

Ulnar-sided wrist pain Surgical approach

Matthias Vanhees



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- Tendon**
- ECU Tendinopathy – (sub)luxation
 - FCU calcific tendonitis

- Ligament**
- TFCC tear
 - Lunotriquetral ligament tear

- Vascular**
- Hypothenar hammer syndrome

Ulnar sided wrist pain

- Joint**
- Ulnar abutment syndrome
 - Ulnar styloid impingement
 - Pisotriquetral arthritis
 - DRUU synovitis
 - Ganglion cyst
 - Midcarpal instability
 - Luno hamate impingement
 - Cartilage injuries
 - Loose bodies

- Bone**
- Hamate (stress) fracture
 - Ulnar styloid fracture
 - Intraosseous ganglion

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TFCC injuries



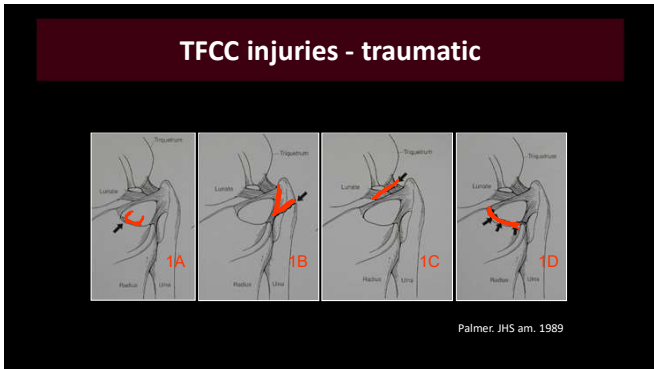
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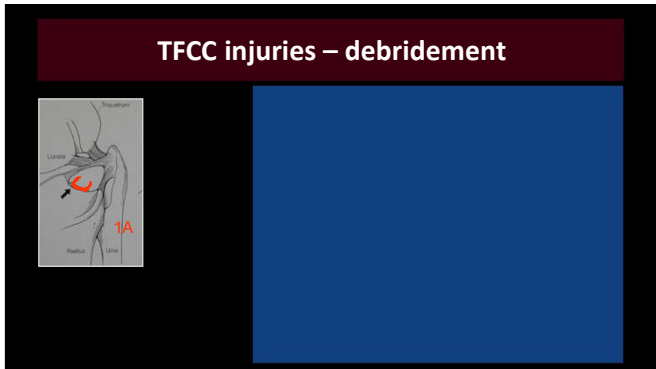
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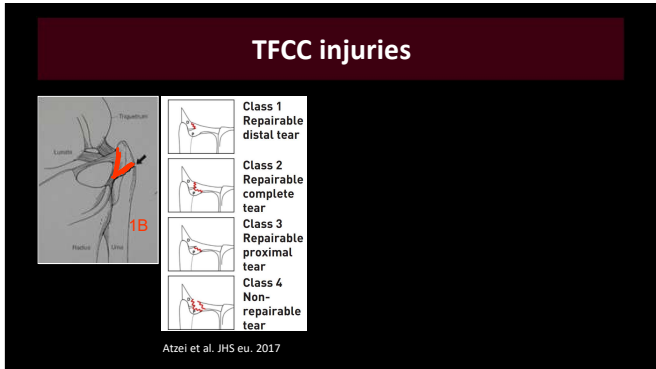
