

## ROTATOR CUFF ARTHROPATHY SHOULDER ARTHRITIS WITH ROTATOR CUFF TEAR

### **What is wrong with my shoulder?**

The shoulder (glenohumeral) joint is a ball and socket joint. The “ball” is the rounded portion of the humerus and the “socket” is the dish-shaped outer edge of the scapula called the glenoid. Cartilage allows smooth movement of the joint and overlies the bones. The rotator cuff holds the ball in the socket. Sometimes when you have a very large rotator cuff tear, the humerus will migrate upward and you can develop arthritis. This is called rotator cuff arthropathy.

### **What causes rotator cuff arthropathy?**

Rotator cuff arthropathy occurs when a patient has a very large irreparable rotator cuff tear combined with shoulder arthritis. Many patients are unable to lift their arms above a 90 degree angle. This is very debilitating for most patients. For these individuals, a conventional total shoulder replacement can still leave them with pain and limited function.

### **How is rotator cuff arthropathy diagnosed?**

Patients with rotator cuff arthropathy usually have severe debilitating pain. Patients typically have pain at night and with most activities. The diagnosis of rotator cuff arthropathy can usually be made by physical examination and x-rays. On physical examination, patients will have crepitation, pain, and limitation of range of motion. X-rays usually reveal upward migration of the humeral head “ball” and arthritis including bone spurs.



### **How is rotator cuff arthropathy treated?**

Treatment, initially, consists of activity modification and non-steroidal anti-inflammatories (NSAID's) such as ibuprofen or prescription drugs. Cortisone, a steroidal anti-inflammatory, can be injected into the shoulder if symptoms persist despite the use of nsaid's. When non-operative treatment fails, some patients may elect to have surgery

### **What happens if I need surgery?**

Traditional shoulder replacements have had poor results when used to treat rotator cuff arthropathy. A newer type of shoulder replacement is called reverse total shoulder arthroplasty. This surgery was developed in Europe in the 1980s, and it was approved by the Food and Drug Administration (FDA) for use in the United States in 2004. In reverse total shoulder replacement, the socket and metal ball are switched. That means a metal ball is attached to the shoulder socket and a plastic socket is attached to the humerus.



Normally, the rotator cuff and deltoid muscles work together to allow a person to raise their arm overhead. With a large rotator cuff tear, the normal mechanics of the shoulder are disrupted, and it may be difficult or impossible for a patient to lift his or her arm. The reverse shoulder prosthesis provides a fixed fulcrum for the shoulder joint, allowing the arm to be raised overhead even when the rotator cuff muscles are absent. This allows the patient to use the deltoid muscle instead of the torn rotator cuff to lift the arm.