

# DISTAL BICEPS TENDON TEARS AND REPAIR

This information aims to help you understand your condition and gain maximum benefit from your treatment. It covers the most commonly asked questions. However, every individual is different, and you should ask as many questions as you like.

### **BICEPS ANATOMY**

The biceps muscle is at the front of the upper arm and runs from the shoulder to the elbow. It is attached to the bone by tendons at the shoulder and the elbow. The tendon at the elbow is known as the 'distal biceps tendon'. It attaches to a bump on the upper part of the radius (one of the forearm bones). The biceps muscle is responsible for bending the arm at the elbow ('elbow flexion') and rotating the forearm, such as when using a screw driver ('supination').

## DISTAL BICEPS TEARS

When the tendon tears, it is pulled from its attachment onto the bone. It is usually caused by a very strong contraction of the tendon, such as during heavy lifting. It is more likely to happen if the tendon is worn and is most common in men over 35 years old.

If the damaged tendon is not repaired back to the bone, patients are likely to notice some pain and a weakness in elbow flexion strength, such as when lifting weights, and during activities involving forearm rotation (supination) such as using a screwdriver. The reduction of strength is about 35% in elbow bending and 55% in rotation if the tendon is not repaired.

Because of this most patients choose to undergo surgery. It is not essential to repair the tendon though and some people may decide that they can cope with reduced strength and the change in the muscle shape.

## THE OPERATION

The aim of surgery is to re-attach the tendon to the bone

You will come to hospital on the day of surgery. You will have a general anaesthetic. The surgery usually takes 1 hr. A cut is made on the upper forearm. Sometimes a second incision in needed on arm above the elbow to find the tendon if it has pulled back at long way.

Strong sutures are placed in the tendon and the sutures are attached to a small metal 'button' through drill holes in the bone. Then the sutures are tightened. A nerve that supplies sensation to the thumb side of the forearm is moved out of the way to do the operation. As a result, most people get an area of numbness or pins and needles that lasts a few weeks or months.



Courtesy Greg Bain.

### AFTER SURGERY

You may go home either on the same day or the day after surgery You will see a physiotherapist before you leave hospital.

The fixation of the tendon is strong so some range of motion is allowed quite soon after surgery. However tendon healing is slow so lifting is restricted

The speed of recovery is variable. It can be rapid or seem slow. Most improvement occurs in the first 6 months. The end of recovery is around 12-24 months after surgery.

Further general information is available in the 'Information for patients undergoing surgery' leaflet.

#### APPOINTMENTS AFTER SURGERY

10-14 days; 6 weeks, 3 months, 6 months, 12 months.

#### **REHABILITATION EXERCISES**

Specific rehabilitation exercise sheets will be given to you in hospital and during your follow-up visits. Only do the exercises shown to you in hospital and demonstrated to you in clinic. Do not remove the sling +- splint until you are told to do so. Your therapist will suggest whether you can do the exercises yourself at home or would be better with regular supervised physiotherapy sessions. You will need to get into the habit of doing the exercises several times a day for around 6 months.

#### MILESTONES

0-4 weeks
Sling +- splint full time
4-6 weeks
Wear the sling between exercises for comfort
Use the arm only for light activities with NO
load
6-12 weeks:
Normal day to day use of the arm is allowed.
Strengthening starts
3-6 months:
Progress strengthening
6 months +:
Full activity

#### **RETURN TO WORK/SPORTS**

Work (light duties / office)	1-2 weeks
Swimming (breaststroke)	6-8 weeks
Driving	6 weeks
Work (manual)	3-6months
Light lifting	6 weeks
Moderate lifting	3 months
Heavy lifting	4-6months
Swimming (freestyle)	2-3months
Golf	3-4months

#### DRIVING

You cannot drive while you are using a sling.

Once you have been told that you can remove the sling you can drive when you feel that you have full control of the vehicle. It is your responsibility to make this decision.

#### LIFTING

In the long-term it is important to remember that the tear happened because it was somewhat worn. With very heavy lifting it may re-tear or the other side may tear.

#### LIKELY OUTCOMES

The main aim of surgery is to improve pain and function. Patient satisfaction rates after surgery are around 95%