Outcomes Following A Multi-Disciplinary Approach To Arthroscopic Anterior Cruciate Ligament (ACL) Reconstructive Surgery At Hospital Tuanku Ja’afar, Seremban: A Case Series

1Liew MY, 2Shamsudin Z, 3Nadarajah E, 3Kalimuthu M, 3Ebrahim R, 2Ahmad AR, 4Solayar GN
1Hospital Tuanku Ja’afar, Jalan Rasah, Bukit Rasah, 70300 Seremban, Negeri Sembilan
2Orthopaedics Department, Hospital Tuanku Ja’afar, Jalan Rasah, Bukit Rasah, 70300 Seremban, Negeri Sembilan
3Sports Medicine Department, Hospital Tuanku Ja’afar, Jalan Rasah, Bukit Rasah, 70300 Seremban, Negeri Sembilan
4Orthopaedics Department, International Medical University (IMU), Jalan Dr Muthu, Bukit Rasah, 70300 Seremban, Negeri Sembilan

INTRODUCTION:
Primary ACL reconstruction is an effective surgical treatment for ACL deficiencies, with satisfactory or better outcomes in 75% to 97% of patients1. However, some studies suggest that up to 23% of these reconstructions may fail2. This case series aims to determine outcomes following arthroscopic ACL reconstruction at Hospital Tuanku Ja’afar, Seremban.

METHODS:
A total of 74 patients who underwent arthroscopic ACL reconstruction from January 2015 to December 2017 were contacted. Only 50 patients were contactable and included in this retrospective study. Outcomes were measured using the Tegner-Lysholm Knee Scoring Scale and Visual Analog Scale for pain, pre- and post-operatively. Patients’ medical records were also thoroughly reviewed. All patients underwent sports specific rehabilitation under the sports physicians in our unit.

RESULTS:
The mean follow-up time was 12 months following surgery. All patients reported mild (82%) to no pain (18%) following ACL reconstruction. 31 had associated meniscal tears. Patients’ accounts on their functional status following operation are as Table 1.

<table>
<thead>
<tr>
<th>Lysholm Score &amp; Tegner Activity</th>
<th>Number of patients (N)</th>
<th>% with associated meniscus tear and repair</th>
<th>Percentage of patients (N/50 [%])</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor (65)</td>
<td>5</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Fair (65-83)</td>
<td>7</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Good (84-90)</td>
<td>12</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>Excellent (&gt;90)</td>
<td>26</td>
<td>10</td>
<td>52</td>
</tr>
</tbody>
</table>

There were no significant differences in outcomes between patients with and without meniscal tears in this series. One patient had surgical site infection and 1 patient required revision surgery due to failed graft.

DISCUSSIONS:
Most patients in our series were satisfied following ACL reconstruction with regards to their function and pain scores. Patients who had poor or fair functional scores only claimed to have difficulty performing very strenuous exercises. All patients were followed up at the Orthopaedic outpatient clinic by their surgeon as well as team sports physicians at our unit for further rehabilitation of their function. Most patients were happy and attributed this to the comprehensive treatment provided by our multidisciplinary team.

CONCLUSION:
The multi-disciplinary approach to ACL reconstruction surgeries in Hospital Tuanku Ja’afar, Seremban have been largely successfully with satisfactory return of patients’ functional level and low complication rates post-operatively.

REFERENCES: