Combined Hip Arthroscopy and Periacetabular Osteotomy: Intra-Articular Pathology

URMC Sports Medicine and Hip Preservation

Raymond J. Kenney, MD
Kelly L. Adler, MEd, ATC
P. Christopher Cook, MD
Brian D. Giordano, MD
<table>
<thead>
<tr>
<th>Name</th>
<th>Financial Disclosures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raymond J. Kenney, MD</td>
<td>No financial relationships to disclose</td>
</tr>
<tr>
<td>Kelly L. Adler, MEd, ATC</td>
<td>No financial relationships to disclose</td>
</tr>
<tr>
<td>P. Christopher Cook, MD</td>
<td>Arthrex, Inc: Paid consultant</td>
</tr>
<tr>
<td>Brian D. Giordano, MD</td>
<td>Arthrex, Inc: Royalties; Paid consultant; Paid presenter or speaker; Research support</td>
</tr>
</tbody>
</table>
Background

• Patient reported outcomes, complications and intra-articular pathology have been reported in small series of patients who have undergone hip preservation surgery

• Various types of intra-articular pathology have been previously reported in up to 100% of patients undergoing combined Hip Arthroscopy and Peri-acetabular Osteotomy (PAO).
Purpose

• The purpose of this study was to examine the types and rate of intra-articular pathology in a large series of patients who have undergone combined Hip Arthroscopy and PAO at a high volume hip preservation center.
Methods

• Prospectively collected data was analyzed to determine the types and rate of intra-articular pathology for 73 consecutive patients (76 hips) who underwent combined Hip Arthroscopy and PAO at a single academic medical center from June 2012 through February 2016.

• Charts were reviewed for operative records describing intra-articular pathology encountered at the time of Hip Arthroscopy.
**Capsule Thickness**

- **NORMAL**: 16
- **THICK/CONTRACTED**: 27
- **THIN/REDUNDANT**: 14

**Ease of Distension**

- **NORMAL**: 28
- **CONTRACTURE**: 11
- **HYPERDISTENSION**: 17
Synovitis

- 70
- 3

SYNOVITIS
NO SYNOVITIS

Loose Bodies

- 37
- 39

LOOSE BODY
NO LOOSE BODY
Femoroacetabular Impingement (FAI) Morphology

- PINCER: 2
- CAM: 4
- MIXED: 17
- NORMAL: 43
**Labral Tear**

- 14 Labral Tear
- 62 No Labral Tear

**Ligamentum Teres Tear**

- 5 No Tear
- 11 Grade 1 Tear
- 13 Grade 2 Tear
- 14 Grade 3 Tear
- 20 Grade 4 Tear
**Acetabular Chondromalacia: Grade (%)**

- Grade 1: 32%
- Grade 2: 57%
- Grade 3: 32%
- Grade 4: 16%

**Acetabular Chondromalacia: Zone (%)**

- Zone 1: 0%
- Zone 2: 78%
- Zone 3: 79%
- Zone 4: 38%
- Zone 5: 1%
Femoral Chondromalacia: Grade (%)  

- Grade 1: 3%  
- Grade 2: 8%  
- Grade 3: 4%  
- Grade 4: 3%

Femoral Chondromalacia: Zone (%)  

- Zone 1: 3%  
- Zone 2: 12%  
- Zone 3: 13%  
- Zone 4: 9%  
- Zone 5: 4%
Conclusions

• In a large series of patients with acetabular dysplasia undergoing combined Hip Arthroscopy and PAO, a high rate of coexistent intra-articular pathology was identified.

• Traditional arthrotomy may offer a more limited window into the central compartment, and subsequently fail to address potentially treatable intra-articular pathology.

• Separate studies are focused on the use of combined Hip Arthroscopy and PAO clinical outcomes through a more comprehensive approach to treating both intra-articular pathology and structural malalignment.
References


