THE TIMING OF HIP ARTHROSCOPY

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DISCLOSURES

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BACKGROUND:

The best timing for arthroscopic knee surgery has been reported for anterior cruciate ligament lesions as being within the first year of injury, but there is no study that describes the best timing for hip arthroscopy.
AIM:

to correlate the results of hip arthroscopic surgery with the duration of a patient’s pre-operative symptoms.

PATIENTS:

We studied 561 consecutive patients who underwent a hip arthroscopy by the senior author (RNV) in a single-surgeon practice.
METHODS:

The criterion for inclusion was at least one of the following preoperative diagnoses: labral tear, FAI and chondral lesion. Patients with incomplete follow-ups were excluded.

The patient’s age at surgery, gender, duration of hip symptoms, diagnoses and intraoperative findings were prospectively recorded in a custom-made database.

Patients were prospectively assessed before surgery and at six weeks, six months, one year, two years and three years after the procedure.

Patients were divided into three groups according to the duration of hip pain: group A, less than six months; group B, between six months and three years; and group C, more than three years.
POPULATION AND INTRAOPERATIVE FINDINGS:

<table>
<thead>
<tr>
<th>Group</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients</td>
<td>73</td>
<td>292</td>
<td>160</td>
</tr>
<tr>
<td>Age at surgery (yrs)</td>
<td>38</td>
<td>39</td>
<td>38</td>
</tr>
<tr>
<td>Male</td>
<td>45</td>
<td>135</td>
<td>61</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>157</td>
<td>99</td>
</tr>
<tr>
<td>Right</td>
<td>38</td>
<td>172</td>
<td>85</td>
</tr>
<tr>
<td>Left</td>
<td>35</td>
<td>120</td>
<td>74</td>
</tr>
<tr>
<td>Mean duration of pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(days)</td>
<td>136</td>
<td>490</td>
<td>3818</td>
</tr>
<tr>
<td>Labral tear</td>
<td>57</td>
<td>194</td>
<td>98</td>
</tr>
<tr>
<td>FAT</td>
<td>22</td>
<td>65</td>
<td>43</td>
</tr>
<tr>
<td>Chondral lesion</td>
<td>6</td>
<td>63</td>
<td>26</td>
</tr>
</tbody>
</table>

No significant differences were found between the three groups (all p values > 0.05) for age, gender and side.
CLINICAL RESULTS

TOTAL MHHS SCORES

- Group A
- Group B
- Group C

Score (points) vs. Time (years)
CLINICAL RESULTS

• The mean pre-operative mHHS was 59, 58 and 55 for groups A, B and C, respectively. There was no significant difference between these preoperative scores (p=0.1).

• The mean post-operative mHHS was, respectively, 68, 64 and 62 at six weeks; 75, 71 and 67 at six months; 78, 73 and 69 at one year; 78, 76 and 70 at two years; and 79, 75 and 69 at three years.

• For each of the three groups there was a significant improvement in mHHS between the preoperative and postoperative values at all time periods (p<0.001 at six weeks, six months, one, two and three years).
Required subsequent revision hip arthroscopy or arthroplasty rate on the same side was 4% in group A, 11% in group B and 13% in group C.(figure 1).
DISCUSSION

• Some authors suggest hip pain should be treated conservatively and recommend surgery only if physiotherapy has failed. However, our results show that this approach is best limited to a period of less than six months from the onset of symptoms.

• We demonstrate a better clinical outcome when labral tears, impingement lesions or chondral surface damage are treated arthroscopically within six months of symptom onset.

• This finding may perhaps be related to the knowledge that chondral injury can progress as this is commonly described as cause of surgical failure.
DISCUSSION

Our results certainly highlight the importance of early and accurate diagnosis of intraarticular hip pathology. Once a labral tear, FAI, or chondral damage are suspected or diagnosed, typical conservative treatment might include limited weight-bearing, avoidance of sport, nonsteroidal anti-inflammatory drugs or physiotherapy. The patient’s symptoms may be reduced during this period of limited activity. However, they may recur on return to normal activities, perhaps because of the limited ability of a labral tear or chondral surface to heal.
CONCLUSIONS

An early diagnosis of labral tear, FAI or chondral damage for a symptomatic patient is to be encouraged.

Conservative treatment is of course welcomed. However, this should be limited to a period of no more than six months from symptom onset. At that point, hip arthroscopy should be performed, if it is to be performed at all.

To wait longer may reduce the chances of achieving a good postoperative result and patients should be counselled accordingly.
REFERENCES

• Bedi A, Chen N, Robertson W, Kelly BT. The management of labral tears and femoroacetabular impingement of the hip in the young, active patient. *Arthroscopy* 2008;24:1135-45.


