

Update on treatment - TFCC Tears

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1

TFCC

Triangular fibrocartilage complex consists of 7 discrete structures

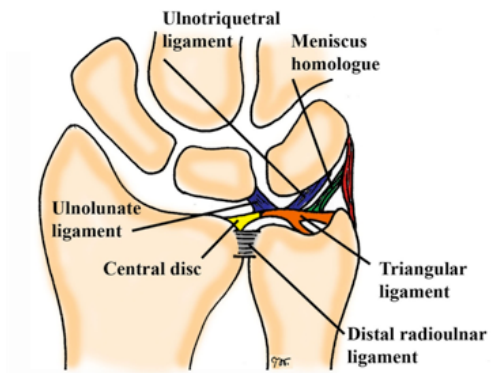
Major stabiliser of ulnar carpus and DRUJ

Absorbs 20% of axial load across wrist joint, but can increase to 80% depending on ulnar variance

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2

TFCC



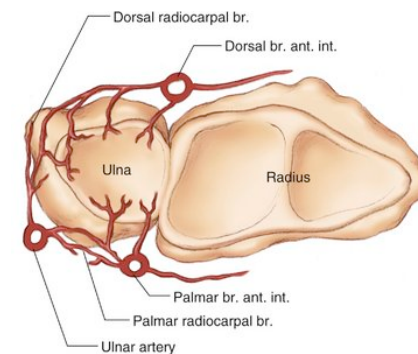
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3

TFCC

Peripheral tears can heal

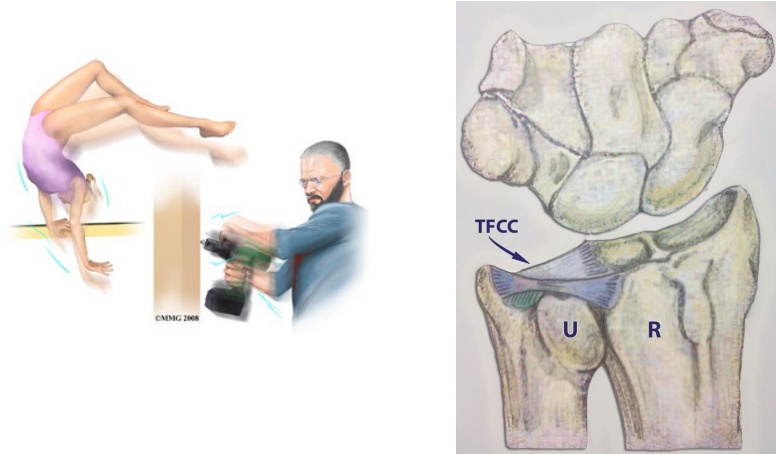
They are also amenable to repair



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4

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5

Diagnosis

History - painful rotation or loading in ulnar deviation and extension.

Clinical examination - "Fovea sign", pain on deviation, ballotment of DRUJ

Imaging - MRI sensitivity 75-90%

Arthroscopy is most accurate

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6

MRI findings

High signal at periphery towards styloid attachment

High signal in DRUJ inferior recess



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7

Non-op vs Op

Non-operative treatment:

REST

ACTIVITY MODIFICATION

Splints or brace

Anti-inflammatories

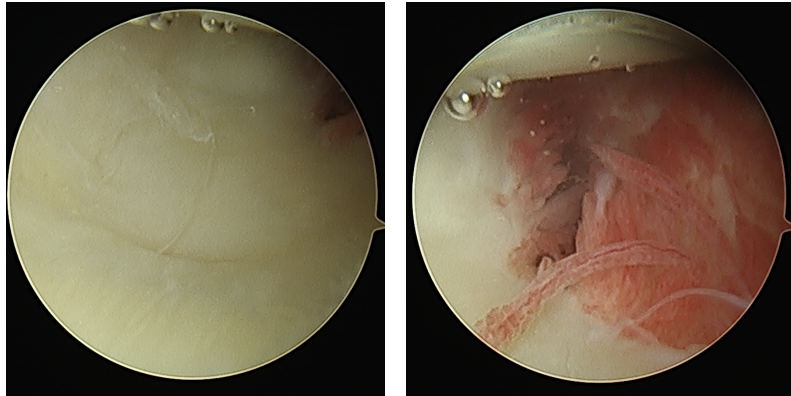
Rehabilitation of ulnar sided structures