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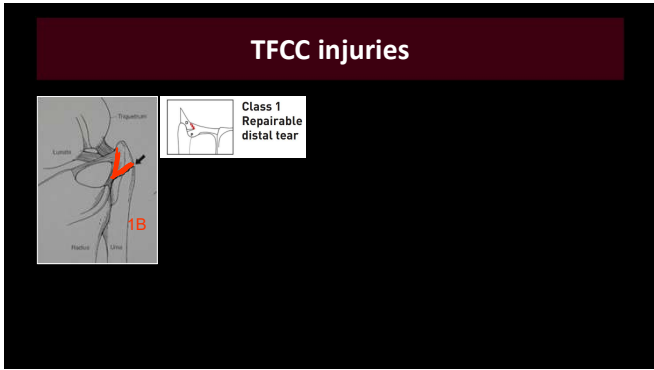
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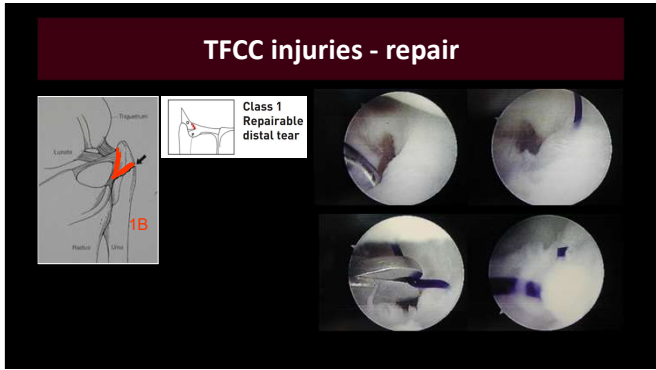
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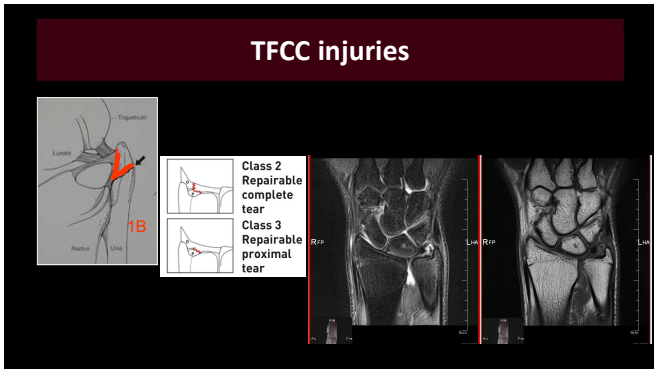
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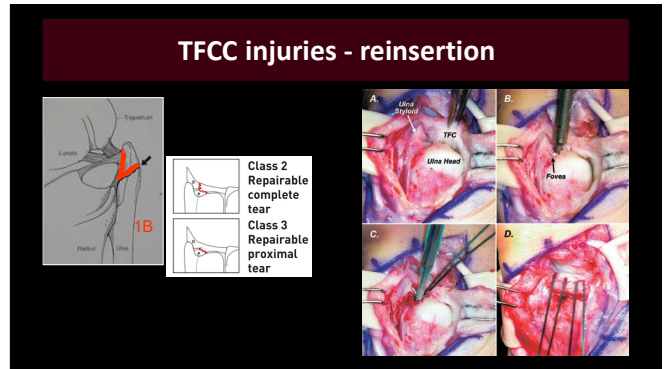
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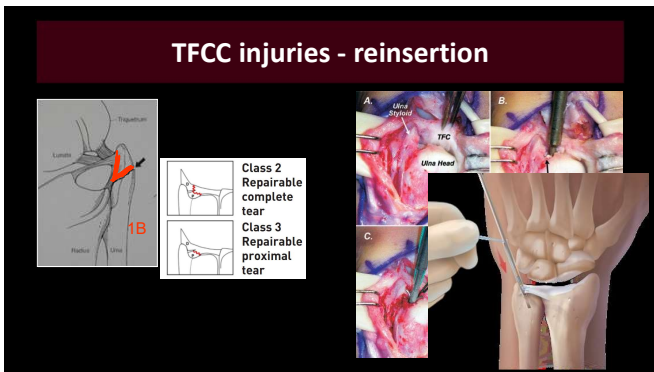
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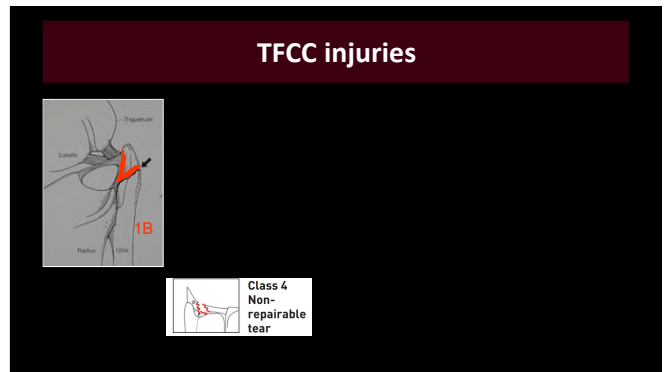
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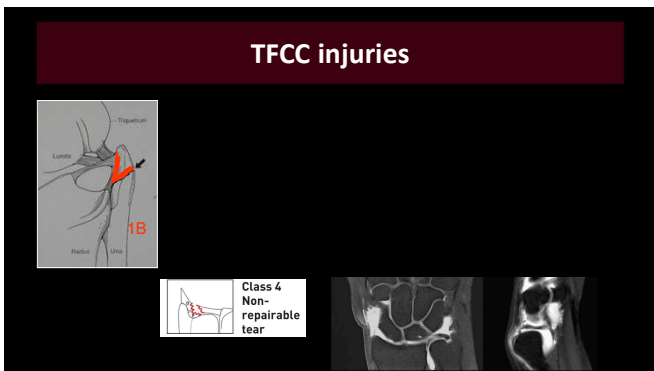
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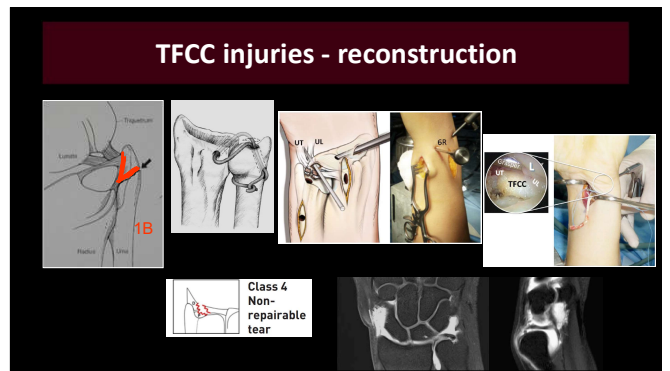
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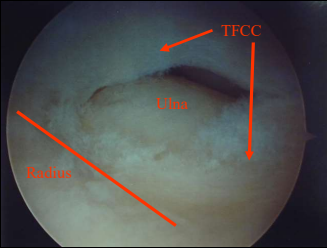
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TFCC injuries - degenerative

