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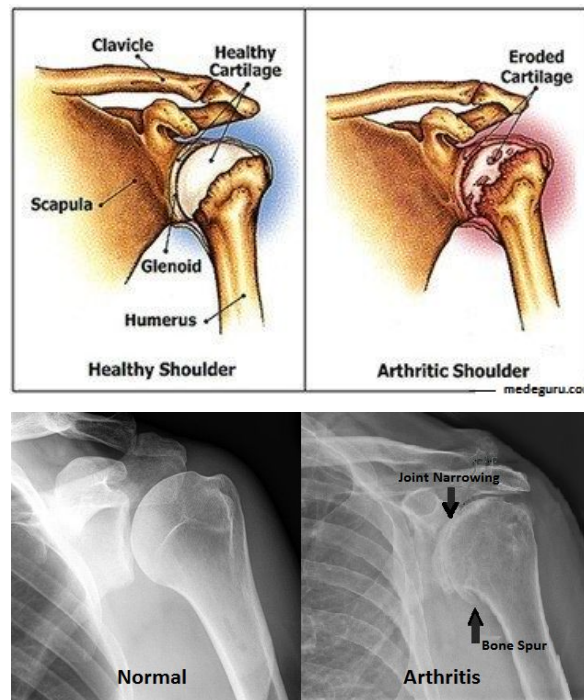
Shoulder and Elbow Surgery

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## SHOULDER OSTEOARTHRITIS DEGENERATIVE JOINT DISEASE



### WHAT IS OSTEOARTHRITIS?

*Osteoarthritis*, also referred to as *Degenerative Joint Disease*, is defined as inflammation of a joint associated with loss of articular cartilage, the shiny tissue on the end of the bone within a joint. You can see this tissue at Thanksgiving dinner if you open the thigh joint of a turkey leg! The best test to diagnose osteoarthritis is a plain x-ray showing “bone on bone” arthritis, see above.

### ANATOMY OF THE SHOULDER

The shoulder is made up of three bones: the *humerus* (the upper arm), the *scapula* (shoulder blade), and the *clavicle* (collarbone). The shoulder is a “shallow” ball-and-socket joint. The head

of the humerus (the ball) fits into the relatively flat socket of the shoulder blade (the *glenoid*). This is known as the glenohumeral joint. The other joint of the shoulder is the one in which the *clavicle* meets the tip of the shoulder blade (*acromion*). This joint is called the acromioclavicular (AC) joint. Although technically not a joint, the shoulder blade also moves on the chest wall, providing approximately 1/3 of total shoulder overhead range of motion; i.e. scapulo-thoracic motion.

### **SYMPTOMS OF ARTHRITIS OF THE SHOULDER:**

The most common symptoms of shoulder arthritis are *pain* and *stiffness* that interrupts sleep at night and compromises activities of daily living that require full range of motion of the shoulder.

### **DIAGNOSIS OF ARTHRITIS OF THE SHOULDER:**

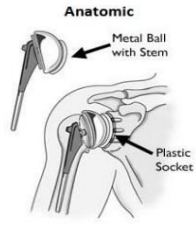
Physical findings indicating osteoarthritis, include limited range of motion of the shoulder accompanied by pain and grinding (crepitus). The strength of the shoulder muscles is usually normal. X-rays are the most common study used to confirm the diagnosis of osteoarthritis and will reveal varying degrees of joint space narrowing and bone spurs (osteophytes) at the periphery of the joint, see above.

### **NONSURGICAL TREATMENT OF ARTHRITIS OF THE SHOULDER**

Mild to moderate degrees of osteoarthritis can be successfully managed using the standard principles of non-operative treatment of musculoskeletal conditions: activity modification to avoid those activities that exacerbate pain, anti-inflammatory medications and/or Tylenol to decrease pain, rehabilitation exercises to increase flexibility and strength of the shoulder (performed independently or under the guidance of a physical therapist), and an intra-articular cortisone injection.

### **SURGICAL TREATMENT FOR ARTHRITIS OF THE SHOULDER**

Patients who fail non-operative treatment and have persistent pain that compromises sleep, activities of daily living and sporting activities are candidates for surgical treatment. For patients with early stage osteoarthritis who still have some articular cartilage, arthroscopic removal of inflamed tissue in the joint may be considered. For patients who have end-stage, “bone-on-bone” arthritis, a shoulder replacement is recommended. Patients with osteoarthritis and an intact rotator cuff are candidates for an *anatomic total shoulder replacement*. Those patients with arthritis and massive tearing of the rotator cuff or severe deformity of the glenoid are candidates for a relatively new design of shoulder replacement called the *reverse shoulder replacement*.



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