

# **Distal Triceps Tendon Revision Reconstruction with Achilles Tendon Allograft and Anconeus Autograft Flap or Plate Augmentation**

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## **Background**

Chronic triceps tendon rupture is a rare injury with limited reports in the literature. Re-rupture after reconstruction is a more rare complication. Treatment options are limited and include symptomatic management and activity modifications or reconstruction via various allografts or autografts. Reconstruction with the use of an Achilles tendon allograft augmented with an anconeus autograft flap or plate augmentation are good treatment options for restoration of muscle tension, strength, and function.

## **Purpose**

This video provides an overview and case presentation and demonstrates triceps tendon reconstruction with the use of an Achilles tendon allograft and anconeus autograft flap, with failure of initial reconstruction and revision reconstruction with the use of another Achilles tendon allograft and plate augmentation.

## **Methods**

The anatomy of, pathogenesis of, diagnosis of, and treatment options for chronic triceps tendon ruptures and re-ruptures are reviewed. The case presentation of a 61-year-old man who underwent left triceps tendon repair and ulnar nerve decompression 7 years ago is discussed. The patient participates in obstacle races and re-injured his left elbow multiple times over the past 2 years and was unable to extend his elbow against gravity. After a thorough discussion of risks, advantages, and prognosis, the patient elected to proceed with triceps reconstruction to improve strength and cosmesis of the elbow.

## **Results**

The triceps tendon was reconstructed with the use of an Achilles tendon allograft with Pulvertaft weave proximally and suture anchor-based double-row fixation distally with anconeus autograft augmentation. Postoperatively, the patient continued to experience extensor lag and was unable to perform power extension movements; therefore, he underwent revision triceps reconstruction with the use of an Achilles tendon allograft and plate augmentation.

## **Conclusion**

Triceps reconstruction with the use of an Achilles tendon allograft and anconeus autograft or plate augmentation are viable treatment options for chronic ruptures of previously repaired or reconstructed tendons. This treatment option is relatively simple to perform and affords good functional results. Adherence to postoperative rehabilitation is crucial for optimal outcomes.