

## Mid-term Outcomes of Fixed Bearing Lateral Unicompartmental Knee Replacement

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**INTRODUCTION:** Lateral unicompartmental knee replacement (UKR) has had mixed clinical results and, although appropriate for about 10% of knees needing replacement, is only used for about 1%. The aim of this study was to determine the medium-term results for Fixed Bearing Lateral UKR (FBLUKR).

### **METHODS:**

This study reports the clinical results and survival for 305 consecutive FBLUKRs implanted between 2015 and 2022, with minimum 1-year follow-up. 93% of knees satisfied the recommended indications. The mean follow-up was 4.3 years (SD 1.9), and maximum was 8 years. The mean age was 70.8 (SD 11) and mean BMI was 28.4 (SD 5.4). The right side was operated on in 65% of cases and 72% of patients were female. Isolated lateral compartment osteoarthritis was the indication for 98% of operations. The Oxford Knee Score (OKS) was recorded pre- and post-operatively to assess the FBLUKRs clinical effectiveness. The revision status of all knees was known.

### **RESULTS:**

2 FBLUKRs were converted to primary TKRs for instability and progressive arthritis, 2 had the addition of a medial UKR for medial compartment disease, and there were 3 other reoperations. At last clinical follow-up the mean OKS was 41, a mean increase of 20 points from pre-operative OKS. At 7 years the survival rate for any re-operation (including revision) was 96% (95%CI 91-100), for revision was 98% (95%CI 94-100) and for revision to primary TKR was 99% (95%CI 96-100). No revisions required revision TKR components. When knees outside the recommended indications were excluded, there were only 2 revisions, both for osteoarthritis progression, resulting in a 7-year survival for revision of 99% (95%CI 93-100).

### **DISCUSSION AND CONCLUSION:**

This study presents the largest published cohort of FBLUKRs. The good clinical outcomes and medium-term survival of FBLUKR, particularly if the recommended indications are used, suggest FBLUKR is an excellent alternative to TKR for the treatment of isolated lateral compartment disease.

