

Shoulder Replacement Surgery (Arthroplasty)

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Replacing Your Worn Shoulder

Arthritis of the shoulder can develop over a period of time leading to symptoms of stiffness, pain, weakness, and loss of function. When conservative treatment methods such as medications, physical therapy, and injections fail to provide significant relief, there are surgical options. The most likely option to help over the long term involves that of a shoulder replacement or arthroplasty.

The shoulder joint is somewhat similar to the hip joint in that it is a ball and socket joint with the ball on the arm side of the joint and the socket on the chest side of the joint. However, the shoulder is required to move through a much greater range of motion than the hip in order to allow us to place the arm in the desired positions for normal function. Therefore, while the hip is a somewhat deep socket with stability achieved by the ball sitting within an enclosed socket, the shoulder is a very shallow socket that requires stability of the ball from the balance of the muscles surrounding it known as the rotator cuff and shoulder girdle complex.

Shoulder replacement surgery almost always relieves pain and may provide more strength and movement of the affected arm. Ultimately a goal of returning the patient to many of their normal daily activities is sought. A shoulder prosthesis can last anywhere from 10 to 15 years. Due to the shoulder joint normally being a non weight bearing joint, prosthesis longevity typically is on the higher side. Prosthesis longevity depends on many factors including the patient's health, activity level, quality of bone, the nature of the disease, and how well the implants adhere to bone.

Surgery

Like a hip or knee replacement, shoulder surgery involves removing the arthritic surfaces of the joint and replacing them with a metal ball and plastic liner to allow for smoother, more pain-free motion within the joint. Depending on the nature and extent of the patient's disease joint replacement surgery may include replacement of just the ball (partial replacement or hemiarthroplasty) or both the ball and the socket (total joint replacement).



Surgery consist of an incision roughly 10cm

long starting from the collarbone and extending to the middle of the arm. The humeral head is removed and the prosthetic stem is cemented or press-fit into the bone. The metal ball is then secured to the new stem. If a total shoulder is needed, the plastic liner is then cemented in place to the glenoid. Scarred and contracted muscles also are released to allow (in most cases) an improved range of motion. The primary goal of the surgery, however, is pain relief. Once the new joint is in place, the incision is closed with staples or sutures (stitches).

Post-op

The surgical procedure requires hospitalization for approximately one to two nights, before being discharged home. A sling is worn initially and the avoidance of external rotation is followed until deemed appropriate by the surgeon. Additionally leaning on the operative arm or supporting weight with it is contraindicated. Pendulum exercises are begun with the supervision of a physical therapist on the first or second postoperative day. These should be continued at home upon discharge from the hospital. Additionally out patient physical therapy will be prescribed.

Postoperative motion varies depending on the amount of destruction and muscle contracture that existed prior to surgery. Some shoulder joints are more prone to stiffness following surgery, while others are prone to excessive looseness or instability that in some cases can even lead to dislocation and may require further treatment.

Conclusion

Studies have shown that post surgical complications are generally lower in centers that perform this procedure on a regular basis and that overall patient satisfaction is higher. Most patients can expect to return to an improved level of function with their daily activities and in some cases, even allowing golf or light tennis. Heavy weightlifting or heavy labor activities are discouraged due to the concern over the prosthesis loosening from the bone over time and thus requiring further surgery. Total joint patients are required to take prophylactic antibiotics one hour prior to any dental work for two years from the date of their surgery.