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8

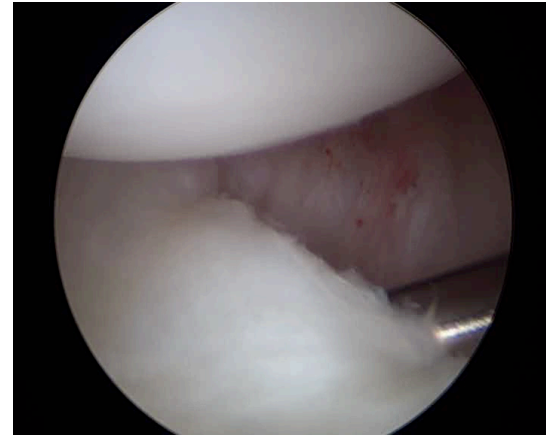
TFCC Repair



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9

Unstable peripheral TFCC



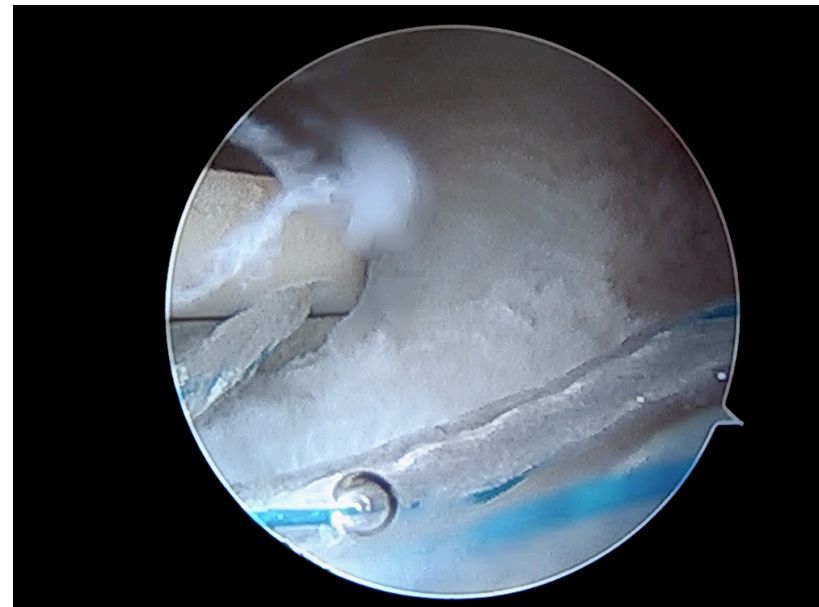
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10