- What is it?
 - Degenerative tear
 - 2A TFCC wear
 - 2B TFCC wear and chondromalacia
 - 2C TFCC perforation
 - 2D TFCC perforation and lunotriquetral tear
 - 2E TFCC perforation and ulnocarpal osteoarthritis



Palmer, JHS am. 1989


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Ulnar sided wrist pain

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Vascular <ul style="list-style-type: none"> • Hypothenar hammer syndrome 	Joint <ul style="list-style-type: none"> • Ulnar abutment syndrome • Ulnar styloid impingement • Pisotriquetral arthritis • DRUU synovitis • Ganglion cyst • Midcarpal instability • Luno hamate impingement • Cartilage injuries • Loose bodies
Bone <ul style="list-style-type: none"> • Hamate (stress) fracture • Ulnar styloid fracture • Intraosseous ganglion 	


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Ulnar abutment syndrome



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Ulnar abutment syndrome



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Ulnar abutment syndrome


- Ulno-carpal stress test



Nakamura, JHS br. 1997

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Ulnar abutment - treatment




- Arthroscopic Wafer
- Ulnar shortening osteotomy

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Ulnar abutment - treatment

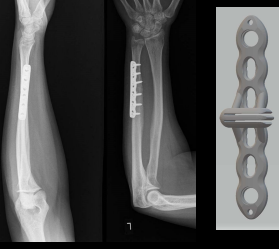


- Arthroscopic Wafer
- **Ulnar shortening osteotomy**
 - Unloads the ulnar compartment
 - Maintains the cartilage surface at the distal ulna
 - Stabilises the ulnar carpus and the DRUJ

Nishiwaki, JHS am, 2005

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Ulnar abutment - treatment



- Technique
 - Shortening: 2,5-4 mm
 - 3D technology
 - Transverse diaphyseal osteotomy and LCP plate
 - “Ice cold” saline for cooling
 - ± 4 months until union

