

TRAUMA CASE OF THE WEEK

Case Five

A 33 year old man presents to the ED complaining of having injured his left calf last night playing squash. He felt pain and a 'snap' when he lunged forward to play a shot and was unable to continue the match. He hobbled off the court, and similarly hobbled into ED.

- What is being demonstrated in the clinical photograph?
- How reliable is this as a test and would any other testing be more appropriate or helpful?
- What treatment options are there for this injury?



The photograph demonstrates the “calf squeeze” test which is used to make a clinical diagnosis of a ruptured Achilles tendon. The doctor is squeezing both the patient’s calves while the patient lies face down with his legs relaxed over the end of the bed. With this “squeeze” the normal right side shows obvious ankle plantarflexion while on the injured left side there is no ankle movement. Furthermore, closer inspection shows a visible dip or defect about 5cm above the heel on the left side. This is the point at which the Achilles tendon has likely (and typically) ruptured. This is a typical age for the injury.

The positive predictive value of the calf squeeze test is very high and in a clear-cut case like this is enough to make the diagnosis and start planning for definitive treatment. Further information about the nature of the rupture is best obtained from an MRI, but in our institution ultrasound is a good, easily accessible test but can struggle differentiating full from incomplete tears.

Both surgical and non-operative approaches are options in the management of ruptured Achilles tendon. What approach is used will depend on patient factors (eg risk of post-op infection in an older diabetic), patient preferences & local surgical practice. In the right patient surgery offers greater long-term strength and lower recurrence. Irrespective all patients benefit from active functional rehabilitation.