

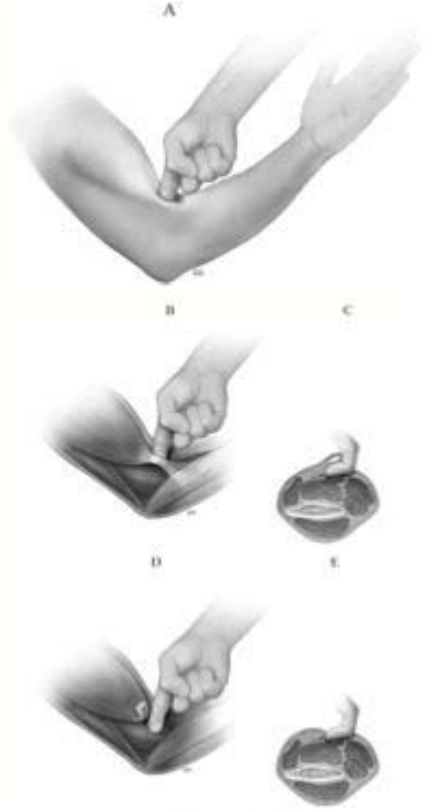


QUESTION | A 55 year old patient injured himself while lifting a rock in his garden. His symptoms are quite typical of a distal biceps rupture but his hook test is negative. Can you guide me with diagnosis and treatment please?

ANSWER | It was thought for a long time that the distal biceps was a single tendon which combined the short and long head of biceps from the shoulder.

It is now clear that in many patients these tendons persist as discreet tendons all the way to their insertion at the radial tuberosity. A subgroup of patients will tear their short head of biceps only and leave the long head intact.

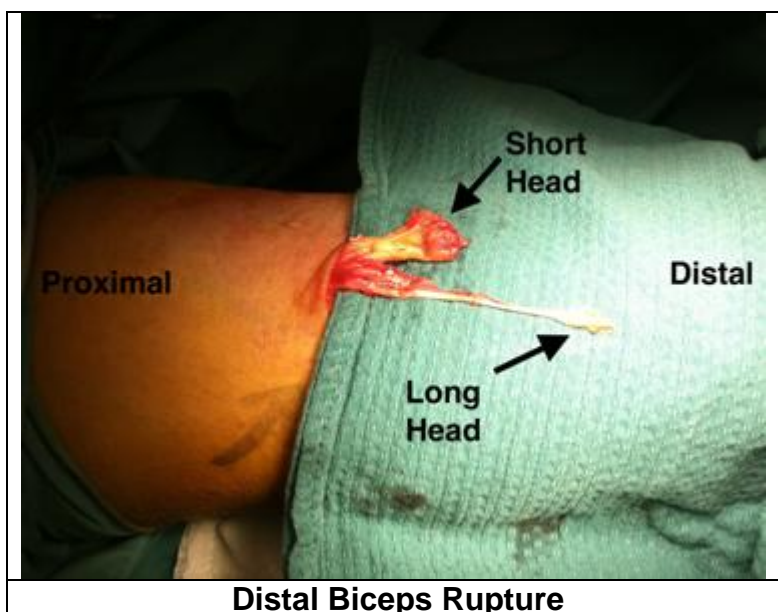
Unfortunately the bulk of the strength comes from the short head and patients are rarely satisfied with the outcome of non surgical treatment when they have ruptured their short head.

	<p>Shawn O'Driscoll defined the hook test for distal biceps rupture.</p> <p>He described the test this way: "While the patient actively supinates with the elbow flexed 90°, an intact hook test permits the examiner to hook his or her index finger under the intact biceps tendon from the lateral side.</p> <p>With an abnormal hook test, indicating distal avulsion, there is no cord-like structure under which the examiner may hook a finger".</p> <p>This test is extremely sensitive and specific for a complete distal biceps rupture.</p>
<p>The Hook Test</p>	
<p><i>Am J Sports Med November 2007 vol. 35 no. 11 1865-1869</i></p>	

In patients where the long head is intact but the short head is ruptured the hook test will feel 'different' to the other side. The test will neither be positive nor negative. The history remains quite typical and there is usually a change in the contour of their distal biceps above the elbow but the muscle does not retract as one would expect a complete rupture to.

Patients often return to function very quickly and may not seek treatment until several weeks after their injury. The longer the rupture is left the more difficult it is to repair. Treatment involves detachment of the intact long head and repair of the combined short and long heads to the radial tuberosity. The rehabilitation is the same as with a complete rupture.

Xrays are required to exclude a bony avulsion but no other imaging is needed as this is a clinical diagnosis.



Summary

Short head of distal biceps rupture is easily missed. Your patient requires early referral to an Orthopaedic surgeon and most likely early repair of the tendon.

Dr Doron Sher