

CLINICAL SURVEY OF PATIENT SATISFACTION

A STUDY OF BILATERAL KNEE RECIPIENTS

Introduction | Traditionally, the two primary outcomes of total knee arthroplasty (TKA) have been restored basic patient function and relief of pain. However, despite the acceptance of contemporary TKA designs, many devices fail to replicate the medial-pivot kinematics, range of motion, and

anterior-posterior stability of the normal knee.¹⁻⁷ To address these issues, a total knee implant was designed to replicate the motion and stability of the normal knee with the goal of improving patient satisfaction and implant longevity.

PURPOSE

The purpose of this multi-center study was to evaluate the effectiveness of a medial-pivot TKA (ADVANCE®Medial-Pivot Total Knee, Wright Medical Technology Inc., Arlington, TN) as compared to 7 contemporary total knee designs through the feedback of patients with bilateral total knees.

METHODS

Ten surgeons performed staged bilateral total knee surgery on patients in whom an ADVANCE®Medial-Pivot Knee was implanted in one side, after a contemporary total knee design had been implanted in the other. Follow-up surgery for the contralateral side ranged from 9 months to 9 years with a mean time of surgery of 3 years. Following surgery on the second knee, patients were asked by surgeons to complete a standardized written survey which would evaluate the effectiveness of their bilateral total knee surgery. For questions comparing the two devices, patients were asked to respond “left” or “right” knee. Later review of medical records determined which knee was selected for each question. All patients who experienced postoperative trauma were excluded from the study.

RESULTS

Of the patients surveyed, 72.1% (31 of 43) noted a perceivable difference between their bilateral knee replacements. The following table summarizes the responses of this group of patients.

Question	Medial Pivot	Other	No Difference
Which knee was easier to rehabilitate?	74.2%	12.9%	12.9%
Which knee do you like better?	80.6%	19.4%	0%
Which knee is more stable?	42%	16.1%	41.9%
Which knee is easier to bend?	54.8%	25.8%	19.4%

Discussion | Based on independent responses from bilateral total knee patients, 72.1% of those surveyed were able to discern a difference between their total knee implants. Of particular interest is the correlation between rehabilitation and implant preference. Of the 27 patients that noted a improvement in rehabilitation, 100% of those patients preferred that same implant when asked, “which knee do you like better?” Within this group of patients, 88.8% preferred the ADVANCE® Medial-Pivot Knee design to the other contemporary designs. A strong correlation was also noted between joint stability and implant preference. Although a smaller group noted a difference in joint stability between knees (17 patients), 88.2% of those patients preferred the same implant they selected as more stable. Within this group of patients, 76.4% preferred the ADVANCE® Medial-Pivot implant. Based on this study of patient feedback, designs that replicate the normal motion and stability of the anatomic knee may be perceived by patients as a functionally improved total knee design.

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