

# Biceps Tendonitis

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## Introduction

Biceps tendonitis, also called bicipital tendonitis, is inflammation in the main tendon that attaches the top of the biceps muscle to the shoulder. The most common cause is overuse from certain types of work or sports activities. Biceps tendonitis may develop gradually from the effects of wear and tear, or it can happen suddenly from a direct injury. The tendon may also become inflamed in response to other problems in the shoulder, such as rotator cuff tears, impingement, or instability (described below).

This guide will help you understand

- what parts of the shoulder are affected
- the causes of biceps tendonitis
- ways to treat this problem

## Anatomy

What parts of the shoulder are affected?

The biceps muscle goes from the shoulder to the elbow on the front of the upper arm. Two separate tendons (tendons attach muscles to bones) connect the upper part of the biceps muscle to the shoulder. The upper two tendons of the biceps are called the proximal biceps tendons, because they are closer to the top of the arm.

The main proximal tendon is the long head of the biceps. It connects the biceps muscle to the top of the shoulder socket, the glenoid. It also blends with the cartilage rim around the glenoid, the labrum.

The labrum is a rim of soft tissue that turns the flat surface of the glenoid into a deeper socket. This arrangement improves the fit of the ball that fits in the socket, the humeral head.

Beginning at the top of the glenoid, the tendon of the long head of the biceps runs in front of the humeral head. The tendon passes within the bicipital groove of the humerus and is held in place by the transverse humeral ligament. This arrangement keeps the humeral head from sliding too far up or forward within the glenoid.

The short head of the biceps connects on the coracoid process of the scapula (shoulder blade). The coracoid process is a small bony knob just in from the front of the shoulder. The lower biceps tendon is called the distal biceps tendon. The word distal means the tendon is further down the arm. The lower part of the biceps muscle connects to the elbow by this tendon. The muscles forming the short and long heads of the biceps stay separate until just above the elbow, where they unite and connect to the distal biceps tendon.

Tendons are made up of strands of a material called collagen. The collagen strands are lined up in bundles next to each other. Because the collagen strands in tendons are lined up, tendons have high tensile strength. This means they can withstand high forces that pull on both ends of the tendon. When muscles work, they pull on one end of the tendon. The other end of the tendon pulls on the bone, causing the bone to move.

Contracting the biceps muscle can bend the elbow upward. The biceps can also help flex the shoulder, lifting the arm up, a movement called flexion. And the muscle can rotate, or twist, the forearm in a way that points the palm of the hand up. This movement is called supination, which positions the hand as if you were holding a tray.

Related Document: [A Patient's Guide to Shoulder Anatomy](#)

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