The outcome of unicompartment knee arthroplasty treatment for spontaneous osteonecrosis of the knee

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DISCLOSURE

Tsung Yu Lin, MD
I have no financial conflicts to disclose
Aims of this study

1. The result of uni-knee arthroplasty (UKA) treatment for SONK in our hospital

2. The incidence of medial meniscus posterior root tears (MMPRT) in confirmed diagnosis SONK patient
Method and materials


51 SONK patients

7 with ACL tear

2 with previous meniscectomy

42 received UKA
# Patient characteristics

<table>
<thead>
<tr>
<th></th>
<th>Average age</th>
<th>Male: female</th>
<th>Average lesion condylar ratio</th>
<th>Average lesion volume</th>
<th>Average follow-up time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>61.4 (54-80)</td>
<td>12:30</td>
<td>0.622 (0.44-0.879)</td>
<td>7.91 (1.35-20.69) cm³</td>
<td>3.2 months</td>
</tr>
</tbody>
</table>
Case 1: 71 female
X-ray: Aglietti stage IV, Ficat 3
Case 1: 71 female
Case 2: 64 female
X-ray: Aglietti stage II, Ficat 2
## Results

<table>
<thead>
<tr>
<th></th>
<th>Mean pre-OP OKS</th>
<th>Mean post-OP OKS</th>
<th>Mean pre-OP VAS</th>
<th>Mean post-OP VAS</th>
<th>Incidence of MMPRT</th>
<th>Mean final ROM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>35.65 ± 4.28</td>
<td>14.91 ± 4.63</td>
<td>8.04 ± 0.77</td>
<td>2.61 ± 0.72</td>
<td>54.7% (23/42)</td>
<td>125.6° ± 15.2°</td>
</tr>
</tbody>
</table>

**OKS:** The Oxford Knee Score  
**VAS:** Visual Analogue Scale  
**MMPRT:** Medial meniscus posterior root tears
Conclusion

• UKA might be a better option than TKA for SONK
  → More bone and natural kinematics preservation and micro-damage.

• Long-term prognosis need to be investigated

• The etiology of SONK probably is multifactorial, but MMPRT may have a key role in the development of SONK.
Reference


