Heterotopic Ossification Excision Following Hip Arthroscopy

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Disclosures – Dr. Benjamin Domb

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Heterotopic Ossification (HO)

- Common after hip arthroscopy
- Incidence around 44% for pts. not receiving prophylaxis
- Can still occur with preventative measures
The purpose of this study was to evaluate patient-reported outcome (PRO) scores for patients undergoing revision surgery for HO excision.
Methods

- Study period: 2008 – 2014
  - 2379 arthroscopic surgeries
    - 68 (3%) patients had revision surgery for HO excision
      - Inclusion criteria was ossification of 1 cm, which eliminated 45 patients
      - Final study group was 23 patients
    - Two reviewers assessed radiographs for inclusion
    - Retrospective chart review completed
    - Patients with previous hip conditions were excluded
The protocol included pre- and post-operative administration of:

- Modified Harris Hip Score (mHHS)
- Non-Arthritic Hip Score (NAHS)
- Hip Outcome Score
  - Activities of Daily Living (HOS-ADL)
  - Sport Specific Subscale
- Visual Analog Scale (VAS)
- Satisfaction
## Results - Demographics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up Percentage</td>
<td>82.6%</td>
</tr>
<tr>
<td>Average Follow-up Time</td>
<td>1.5 months</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
</tr>
<tr>
<td>Average Age</td>
<td>38.7</td>
</tr>
<tr>
<td>Laterality</td>
<td></td>
</tr>
<tr>
<td>Left</td>
<td>12</td>
</tr>
<tr>
<td>Right</td>
<td>11</td>
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</table>
## Primary Surgery Procedures

<table>
<thead>
<tr>
<th>Procedure</th>
<th>N=</th>
</tr>
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<tbody>
<tr>
<td>Femoral Osteoplasty</td>
<td>17</td>
</tr>
<tr>
<td>Acetabuloplasty</td>
<td>16</td>
</tr>
<tr>
<td>Iliopsoas Release</td>
<td>4</td>
</tr>
<tr>
<td>Removal of Loose Body</td>
<td>3</td>
</tr>
<tr>
<td>Trochanteric Bursectomy</td>
<td>2</td>
</tr>
<tr>
<td>Labral Treatment</td>
<td></td>
</tr>
<tr>
<td>Base refixation</td>
<td>4</td>
</tr>
<tr>
<td>Debridement</td>
<td>6</td>
</tr>
<tr>
<td>Reconstruction</td>
<td>8</td>
</tr>
<tr>
<td>Simple stitch</td>
<td>8</td>
</tr>
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</table>
## HO Excision Surgical Procedures

<table>
<thead>
<tr>
<th>Procedure</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Femoroplasty</td>
<td>6</td>
</tr>
<tr>
<td>Chondroplasty</td>
<td>5</td>
</tr>
<tr>
<td>Acetabuloplasty</td>
<td>4</td>
</tr>
<tr>
<td>Iliopsoas Release</td>
<td>3</td>
</tr>
<tr>
<td>Osteoplasty (Peripheral)</td>
<td>2</td>
</tr>
<tr>
<td>Debridement of Trochanteric Bursitis</td>
<td>1</td>
</tr>
<tr>
<td>Iliotibial Band Release</td>
<td>1</td>
</tr>
<tr>
<td>Microfracture – Acetabulum</td>
<td>1</td>
</tr>
<tr>
<td>Labral Treatment</td>
<td></td>
</tr>
<tr>
<td>Base Refixation, Reconstruction &amp; Simple Stitch</td>
<td>0</td>
</tr>
<tr>
<td>Debridement</td>
<td>13</td>
</tr>
</tbody>
</table>
Results

mHHS

HOS - SSS

HOS - ADLS

NAHS

Pre Surgery 1
Pre Surgery 2
Latest After Surgery 2

Pre Surgery 1
Pre Surgery 2
Latest After Surgery 2

Pre Surgery 1
Pre Surgery 2
Latest After Surgery 2

Pre Surgery 1
Pre Surgery 2
Latest After Surgery 2
Conclusion

• Improved outcome scores and decreased pain in patients undergoing revision surgery for HO excision
• Few patients achieved good or excellent results (defined as >80 mHHS)
• Revision surgery for HO removal should be approached cautiously
• Further research warranted
References