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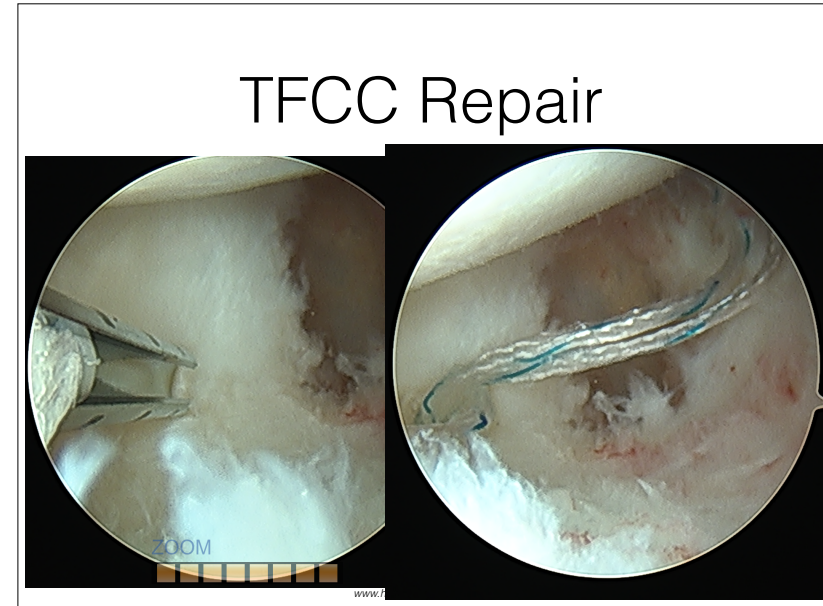
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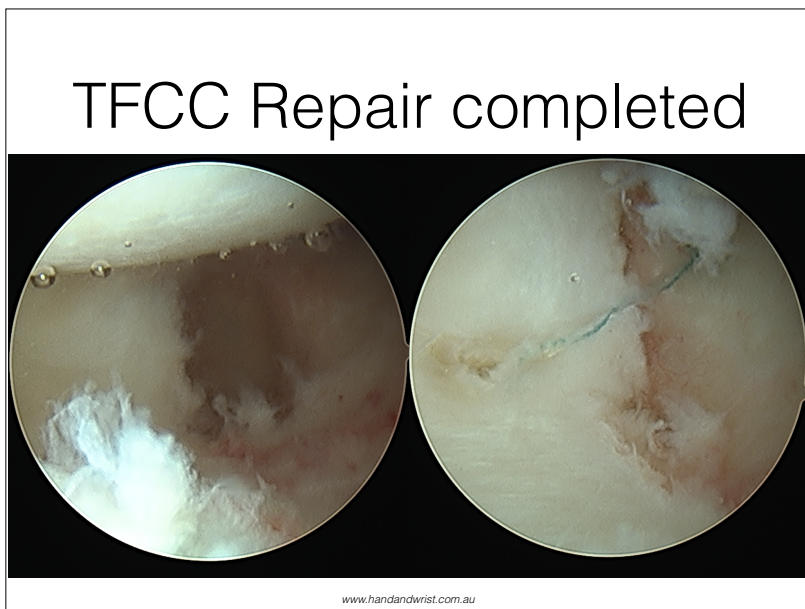
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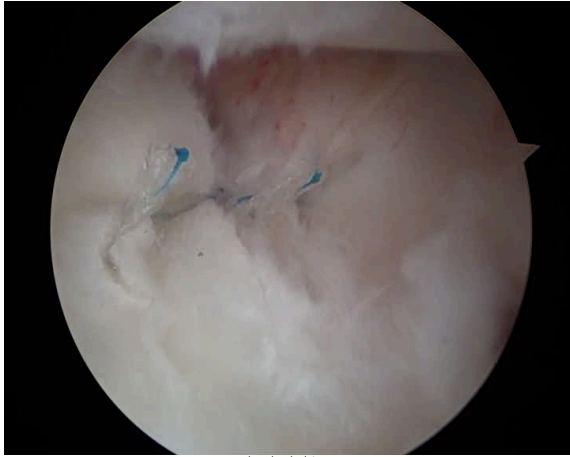


