Extensor Carpi Ulnaris Subsheath Reconstruction With Ulna based Extensor Retinaculum Sling

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INTRODUCTION:

Extensor carpi ulnaris (ECU) subsheath injuries has been recognized as one of causes for ulna sided wrist pain. These injuries is result from force hypersupination, flexion and ulna deviation of the wrist joint. ECU subsheath is a part of triangular fibrocartilage complex (TFCC) that is important for ECU stability. Any injuries involving TFCC can lead to ECU instability. We hereby presented a case report of ECU subsheath injury following distal end radius fracture and distal radio-ulna Joint (DRUJ) injury treated with ECU subsheath reconstruction with extensor retinaculum sling.

REPORT:

48 years old gentleman with history of distal end radius fracture with ulna styloid fracture. Complaint of chronic pain and snapping sensation over ulna aspect of wrist upon supination and pronation of wrist. Clinically, painful snap present upon flexion and supination of the wrist. Radiograph imaging reveal non union of ulna styloid fracture.

Patient opted for surgical intervention. Intraoperatively, ECU subsheath tear with demonstrable subluxation of ECU tendon in supination. The non union ulna styloid was fixed with headless screw. **ECU** subsheath reconstruction done using extensor retinaculum sling, passed volarly to ECU, secured using multiple interupted Ethibond 2-0. reconstruction, no further subluxation of ECU tendon through full range of pronation supination motion.

The wrist protected with sugar tong in elbow flexion, forearm pronated and wrist extension position.



Figure 1: ECU subluxation volarly in supination



Figure 2: Complete retinaculum reconstruction. ECU remain in track without snapping or subluxation.

CONCLUSION:

ECU subsheath tear can occur following TFCC injury. Reconstruction of ECU sheath will provide stability thus improve pain and instability symptoms and allow patient back to function.

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