



SURGICAL SPOTLIGHT

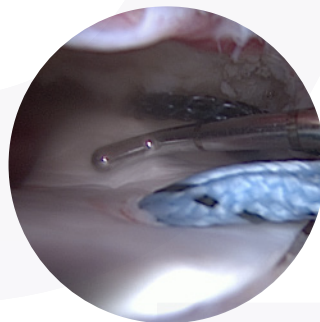
MASSIVE ROTATOR CUFF REPAIR WITH ANTERIOR CABLE RECONSTRUCTION & ROTIUM® BIORESORBABLE WICK



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SCAN FOR VIDEO TECHNIQUE



For this massive but reducible tear, the repair strategy addressed both restoration of the anterior cable and the tendon-bone healing environment.

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PATIENT HISTORY

A 57-year-old male presented with several years of shoulder pain followed by an acute event while playing pickleball 3 months prior. Physical therapy, activity modification, and a PRP injection failed to provide adequate relief. Despite preserved range of motion, notably, he demonstrated 4/5 strength with resisted external rotation.

MRI demonstrated a full-thickness supraspinatus tear extending into the infraspinatus, with retraction to or just medial to the glenohumeral joint, superior migration of the humeral head, and minimal early fatty infiltration.

CLINICAL RATIONALE

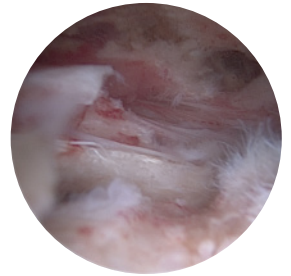
Diagnostic arthroscopy confirmed an upper-border subscapularis tear and significantly retracted, but reducible, supraspinatus and anterior infraspinatus tears with good tendon quality. The massive tear pattern, degree of retraction, superior humeral head migration, and early fatty infiltration presented a significant healing challenge.

The repair strategy combined subscapularis repair, biceps tendon anterior cable reconstruction, and double-row rotator cuff repair. ROTIUM[®] was incorporated as an interpositional scaffold at the tendon-bone interface to complement the mechanical reconstruction with biologic support at the healing footprint.

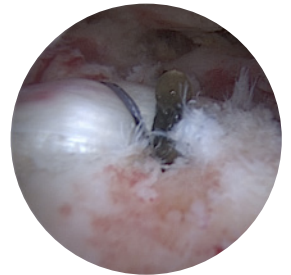
SURGICAL TECHNIQUE

An arthroscopic intra-articular subscapularis repair was performed, followed by biceps tendon anterior cable reconstruction using the anterior medial-row anchor. A double-row rotator cuff repair was then performed with ROTIUM positioned at the tendon-bone interface.

The scaffold was shuttled arthroscopically and seated over the footprint. Medial-row sutures were passed through the rotator cuff, allowing the cuff to be reduced and compressed over ROTIUM. The sutures were then docked into lateral-row anchors in standard fashion, completing the double-row construct with the scaffold compressed beneath the repaired tendon.



*Retracted supraspinatus
infraspinatus tear*



*Completed biceps anterior
cable reconstruction*

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TECHNICAL PEARLS

ROTIUM was shaped on the back table to better accommodate the rounded contour of the tuberosity. Small holes were created at the corresponding locations using a punch or Scorpion, and the suture tapes were passed through ROTIUM using a free needle.

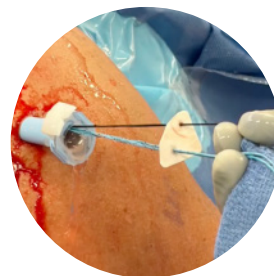
A large cannula with a removable inner cannula facilitated scaffold passage. Once shuttled into the joint, the standard repair compressed the cuff over the scaffold, integrating ROTIUM between the tendon footprint on the bone and a probe was used to position ROTIUM over the footprint before completion of the repair.

POSTOPERATIVE EXPERIENCE

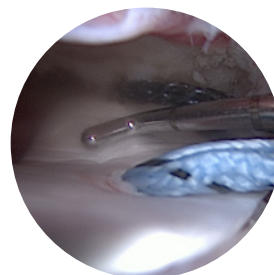
At 3 months postoperatively, the patient was doing very well and reported minimal pain beginning at the time of surgery. During active-assisted and passive range-of-motion rehabilitation, he demonstrated 140° of forward elevation, 40° of external rotation, internal rotation to the buttock, and 5-/5 strength with forward elevation and external rotation.

SURGEON'S PERSPECTIVE

For this massive but reducible tear, the repair strategy addressed both restoration of the anterior cable and the tendon-bone healing environment. ***The biceps tendon was incorporated as an anterior cable reconstruction to support the mechanical repair, while ROTIUM provided interpositional biologic support beneath the repaired cuff directly at this critical healing site.***



Trimmed ROTIUM prepared for insertion



ROTIUM positioned at the tendon-bone interface