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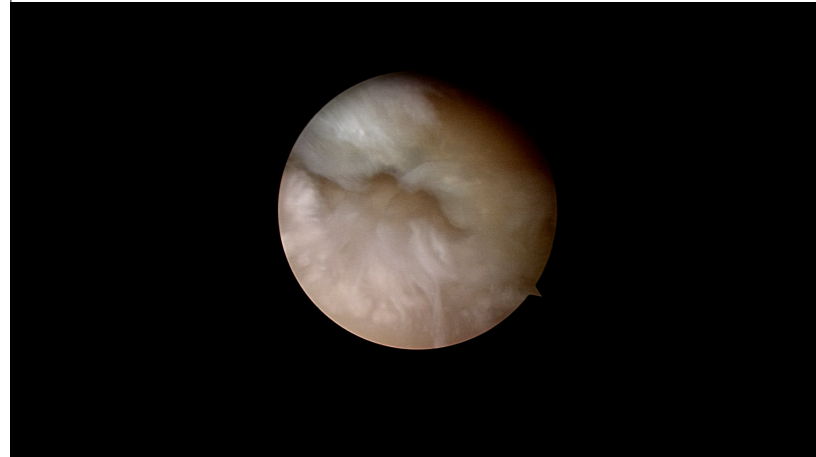
DRUJ movement post repair



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17

Central degenerative tear



18

Ulna-lunate abutment

Positive ulnar variance - post traumatic or developmental

Central TFCC tear

Pain on wrist extension and loading. Relieved with axial traction

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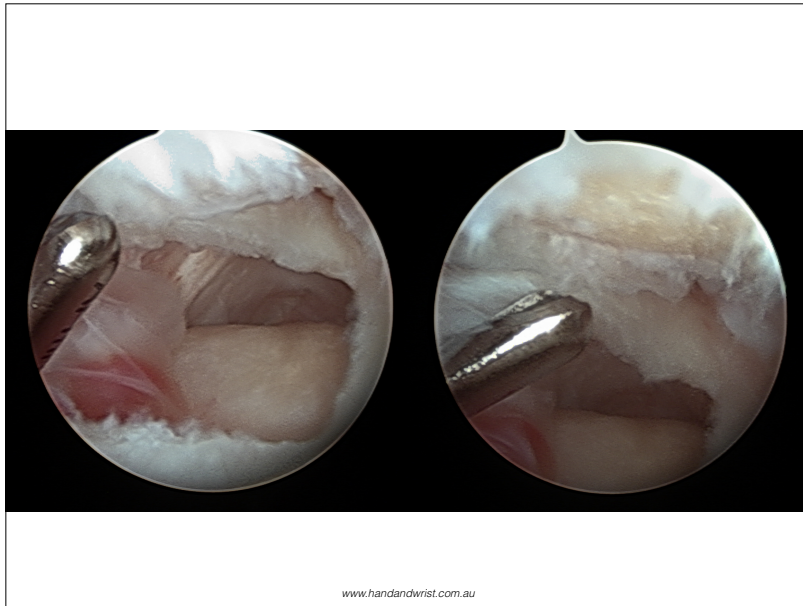
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Ulna-lunate abutment

