+ Evidence in focus

Publication summary

Smith-Nephew

JOURNEY[°] II UK with OXINIUM[°] Technology demonstrates high survivorship and improved outcomes in UKA at 2 years follow-up

Fricka KB, Strait AV, Ho H, Hopper RH Jr, McAsey CJ. Early outcome of a contemporary unicondylar knee system. Cureus. 2024;16(11):e74596.

Available at: <u>Cureus</u>

Key points



Overview

- Single-centre, multi-surgeon, retrospective study that analysed outcomes of 944 UKAs (814 medial, 130 lateral) performed at a US high-volume centre using JOURNEY II UK with OXINIUM Technology (between 2019–2023)
 - 112 patients had staged bilateral UKAs (mean 283 days between procedures)
- The primary outcome was overall re-operation rate (defined as re-operations for any reason)

Results

- Overall re-operation rate was 0.7% at 1 year (95% CI: 0.1–1.3%) and 1.8% at 2 years (95% CI: 0.5–3.1%)
 - Re-operations (n=9) were all medial UKAs and were due to infection (n=3), tibial loosening (n=2) and femoral loosening, lateral compartment progression, arthritis, patellar instability and recurrent hemarthrosis (all n=1)
- Versus pre-operative scores, PROMs progressively improved through the 2-year follow-up
- At 2 years, improvements for:
 - KOOS JR score (+30) notably exceeded the MCID¹ (+14; Figure)
 - PROMIS Physical score were +10
 - PROMIS Mental score were +7
- ROM improved from 118° (±8° SD) pre-operatively to 122° (±7° SD) at 1 year follow-up (n=202; p<0.001)

- Secondary outcomes included ROM, and PROMs, including: KOOS JR, PROMIS Global Health Physical and Mental scores
- Data were collected pre-operatively and at 4 weeks, 4 months, 1 year and 2 years follow-up
- The mean follow-up was 1.3 (±1.0 years SD)



Mean improvement in KOOS JR score (2 years)

Figure. Improvements in KOOS JR score at 2 years compared with MCID¹ (n=285)

Conclusions

Data from a US high-volume center demonstrate high survivorship and improved PROMs with JOURNEY II UK at 2 years, building on the recent D'Amario publication² which reported similar results.

Abbreviations: CI = confidence interval; KOOS = Knee Injury and Osteoarthritis Outcome Score; MCID = minimum clinically important difference; PROMs= patient-reported outcomes measures; PROMIS: Patient-Reported Outcomes Measurement Information System; ROM = range of motion; SD= standard deviation; US= United States.

References

1. MCID as defined by: Lyman S, Lee YY, McLawhorn AS, Islam W, MacLean C. What are the minimal and substantial improvements in the HOOS and KOOS and JR versions after total joint replacement? Clin Orthop Relat Res. 2018;476:2432–41. 2. D'Amario F, Berardinis LD, Zanon G, Qordja F, Vitale U, Gigante AP. First Italian experience with the OXINIUM metal-backed fixed-bearing medial JOURNEY II Unicompartmental Knee System: Promising short-term outcomes of 145 cases. J Clin Med. 2024;13(5):1303.

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