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Ulnar sided wrist pain

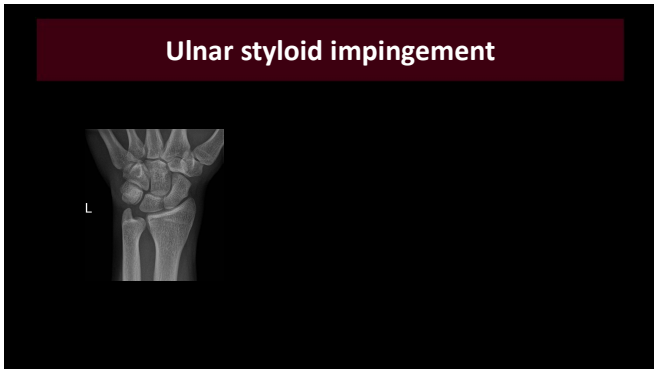
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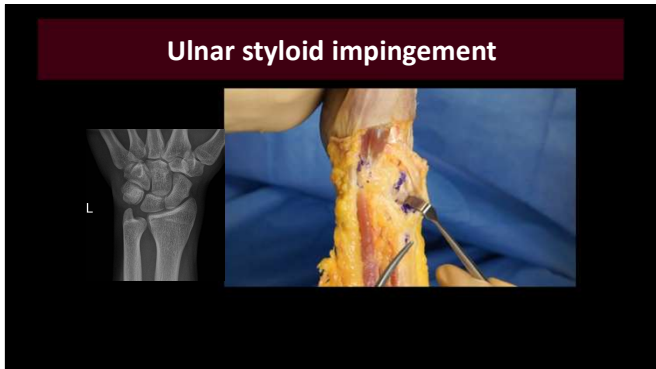
Ulnar styloid impingement



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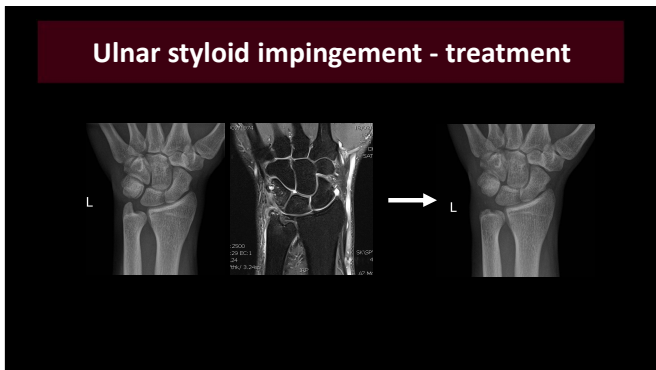
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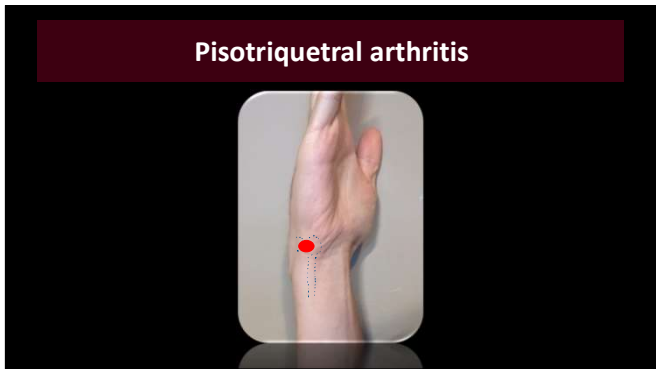