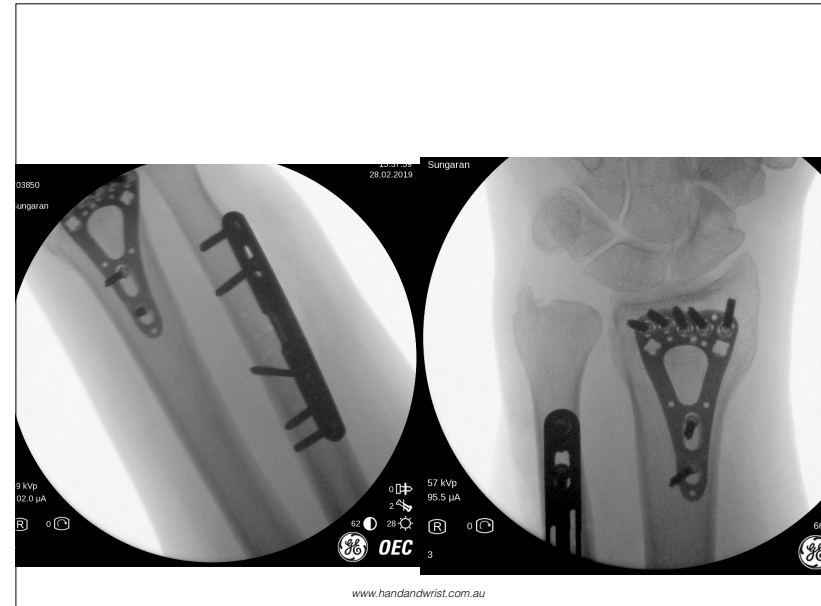


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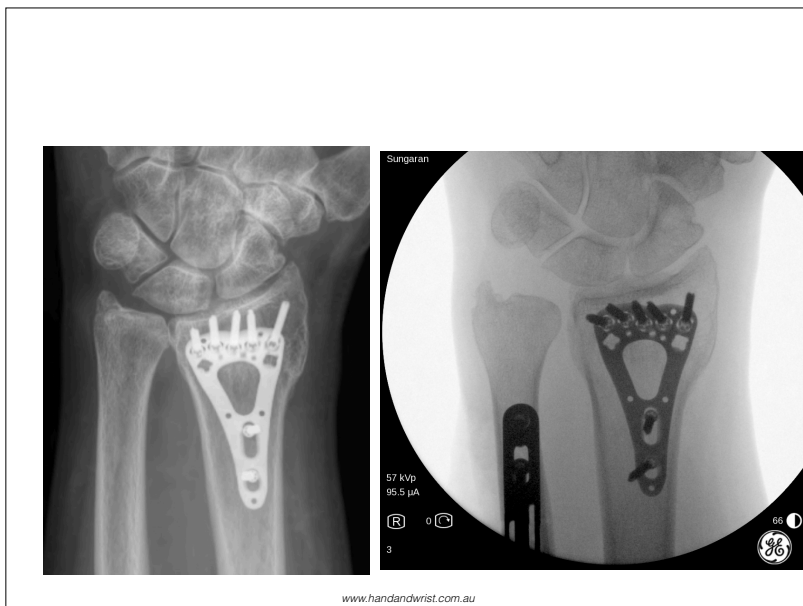
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21



22



23

Stage 1 (Repair) Wk 0-3

Swelling reduction and maintaining finger and MCP ROM

Immobilisation in sugar-tong cast or splint

Sometimes repair is stable enough to use short arm splint

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24

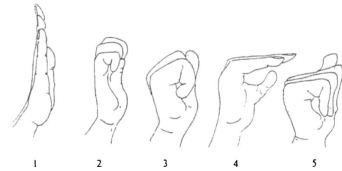
Stage 2 (Repair) Wk 3-6

Focus on restoring wrist flexion/extension while avoiding rotation. Scar management and desensitisation

Isometric exercises for forearm/hand

Tendon glide

Reduce to short arm splint.



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Stage 3 (Repair) Wk 6-10

Wean out of splint and start wrist rotation exercises. Continue flexion/extension and radio-ulnar deviation

Night splinting or taping as needed.

Start strengthening once range improves.

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26

Stage 1 (Debridement) Wk 0-2

Immobilisation for comfort and wound healing

Start MCP and IP joint ROM including grip and tendon glide

Swelling reduction

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27

Stage 2 (Debridement) Wk 2-6

Splint as needed for support and comfort. Start full active ROM including rotation and radio-ulnar deviation

Continue with tendon glide and MCP ROM

Scar therapy and desensitisation

Can commence strengthening if range returns

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28

Stage 3 (Debridement) Wk 6 onwards

No splint. Taping as needed.

Strengthening of ulnar sided structures as well as grip strength

Continue tendon glides and fist exercises.
Consider putty/theraband or hand isometric exercises



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29

TFCC Key Points

Clinical exam and history can identify a tear

MRI has high sensitivity and specificity but arthroscopy is better.

Non-op treatment not for longer than 3-6 months

Rehabilitation is crucial to successful treatment

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30

Thank You!

Questions? Comments?

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31