The arthroscopic outside-in suture of the articular disc in a traumatic TFCC lesion

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Triangular Fibrocartilage Complex

- Most frequent cause of ulnar wrist pain
- Often overlooked at time of injury
- 40% false negative diagnosis in MRI
- Wrist arthroscopy gold standard in TFCC diagnosis
• Palmer Classification I/II A-D

• present study Palmer IB only

• proprietary outside-in Technique since 1998

• Previously published (JBJS Br. Sept 2000)
Materials since 2001:

- 76 TFCC lesions Class I+II
- 41 Palmer IB lesions
- 39 arthroscopic sutures performed
- 31 patients available for follow-up control
Technique

- Standard 2.4 mm optics
- NaCl with 150 mm Hg pressure
- Arm lying horizontally
- No traction applied
Technique

• 18G needle
• 3-0 nonabsorbable suture
• Outside-in
• proximal to distal
Technique

- Suture to be passed through the loop **outside** the joint

- Use loop to pull suture out to form a double seam
• in minimum two double seams are formed
• knot outside against joint capsule
Technique

- First stitch
Technique

- Forming a loop
Technique

• Testing the gap closure
• knot outside against joint capsule
## Results

<table>
<thead>
<tr>
<th>result</th>
<th>patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good or good</td>
<td>25</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>5</td>
</tr>
<tr>
<td>bad</td>
<td>1</td>
</tr>
</tbody>
</table>

- mean follow-up 29 months (6.5 Years to 6 Weeks)
- All but one patient became free of pain
- All patients returned to activities as before trauma
## Complications

<table>
<thead>
<tr>
<th>Problem</th>
<th>No</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failed healing</td>
<td>1</td>
<td>Arthroscopic disc débridement</td>
</tr>
<tr>
<td>Portal pain</td>
<td>2</td>
<td>Steroid infiltration</td>
</tr>
<tr>
<td>Reduced AROM</td>
<td>2</td>
<td>therapy</td>
</tr>
</tbody>
</table>

## Conclusion

- Reliable and technically simple technique
- Recommended as standard procedure for Palmer IB lesions