabilitation program themselves. Others prefer to work with a physical therapist who understands the total shoulder rehabilitation process.



Once A Shoulder With A Total Shoulder Arthroplasty Has Successfully Completed The Rehabilitation Program, What Activities Are Permissible?

Once the shoulder has nearly full range of motion, strength and comfort, the patient can often return to nearly all activities including swimming, tennis, and golf. This generally occurs around six months after surgery. We recommend that the shoulder be protected from heavy overhead lifting. Thus, we discourage chopping wood, vigorous hammering, and recreational activities that subject the shoulder to impact loading (overhead military presses).

What Problems Can Complicate A Total Shoulder And How Can They Be Avoided?

Like all surgeries, the total shoulder arthroplasty can be complicated by infection, nerve or blood vessel injury, fracture, instability, component loosening, and anesthetic complications. Tearing of the subscapularis tendon prior to its healing can occur with forceful external rotation of the shoulder or pushing/pulling in the first 6 weeks after surgery. The most common cause of failure in the short term is stiffness of the shoulder caused by failure to complete the rehabilitation exercises. The most common long-term problem is wearing or loosening of the glenoid component.