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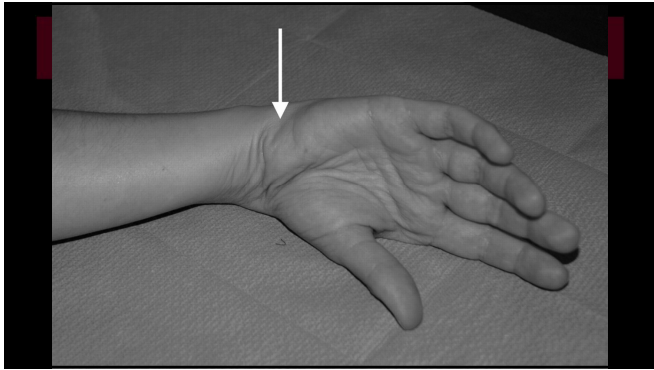
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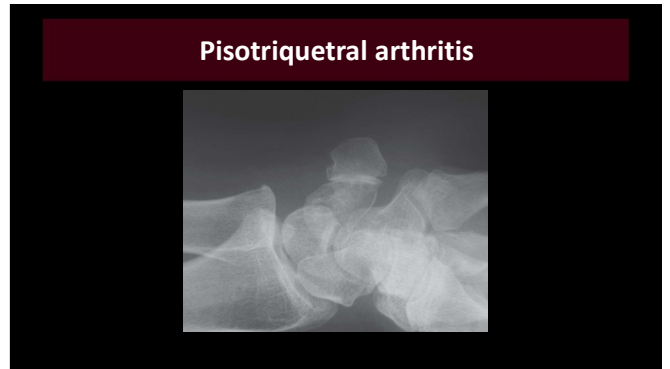
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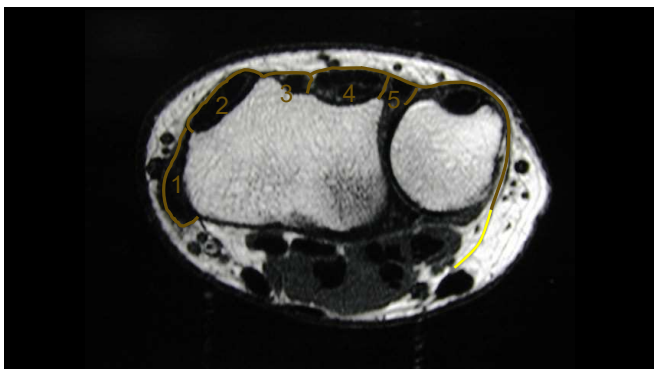
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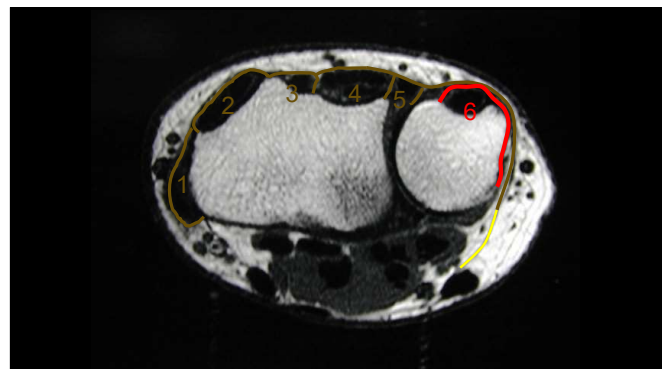
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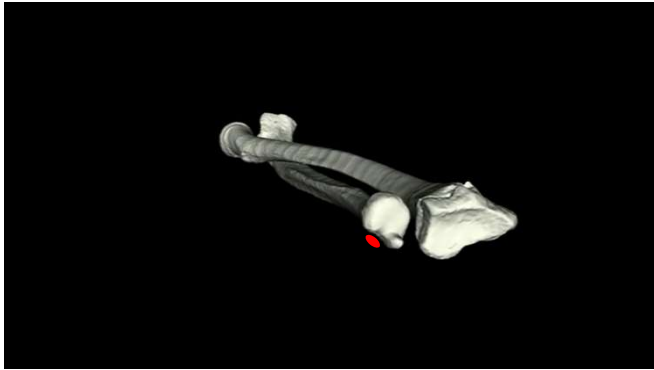
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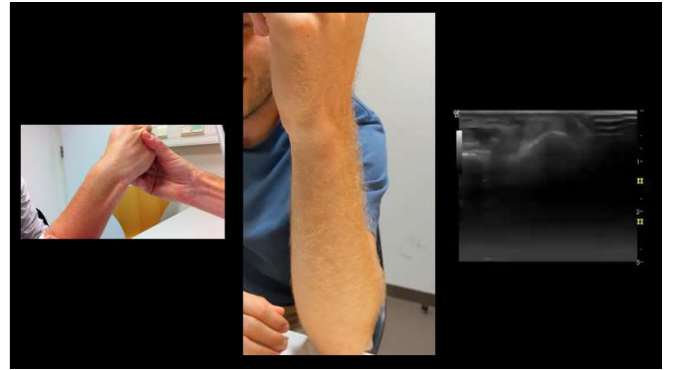
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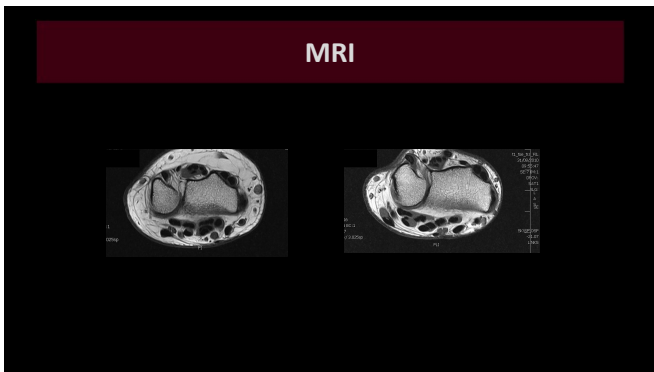
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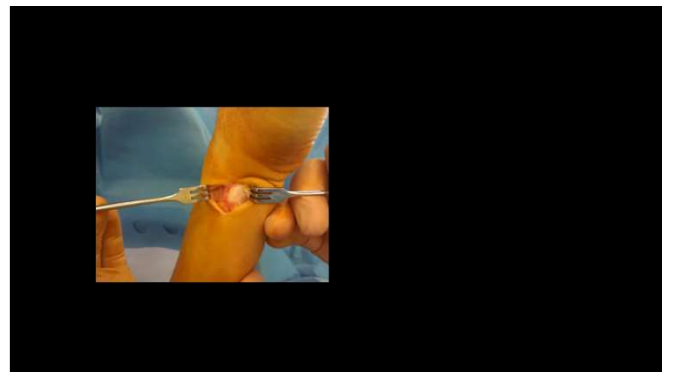
