Acetabular Labral Tear Dimensions and Quantity of Suture Anchors Required for Arthroscopic Repair

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Arthroscopic labral repair in the hip has shown good short and medium term outcomes.

Typical acetabular labral tear sizes have not been quantified.

The typical number of suture anchors required to repair acetabular labral tears has not been reported.
PURPOSE

• To assess the typical length of acetabular labral tears associated with FAI, as measured on the acetabular clock face

• To determine the quantity of suture anchors, relative to labral tear size, are typically required for labral repair
METHODS

- Single surgeon case list review for hip arthroscopy cases with treatment of FAI and labral repair
- Revision surgeries and labral debridement excluded
- Location of tear (clock face) recorded
  - Start
  - End
  - Length
- Number of suture anchors recorded
## RESULTS

<table>
<thead>
<tr>
<th>Subject</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects:</td>
<td>N = 106 patients</td>
</tr>
<tr>
<td>Labral Tear Extension:</td>
<td>Mean: 3.5 hours (105°)</td>
</tr>
<tr>
<td></td>
<td>Range: 1.5-5.0 hours</td>
</tr>
<tr>
<td>Number of Anchors Used:</td>
<td>Mean: 3.07 anchors</td>
</tr>
<tr>
<td></td>
<td>Range: 1-5 anchors</td>
</tr>
<tr>
<td>Tear Starting Position:</td>
<td>Mean: 2:12 on the clockface</td>
</tr>
<tr>
<td>Tear Ending Position:</td>
<td>Mean: 10:54 on the clockface</td>
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</tbody>
</table>
LIMITATIONS

• Retrospective study

• Measurements made arthroscopically – based on surgeons interpretation of clock face

• Surgeon’s judgement to determine how many suture anchors required
CONCLUSIONS

• Most labral tears located in anterosuperior quadrant, and measure approximately 3.5 hours

• Approximately 1 anchor per hour on acetabular clock-face required for repair