Arthroscopic foveal reattachment of the Triangular Fibro Cartilaginous Complex.

Dr G. Kermarrec, Dr G. Cohen, Dr D. Fontès
Disclosure

◊ G. Kermarrec : None

◊ D. Fontès : Arthex Consultant

◊ G. Cohen : Arthrex Consultant
FUNCTIONAL ANATOMY OF THE TRIANGULAR FIBROCARTILAGE COMPLEX

T. NAKAMURA, Y. YABE and Y. HORIUCHI
# Foveal TFCC Tear Classification and Treatment

Andrea Atzei, MD<sup>a,b,c,#</sup>, Riccardo Luchetti, MD<sup>d,e</sup>


doi:10.1016/j.hcl.2011.05.014

## Classification of TFCC Peripheral Tears

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 2</td>
<td>Complete TFCC Tear</td>
</tr>
<tr>
<td>Class 3</td>
<td>Proximal TFCC Tear</td>
</tr>
<tr>
<td>Class 4</td>
<td>Non-reparable TFCC Tear</td>
</tr>
<tr>
<td>Class 5</td>
<td>DRUJ Arthritis</td>
</tr>
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</table>

### Radiographic Findings
- DRUJ Ballottement Test: Negative
- Intact Ulnar Styloid or Tip Fracture of the Ulnar Styloid
- Basilar Fracture of the Ulnar Styloid

### Arthroscopic Findings
- Appearance of the Distal TFCC (during RC Arthroscopy): Normal Appearance (NO tear)
- Tension of the proximal TFCC (Hook Test): Taut TFCC (Negative Hook Test)
- Cartilage status of DRUJ (Positive Hook Test)

### Suggested Treatment
- Splinting for pain relief (Fragment removal in chronic painful cases)
- TFCC Suture (Splinting in acute cases)
- TFCC Foveal Refixation
- Styloid fixation
- Tendon Graft Reconstruction
- Arthroplasty

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CLASS 2

Complete TFCC Tear

- Mild to Severe Laxity (Soft endpoint)
  - CLASS 3-A: Avulsion Fracture of TFCC Insertion
  - CLASS 4-A: Massive Tear Degenerated Edges
  - CLASS 4-B: Frayed Edges Fail Suture

- Loose TFCC (Positive Hook Test)
  - Well preserved Cartilage

- Degenerative or Traumatic Cartilage Defect

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Arthroscopic Evaluation

- Trampoline
- Hook Test (Atzei)
- Ghost Sign (Fontès)
Foveal Insertion Repair

REVIEW ARTICLE
Stability of the Distal Radioulna Joint: Biomechanics, Pathophysiology, Physical Diagnosis, and Restoration of Function What We Have Learned in 25 Years

William B. Kleinman, MD

The Journal of Hand Surgery / Vol. 32A No. 7 September 2007
Arthroscopic Foveal Repair of Triangular Fibrocartilage Complex Peripheral Lesion With Distal Radioulnar Joint Instability

Andrea Atzei, MD and Alessandra Rizzo, MD
Repair of Foveal Detachment of the Triangular Fibrocartilage Complex: Open and Arthroscopic Transosseous Techniques

Toshiyasu Nakamura, MD, PhD*, Kazuki Sato, MD, PhD, Masato Okazaki, MD, Yoshiaki Toyama, MD, PhD, Hiroyasu Ikegami, MD, PhD
Foveal Reattachment (Geissler) Mini pushlock® Arthrex knotless procedure
Foveal reattachment (Fontès)

*mini-pushlock knotless simplified procedure*

### Minimum Materials

- Fiberwire ®
- 18 G Needle
- 2mm Awl
- Impacted Anchor
  - (Pushlock® Arthrex)
3-4 Optical Portal
6R Instrumental Portal
6U Outflow
Foveal reattachment (Fontès)

*mini-pushlock knotless simplified procedure*

**Preparation**
- Synovectomy
- Debridement of the lesion
- Preparation of the footprint
Foveal reattachment (Fontès)

*mini-pushlock knotless simplified procedure*

- Anchor Preparation
- 2 mm Awl
Suture
Impaction Ancre
Résultat Final
Retrospective study

> 9 Month Follow Up

Isolated Palmer 1B Atzei 2 lesions of the TFCC

Exclusion of associated lesions: 6
- SL (1)
- LT (2)
- Radius Fracture (2)
- Palmer 2 (2)

Lost to Follow Up: 2

n = 13

n = 5
Retrospective Study

Age 31  [22 ; 39]  3M 2 F
Dominant Side 3/5
Delay from trauma : 7 months [1 ; 14]

29.4 months follow up [9 ; 42]
# Results

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<tr>
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<td>Pain</td>
<td>6,75 [2 ; 9]</td>
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<td>5 [1 ; 9]</td>
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![Bar Chart](image)

- **Preop**
  - Pain: 2
  - Quick Dash: 8
  - PRWE: 9

- **Post op**
  - Pain: 1
  - Quick Dash: 8
  - PRWE: 7

- **Difference**
  - Pain: 5
## Results

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<td><strong>Quick Dash</strong></td>
<td>59,48 [45 ; 77]</td>
<td>17,68 [0 ; 38,6]</td>
<td>43 [34 ; 57]</td>
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<tr>
<td><strong>PRWE</strong></td>
<td>60,3 [33,5 ; 76,5]</td>
<td>20 [1 ; 41,5]</td>
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**RTW 54 days [26 ; 92]**

**Sports & leisure : 20 weeks [9 ; 31]**

- Same position
- Same level 3/5 (1 Pro)
- Lower level 2/5
<p>| | |</p>
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<tr>
<td>F / E</td>
<td>90 % [90 ; 92 ]</td>
</tr>
<tr>
<td>P / S</td>
<td>98% [94 ; 100]</td>
</tr>
<tr>
<td>Grip Strength</td>
<td>94% [50 ; 140]</td>
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MWS 80 [70 ; 90]

No Residual DRUJ Instability

No Complications (DSBUN)

Satisfaction : 8.2/10 [5 ; 10]
CONCLUSION

Longer follow up / Bigger Sample

Simple
Short Learning Curve

First Choice to Treat Atzei 2 lesions
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Merci pour votre Attention