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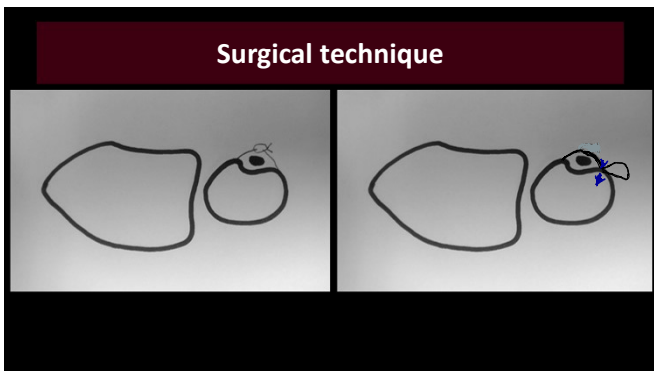
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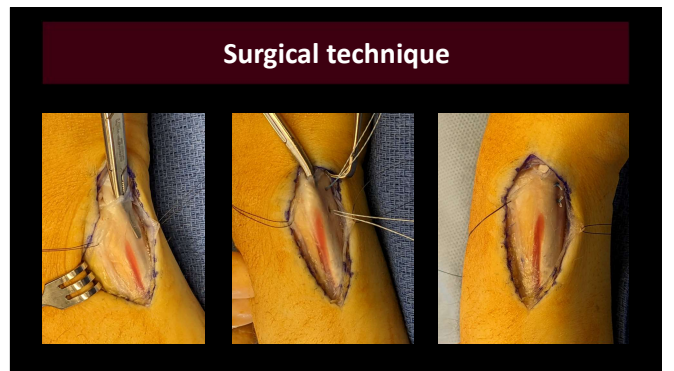
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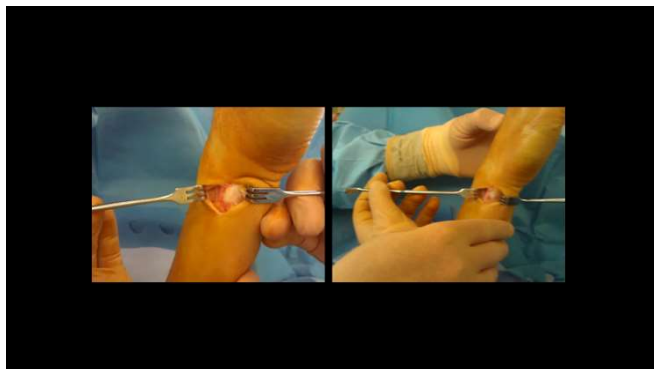
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Postop instructions

- Munster type brace for 6 weeks
- Early pronation exercises
 - to prevent adhesions between extensor retinaculum and ECU subsheath
- Limited: supination, ulnar deviation and palmar flexion

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ECU Tendinopathy



No repetitive corticosteroid injections...

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Thank You



✉ matthias.vanhees@gmail.com





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