

Title of Article: Clinical and Radiologic Outcomes of Total Knee Arthroplasty Using the ADVANCE® Medial-Pivot Prosthesis. A Mean 7 years Follow-Up.

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Citation: Knee, 6 (2012) p. 851-5

Product(s): ADVANCE® Medial-Pivot TKA

Publication Highlights

- Patients with ADVANCE® Medial-Pivot TKAs showed satisfactory pain relief and functional recovery in the mid-term (7-year follow-up).
- This study does not demonstrate any advantage for the ADVANCE® medial-pivot design regarding the degree of flexion, but this may be due to the retention of the PCL.
- The mid-term results using the ADVANCE® medial-pivot knee design are satisfactory.

Publication Summary

Methods

- Prospective clinical study of 172 ADVANCE® Medial-Pivot TKAs (160 consecutive patients) used in the treatment of osteoarthritis
- Mean follow-up: 7 years (range, 4-10 years)
- Mean age: 71 years (range, 31-85 years); Indications: idiopathic osteoarthritis in 157 (91.3%), RA in 10 (5.8%), post-traumatic arthritis in 3 (1.7%), and psoriatic arthritis in 2 (1.2%)
- Outcome measures:
 - Knee Society Score and Function Score
 - Radiographic: component position, osteolysis, loosening, and zones of lucency (assessed using the Knee Society Total Knee Arthroplasty Roentgenographic Evaluation and Scoring System)

Results

- Kaplan-Meier survivorship: cumulative success of 98.6% after a mean 7 years follow-up
- 88.9% of patients were pain-free or had occasional activity-related pain
- Patients showed a statistically significant improvement in all objective and subjective clinical outcome scores (mean total AKS improved from 77.6 preoperatively to 152.8 postoperatively)
- Stability and comfort during walking was excellent in 16.9%, very good in 43.1%, good in 30%, and fair/poor in 10% of the patients
- 96% of patients were able to return to age-appropriate activities with a mean knee flexion of 112.5° (range, 75°-130°) at final follow-up

Overall Conclusion

- “The results are encouraging but longer follow-up of this cohort is necessary in the study of this specific design.”