Inferior Outcome of 'UKA Converted to TKA’ in Comparison to Primary TKA

Michael C. Liebensteiner, Innsbruck, AUSTRIA, Presenter
Alexander Ruzicka, Innsbruck, AUSTRIA
Maximilian Hinz, Innsbruck, AUSTRIA
Hermann Leitner, Innsbruck, AUSTRIA
Martin Krismer, Innsbruck, AUSTRIA
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<th>Name</th>
<th>Disclosures</th>
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<tr>
<td>Michael Liebensteiner</td>
<td>Consultant Stryker, Consultant Depuy</td>
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<td>Alexander Ruzicka:</td>
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Objective / Aims of the Study

- To investigate the clinical outcome of patients that underwent conversion of a medial unicondylar knee arthroplasty (UKA) to a total knee arthroplasty (TKA)

- To compare that outcome to patients that underwent primary TKA
Hypotheses

- It was hypothesized that patients receiving conversion of an UKA to TKA would show significantly worse knee score outcome (H1)

- and significantly worse implant survival (H2) than patients with primary TKA
Study Design

- retrospective-comparative
- Data extraction from the federal state's arthroplasty registry

- patients that had conversion of medial UKA to TKA (UKA-to-TKA group)
- patients that had primary TKA (pTKA group)
Methods

Outcome parameters

- WOMAC subscales pain, stiffness and function
- from one year postoperative
- (worst 100, best 0).

- Prosthesis Survival
- Kaplan-Meier Curves / Log-Rank tests
Results

- UKA-to-TKA group: 51 cases (age 67 ±9)
- primary TKA group: 2247 cases (age 69 ±9).

One-year postop Knee Score (H1):
- WOMAC total: 33 in the UKA-to-TKA group vs. 21 in the pTKA group (p < 0.001)
- WOMAC pain, WOMAC stiffness and WOMAC function scores were significantly worse in the UKA-to-TKA group (p values from 0.001 to 0.007)
Results

Prosthesis Survival (H2, p<0.001):
- **3-year** prosthesis survival:
  - 84% (UKA-to-TKA) vs. 96% (pTKA)

- **5-year** prosthesis survival:
  - 82% (UKA-to-TKA) vs. 95% (pTKA)

- **10-year** prosthesis survival:
  - 74% (UKA-to-TKA) vs. 91% (pTKA)
Results

Log-rank test: $P=0.0000$

- primary TKA
- TKA after UKA

Analysis time [months]
Conclusions

- Based on our findings it is concluded that patients that receive a TKA after UKA have inferior results than those that directly receive a TKA.

- This is true for both patient-reported knee outcome and prosthesis survival.
Thank you