# **Shoulder Arthritis**

Osteoarthritis or "degenerative joint disease" is the most common type of arthritis in the shoulder. The other less commonly seen types of arthritis in the shoulder are rheumatoid or inflammatory arthritis and arthritis that occurs after severe trauma.

In osteoarthritis, the smooth cartilage that lines and coats the ends of the bones gets worn away, causing the bone ends to rub against each other. This wearing away leads to irregular motion within the joint and the development of bone spurs, which are bony growths formed as the bone tries to heal itself. Irregular motion and bone spurs can result in pain and loss of motion in the shoulder.

There are 2 joints within the shoulder that can be affected by osteoarthritis. The main joint that provides most of the shoulder motion is called the glenohumeral (G-H) joint, which is where the humerus or arm bone meets the scapula or shoulder blade. The other smaller joint in the shoulder that does not provide much motion is the acromioclavicular (A-C) joint, which is the joint that connects the collarbone and the scapula. **(Figure 1)** 

### Incidence

The incidence of shoulder arthritis increases with age. Generally it is seen in people over 50; however, younger people can get it after suffering trauma to the shoulder, such as a fracture or dislocation. Arthritis of the A-C joint tends to occur at a younger age than arthritis of the G-H joint. There is a genetic predisposition to arthritis, so it can be hereditary as well.

### Signs and Symptoms

The most common complaint of someone with shoulder arthritis is pain. The pain worsens with activities—especially with any activities that require the arms to reach over the head—and decreases with rest. Arthritis of the G-H joint usually hurts mostly in the back of the shoulder while A-C arthritis hurts mostly in the front of the shoulder at the end of the collar bone.

The next most common complaint is loss of motion, which is much more severe in people with G-H arthritis. In addition, the motion of the shoulder can sometimes feel like grinding (crepitus) as the bones rub on one another.

Fortunately, not everyone who develops arthritis develops pain and loss of motion. In fact, some people with severe joint destruction have very few symptoms.

## Diagnosis

Arthritis of the shoulder is easily diagnosed with a physical examination and x-rays. During the physical examination, the physician will be looking for pain on range of motion, crepitus or grinding of the joint, weakness of the shoulder, and tenderness to touch. X-rays of the shoulder show loss of joint space, bone cysts, and bone spurs at the edges of the joint (Figure 2). People with arthritis of the A-C joint are also at risk for developing rotator cuff tears and an MRI may be needed.

### **Treatment**

As with most other arthritic conditions, initial treatment consists of rest, activity modifications, exercises that may be directed by a physical therapist, and non-steroidal anti-inflammatory medications such as ibuprofen. Icing and moist heat as well as other therapy modalities such as ultrasound may be prescribed. Steroid injections are sometimes used as well.

If these treatments do not work to decrease the symptoms, then surgery may be suggested. For arthritis of the A-C joint, this would involve removal of the end of the clavicle, which can be done either with open surgery or arthroscopically. For arthritis of the G-H joint, surgery usually involves a joint replacement operation where the arthritic surfaces of the bone are replaced with metal and plastic. Sometimes only a portion of the joint needs to be replaced, which is called hemiarthroplasty. **(Figure 3)** 





