

# Shoulder Pain

## What causes pain in my shoulder?

A common cause of shoulder pain is soreness of the tendon (a cord that attaches a muscle to a bone) of the rotator cuff (the part of the shoulder that helps circular motion). Another common cause is soreness of the subacromial bursa (a sac of fluid under the highest part of the shoulder). You might experience soreness after activities such as painting, lifting or playing a sport, which require you to lift your arms. Or you may not remember any specific injury.

The main joint in the shoulder is formed by the arm bone and the shoulder blade. The joint socket is shallow, allowing a wide range of motion in the arm. The rotator cuff is made up of 4 muscles that surround the arm bone. This cuff keeps the shoulder steady as the arm moves.

## How does the rotator cuff get hurt?

The supraspinatus muscle rests on top of the shoulder. Its tendon travels under the bone on the outside of the shoulder (the acromion). This tendon is the one most often injured because of its position between the bones. As the tendon becomes inflamed (sore and swollen), it can become pinched between the 2 bones. The sac of fluid that cushions the tendon can also be damaged.

## How do I know the rotator cuff is hurt?

If the rotator cuff is involved, the pain is usually in the front or outside of the shoulder. This pain is usually worse when you raise your arm or lift something above your head. The pain can be bad enough to keep you from doing even the simplest tasks. Pain at night is common, and it may be bad enough to wake you.

## What can I do to help relieve the pain?

Treatment should help relieve the pain and help you restore your shoulder to normal function. Pain relief strategies include active rest (you can and should move your shoulder, but you shouldn't do strenuous activities like lifting heavy objects or playing tennis). Application of ice, taking nonsteroidal anti-inflammatory medicine such as ibuprofen (2 brand names: Advil, Motrin) or naproxen (brand name: Aleve) and, occasionally, an injection of anti-inflammatory steroids can also help.

Special exercises may also help. The first step of rehabilitation therapy is simple range-of-motion exercises. By bending over and moving (rotating) your shoulder in large circles, you will help to avoid the serious complication of rotator cuff injury, called a frozen shoulder. These range-of-motion exercises are followed by resistance exercises using rubber tubing or light dumbbells. The final step is resistance training

with weight machines or free weights.

### What exercises should I do?

The following exercises may help you (see pictures 1, 2 and 3). Ask your doctor if you should do other exercises, too.

**Picture 1. Range of motion.** Stand up and lean over so you're facing the floor. Let your sore arm dangle straight down. Draw circles in the air with your sore arm. Start with small circles, and then draw bigger ones. Repeat these exercises 5 to 10 times during the day. If you have pain, stop. You can try again later.

**Picture 2. Rotator cuff strengthening.** Use a piece of rubber tubing for these exercises. Stand next to a closed door with a doorknob. Loop the tubing around the knob. With your hand that is closest to the door, bend your arm at a 90° angle and grab the loop of the tubing. Pull the band across your tummy. At first, do 1 set of 10 exercises. Try to increase the number of sets as your shoulder pain lessens. These exercises should be done every day.

**Picture 3. Upper extremity strengthening.** As your pain goes away, try adding a general upper body weight-lifting program using weight machines or free weights. Lie on your right side with your left arm at your side. With a weight in your left hand and your forearm across your tummy, raise your forearm. Keep your elbow near your side.

### What else can I do to help this injury heal?

An aerobic exercise program will help improve the blood flow to the tendon or bursa. This helps reduce soreness. Smokers should quit smoking so more oxygen reaches the injured tendon. This will help the injury heal faster.

### Will I need surgery?

Sometimes an injury that lasts a long time will cause the tendon to tear. This type of injury may need surgery. A tear of the rotator cuff is suspected when the pain goes on in spite of a good rehabilitation program or when there is weakness in certain motions of the arm.

### Special Instructions:

Copyright © American Academy of Family Physicians 2008