



## DISTAL BICEPS TENDON TEAR

The biceps muscle is composed of 2 parts (or “heads”), the long head and the short head. The long head originates from inside the shoulder at the top of the glenoid (socket) and the short head originates from the coracoid process of the shoulder blade. These two heads come together above the elbow to form a single tendon that attaches onto the radial tuberosity of the radius (one of the two forearm bones).

The biceps serves two primary functions. It is primarily a supinator of the forearm which means it rotates the palm “up”. It also is an elbow flexor.

Injury to the distal biceps tendon typically occurs at its attachment on the radial tuberosity. The mechanism of injury is overload of the tendon as someone is attempting to lift a heavy object when the arm is flexed. As the weight of the object overloads the power of the muscle the elbow is “forced” into extension and the tendon tears from the bone and retracts into the upper arm as the muscle contracts.

Patients often report a pop at the time of the injury and have pain in the elbow/arm. There is usually an immediate deformity of the biceps as it retracts, or pulls, toward the shoulder. They usually will develop bruising in the forearm over the next couple of days.

Once this tendon is torn, it will not heal without being surgically repaired. If it is not repaired, there will be significant weakness of forearm rotation and elbow flexion. Non-surgical management may be considered in elderly or low demand individuals, but most patients with this injury will require surgical repair.

Multiple techniques have been successful in repairing this tendon. The best technique for you is determined by your treating surgeon. These techniques can involve suture anchors, sutures passed through holes in the bone or “buttons” through which sutures are passed and tied around.

Complications from surgery are rare but can occur in 6% to 9% of patients. These may include numbness in the forearm, abnormal bone formation between the forearm bones that prevents rotation, or re-tear of the tendon.

Rehabilitation following surgery varies based on surgeon preference. Your doctor may place you in a protective splint or hinged brace to protect the repair for the first few weeks after surgery. You will begin early range of motion, but it is vital to protect the repair in order for it to heal properly. After the first 6 weeks, you will begin active range of motion. Resistance exercises or strengthening will not typically begin until 3 months after surgery. It is important to begin the strengthening process very slowly and build up to your pre-injury lifting weight over 6-12 months.