



DOES A BALANCED TKA PRODUCE A MORE FORGOTTEN JOINT AND IMPROVED CLINICAL OUTCOMES?

Multicenter Blinded Control Trial

► PURPOSE

The Forgotten Joint Score-12 (FJS-12) is a PROM evaluating the degree to which a patient is able to forget about their joint following surgery. The aim of this study was to measure post-operative outcomes and joint awareness in patients with and without a quantifiably balanced knee following primary TKA.

► METHODS

BLINDED MANUAL VS. UNBLINDED VERASENSE TKA BALANCING

- Multicenter - 11 experienced surgeons, 6 centers
- 332 patients in two patient-blinded operative groups:
 - Sensor-guided TKA with quantified, UNBLINDED VERASENSE balancing (n=162)
 - Surgeon-guided TKA with BLINDED VERASENSE load measurement (n=170)
- Intra-op sensors utilized in all cases. BLINDED group TKAs were balanced using standard, manual techniques, with VERASENSE data collection blinded to the surgeon.

PATIENT-BLINDED GROUPS WERE POOLED POST-OP AND RE-STRATIFIED BY STATE OF SOFT TISSUE BALANCE:

- **BALANCED** = M/L load differential \leq 15 lbf through ROM
- **UNBALANCED** = any M/L load differential $>$ 15 lbf

► RESULTS

In the early post-operative phase, balanced patients:

- Are significantly **MORE SATISFIED** (KSS Satisfaction)
- Have a significantly **MORE FORGOTTEN JOINT** (FJS-12)
- Have a significantly **BETTER HEALTH STATE** (EQ-5D-3L), with **LESS PAIN** and **EARLIER RETURN TO USUAL ACTIVITIES**

► CONCLUSIONS

Quantitative knee balance significantly improves patient outcomes, with effects most pronounced in critical early post-operative phases.



Golladay et al., Are Patients More Satisfied with a Balanced Total Knee Arthroplasty? *J Arthroplasty*, 2019.
 Golladay et al. (2018, October). Sensor-Assisted Balancing: Does the Surgeon on Need the Extra Sense? Podium Presentation, AOA, Perth.
 Gordon et al. (2018, October). Do Balanced Knees Perform Better Clinically? Podium presentation, ISTA, London.