

Treatment Options: Distal Biceps Tendon Rupture

Audience: All patients with an ultrasound proven distal biceps tendon rupture

Why am I being given this leaflet?

This leaflet has been designed to provide you with information about the treatment options for distal biceps tendon rupture. It is helpful to read this leaflet before you attend clinic and to write down any questions that you wish to ask that may help with your decision making.

What is the biceps tendon and what is a distal tendon rupture?

The biceps is a muscle in the upper arm that stretches from above the shoulder to below the elbow. Its main role is to turn the forearm (supination) but it also helps with bending (flexion) at the elbow. Rupture of this tendon is relatively rare and may present with pain at the front of the elbow and a 'pop' like sensation. On occasion muscle retraction can occur with muscle bulging on the front of the arm above the elbow. Occasionally, tendon rupture may present as weakness and fatigue during certain arm movements.

What are my treatment options?

Distal biceps tendon rupture can be treated both with (operative) or without (non-operative) surgery. There are many factors that determine the best treatment for you but when considering your options it is worth thinking about:

- Whether the rupture is on your dominant or non-dominant arm? *In general the dominant arm is used for more activities. Distal biceps tendon ruptures affecting the dominant arm may impair function more than those in the non-dominant arm.*
- What activities you do you do with you affected arm? Work? Hobbies? *In general, people who do manual work, or hobbies, that involve frequent turning activities of the forearm i.e. using a screwdriver may be more symptomatic and tire more easily if managed non-operatively.*
- Whether you want to undergo an operation? *All operations have surgical and anaesthetic risks. Whilst we minimises these they are important to consider.*
- What impact a period of immobilisation would have on you? *Operative management would involve wearing a sling for a period of time which may affect your mobility, work and driving.*

The ultimate decision about what is best for your injury lies with you, aided by advice from the surgical team. The following table outlines the different treatment options and what they involve:

	Non-operative	Operative	
Potential advantages?	No operation No immobilisation	Better function Better strength / endurance	
Potential disadvantages?	Worse function Worse strength / endurance Appearance of the arm (muscle bulge)	Operative risks Immobilisation of arm Appearance if the scar	
What's involved?	You would be referred to physiotherapy.	You would be scheduled for surgery which would be completed as a day case and involve a cut on the front of the elbow typically within 14 days from your clinic date.	
		Acute (under 3 weeks from injury)	Chronic* (more than 3 weeks from injury)
How long before I can use my hand normally?	<ul style="list-style-type: none"> ▪ No sling required ▪ Movement exercises start immediately ▪ Strength exercises start immediately ▪ Lifting as able 	<ul style="list-style-type: none"> ▪ Sling for 6 weeks ▪ Movement exercises to start week 1 ▪ Strength exercises to start week 6 ▪ No lifting for 3 months 	<ul style="list-style-type: none"> ▪ Sling for 12 weeks ▪ Movement exercises to start week 1 ▪ Strength exercises to start 3 months ▪ No lifting for 6 months
When can I get back to?			
<ul style="list-style-type: none"> ▪ Driving ▪ Sport ▪ Non-manual work ▪ Manual work 	as pain allows as pain allows as pain allows as pain allows	around 3 weeks around 6 weeks around 2 weeks around 6 weeks	around 3 weeks around 3 months around 2 weeks around 3 months
What are the risks?	No serious risks or complications	In every 100 cases performed: <ul style="list-style-type: none"> ▪ 10 cases (10%) temporary numbness/weakness ▪ 2 cases (2%) of permanent numbness/weakness ▪ 2 cases (2%) of tendon re-rupture ▪ 1 to 2 cases (1-2%) of wound infection 	
Compared to pre-injury what are the outcomes?			
<ul style="list-style-type: none"> ▪ Strength <ul style="list-style-type: none"> ▪ Flexion (%loss) 30% ▪ Supination (%loss) 40% ▪ Grip (%loss) 20% ▪ Endurance <ul style="list-style-type: none"> ▪ Flexion (%loss) 60% ▪ Supination (%loss) 80% ▪ Time to achieve outcomes 6 weeks 		<ul style="list-style-type: none"> 10% 10% minimal minimal minimal 3 months 	<ul style="list-style-type: none"> 10-20% 10-20% 10-20% minimal minimal 6 months

*In chronic tears repair may not be possible and will need review by your surgeon

Please put your questions here:
