

AB121. SOH22ABS131. Focal articular surface replacement of the femoral condyle: the influence of patient selection on clinical outcome

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Background: Focal articular surface replacement (FASR) is a reconstructive treatment of focal chondral defects (FCD) of the femoral condyle, offering an alternative to 'biological' procedures. The purpose of this study is to investigate patient or surgical factors associated with the functional outcome, re-operation rate, and revision rate of FASR of FCDs.

Methods: Review of a prospectively collected database including 327 FASR procedures was performed to select patients with FASR of the femoral condyles with a focal metallic implant (HemiCAPTM) and a minimum of 7 years follow-up. Patient and surgical factors were assessed for their association with functional outcome, risk of reoperation or revision.

Results: A total of 266 patients underwent FASR of the femoral condyle with a mean follow-up of 9.6±1.3 years. Functional outcome scores significantly improved during follow-up, and 69% returned to sport. Implant revision rate was 2.2% (n=6), re-operation rate was 12% (n=31) they were associated with a prolonged duration of symptoms or a Kellgren-Lawrence grade >1. Functional outcome, revision and re-operation rate were not affected by body mass index, prior biological procedures, or alignment.

Conclusions: FASR of the femoral condyle significantly

improved functional outcome with a low revision rate (2.2%) after a minimum 7-year follow-up. Kellgren-Lawrence grade was the most consistent factor associated with a poorer functional outcome, revision and re-operation. With appropriate patient selection, FASR of FCDs the femoral condyles can result in a good clinical outcome at mid- to long-term follow-up.

Keywords: HemiCap; osteochondral; knee; focal; defect

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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