Osteoarthritis, or “degenerative joint disease,” is the most common type of arthritis in the shoulder. Less commonly seen types of arthritis in the shoulder are rheumatoid (inflammatory) arthritis and arthritis that can occur after shoulder trauma.

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

There are two joints within the shoulder that can be affected by osteoarthritis. The main joint that provides most of the shoulder motion is a ball-and-socket joint called the glenohumeral (G-H) joint, which is where the humerus (arm bone) meets the scapula (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).

**Causes**
Shoulder arthritis occurs more commonly with advancing age. Generally, it is seen in people over 50; however, younger people can develop arthritis after trauma or other injuries to the shoulder such as a fractures, dislocations or infection. Arthritis of the A-C joint tends to occur at a younger age than arthritis of the G-H joint. Arthritis can be hereditary as well, which means it can run in families.

**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 on “top” of the shoulder at the end of the collar bone.

The next most common complaint is loss of motion, which tends to be more severe in people with G-H arthritis. In addition, the motion of the shoulder can sometimes feel like grinding (also known as 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 typically diagnosed with a physical examination and x-rays. During the physical examination, the physician will be looking for:

- Pain on range of motion
- Grinding of the joint
- Weakness of the shoulder
- Tenderness to touch

X-rays of the shoulder can show:

- Loss of joint space
- Bone cysts
- Bone spurs at the edges of the joint

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 from a physical therapist
- 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 discussed. For arthritis of the A-C joint, this would usually involve removal of the end of the clavicle. For arthritis of the G-H joint, surgery usually involves a joint replacement operation where the arthritic surfaces of the ball and socket are replaced with metal and plastic.