OVERVIEW
You have been diagnosed with a proximal biceps tendon rupture. This tendon connects one part of the biceps to the shoulder through a long tendon, it is called the tendon of the long head of the biceps muscle. This tendon can rupture with acute overloading as in an injury, in weight lifters who over do it, and some times with repetitive use and chronic shoulder problems. The tendon rupture causes a sharp pain at the shoulder and, as the tendon retract into the arm, there can be painful change in the contour of the biceps muscles. Typically, there is severe pain at the time of the rupture, that gradually improves. Muscle function and appearance also improve with time. Options for surgical repair are difficult and of little benefit. Usually, this injury is treated symptomatically with expectations of good function, with a mild change in appearance of the muscle and a slight loss of elbow strength.

BACKGROUND
Tendons attach muscle to bone. The biceps muscle in the upper arm splits near the shoulder into a long head and a short head. Both attach to the shoulder in different places. At the other end of the muscle, the distal biceps tendon connects to the smaller bone (radius) in the lower arm. These connections help the muscle stabilize the shoulder, rotate the lower arm and accelerate or decelerate the arm during overhead motions such as pitching.

The long head of the biceps tendon is vulnerable to injury because it travels through the shoulder joint to its attachment point. Because the torn tendon can no longer keep the muscle taut, you may also notice a bulge in the upper arm (Popeye muscle) and you may lose some strength at your elbow. The proximal biceps tendons near the shoulder tear more easily. Tears can be either partial or complete. Often, these tendons are already frayed, particularly if you are over 40 years of age, have a history of shoulder pain, and participate in activities that involve overhead motions. Among the elderly, biceps tendon ruptures near the shoulder are often associated with rotator cuff tears.
CLINICAL PRESENTATION AND DIAGNOSIS
Usually, there is a sudden, sharp pain in the shoulder and upper arm associated with the injury. Sometimes, there is an audible snap. A bulge will be in the midportion of upper arm above the elbow. Sometimes there is bruising below the shoulder. After the initial injury, there is pain and tenderness at the shoulder and in the biceps. Your physician will examine your arm and ask you to bend the arm and tighten the biceps muscle. The doctor may apply pressure to the top of the arm to see if there is any pain. If you have a history of shoulder pain, your doctor may request an MRI or a special X-ray called an arthrogram to see if you have also torn the rotator cuff muscle.

TREATMENT
Conservative treatment is usually all that is needed for tears in the proximal biceps tendons. Common treatment recommendations may include rest, ice until swelling subsides, elevation of the affected arm, and anti-inflammatory or other pain medications. You should also rest the muscle, limiting your activity when you feel pain or weakness. Using a sling at first can be of benefit to help rest the arm. To keep the shoulder mobile and strengthen the surrounding muscles, your doctor may prescribe some flexibility and strengthening exercises. Over-the-counter pain medications can be of use. These include anti-inflammatories such as Motrin™ (ibuprofen) and Aleve™ (naproxen), and pain medications, such as Tylenol™ (acetaminophen). Ice applications keep down the swelling.

EXPECTED OUTCOME
Prognosis is very good with symptomatic treatment. The tendon does not heal, but the muscle accommodates to the new position and functional recovery is usually quite good. The muscle contour is changed, but often smooths out with time. There can be a slight loss of strength, but this is usually well tolerated.

MORE INFORMATION
Further information can be obtained on the internet. Your local public library can help you explore these sources if you are interested. Two good internet sites for expert and peer reviewed information are the American Academy of Orthopedic Surgeons at www.aaos.org and www.emedicine.com.

FEEDBACK
If you have questions or comments, please contact the office or submit them to the web site at www.pedortho.com.