

# Shoulder Replacement

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#### **Facts**

- -Shoulder replacement surgery is a very successful operation with a success rate of up to 90 percent.
- -A typical shoulder replacement should easily last at least 15 to 20 years but with advanced surgical methods and implants, patients are seeing longer success in the last decade.
- -The surgery involves removing the damaged part of the bone and replacing with metal and plastic implants
- -A partial replacement can be done or a total anatomic or reverse implant established. This is usually based on the level of damage in the joint.
- -In the anatomic procedure, both the ball and socket are replaced.
- -In a reverse total shoulder, both the ball and the socket are replaced, but the implants are reversed. The ball is attached to the shoulder blade and the socket is attached to the upper arm bone. This is typically a better option for individuals with rotator cuff impairment.

## Surgery and protocol

- -Surgery is performed for a variety of reasons. Osteoarthritis occurs regularly with aging and can lead to breakdown of the joint and pain. Other complications leading to this include rotator cuff tear, previous fracture, frozen shoulder, and blood flow restriction within the joint.
- -Limitations after surgery include being in a sling. Most surgeons establish a protocol that limits active movement to start. This usually means limiting movement to only the elbow and wrist. Driving is typically limited until after the sling is discontinued.
- -Too much use of the shoulder can lead to damage to the surgical site. It is important to follow early rehab protocol to protect the joint.
- -Protocols are established by surgeons to protect the joint early on and restore mobility as quickly as possible. Too slow in advancing could lead to mobility restrictions and too quick through the protocol could lead to potential damage to the surgical site.

#### Early Rehab

- -Physical Therapy is essential for individuals with shoulder replacements. Evidence suggests the quicker one starts physical therapy post surgery, the quicker the advancement and improved motion early on. Bandage removal and incision inspection is performed early to prevent infection.
- -Sling use is very typical for early rehab. The sling is used to immobilize and protect the joint. Some protocols limit movement actively up to six to eight weeks and the sling helps protect early movement from occurring at the shoulder.

- -Icing is important to reduce swelling and pain. As swelling improves, pain with moving the shoulder typically reduces as well. Sometimes swelling can reduce the amount of movement able to be performed early in treatment. Elevation can also assist in reducing swelling. Elevation should occur with the arm above the level of the heart for gravity to assist circulating fluid within the lymph system of the body.
- -Early physical therapy activities include gripping, moving the wrist and elbow, and pendulums, which are gentle movements of the shoulder while dangling the arm in a bent position.
- -Most physicians will limit driving until progression into phase II of protocols, involving removal of the sling and gradual advancement into restoring voluntary movement.

### Late Rehab

- -Middle phase of protocols typically are driven to restore voluntary motion of patients. Pulleys, finger ladder, wall slides, cane elevation are common exercises to start in this phase to improve strength and voluntary motion.
- -Late phase rehab is important to recovery of normal function of individuals. Progressive strengthening includes lifting against gravity using gentle weight, wall exercises involving partial weight bearing of the shoulder, with eventual full weight bearing into shoulder. These activities should mimic functional daily activities including reaching overhead onto a shelf or refrigerator, performing household chores, etc.
- -Heavy weighted exercises should be advised against to protect the joint even late in rehab.
- -Avoiding excessive and forceful reaching back is advised typically to avoid dislocation. Usually this is up to 12 weeks but can be longer depending on surgeon protocol.
- -Full strength recovery can take as much as 12-18 months depending on the rigor of rehab and dedication to the home exercise program.

