

Reply to Letter to the Editor

Early Outcome of TKA with a Medial Pivot Fixed-bearing Prosthesis is Worse than with a PFC Mobile-bearing Prosthesis

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We appreciate Mr. Scott's comments regarding our article "Early Outcome of TKA with a Medial Pivot Fixed-bearing Prosthesis is Worse than with a PFC Mobile-bearing Prosthesis" [1]. Mr. Scott suggested osteoarthritis in the knee must differ in its presentation in the Korean population from that encountered in Western society where the need for bilateral TKAs remains the exception rather than the norm and that difference may limit the general applicability of the Korean findings. Presentations of osteoarthritis in the knee in Korean patients are similar to presentations for Western patients except for the preponderance of female patients and varus knee deformity in the majority of patients. We did not manipulate the study although we excluded patients with rheumatoid arthritis because we have few such patients for TKAs and because the polyarticular involvement in these patients means functional assessment after TKA would not provide comparable outcomes.

We do appreciate Mr. Scott's observation of numerous errors in our text. We also found some of these errors after we returned the galley proofs; however, because the article already was published electronically, no additional changes or corrections could be made.

"We excluded three patients postoperatively" should be corrected to two patients. The preoperative ranges of motion for the two designs were 124° and 123°, as stated in the text. In Table 2, 124° should be corrected to 123°. In Table 3, 38 of 92 (63%) should be corrected to 41%, and 51 of 92 (34%) should be corrected to 55%.

We did not notice the errors in Table 6 when we submitted the manuscript or on the galley proofs. The numbers for PFC Sigma should be corrected to:

Parameters	PFC Sigma
Fully satisfied	56 patients (61%)
Satisfied	30 patients (33%)
Somewhat dissatisfied	6 patients (6%)
Fully dissatisfied	0 patients (0%)

We defined postoperative range of motion as insufficient if it was less than 120°. The range of motion at final followup was less ($p = 0.007$) for the Medial Pivot fixed-bearing prosthesis than for the PFC Sigma (mean \pm standard deviation, 115° \pm 18.0° versus 127° \pm 12.1°, respectively). Therefore, the patients' opinion regarding their range of movement concurred with our assertion.

We perform a high volume of bilateral simultaneous TKAs, thereby allowing for large numbers in the limited period of the study. The first author (YHK) performed the TKAs using the Medial Pivot prosthesis in 15 cases before commencing the trial. We submitted a spreadsheet of our raw data to the editor during the editorial process. He requested it again with this letter and we submitted it again. Antibiotics were administered for 48 hours in every patient who had a TKA.

We performed ligament balancing in Medial Pivot and PFC Sigma mobile-bearing TKAs. However, additional time was required for ligamentous balancing in mobile-bearing TKAs to prevent dislocation of the rotating platform.

You may be correct in using only the AKSS scoring system. Our prospective study protocols have established using both systems.

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We are confident no bias was present in the radiographic analysis. The series has only 2.6 years' followup, and unless the implants were grossly malpositioned, we anticipate the radiographic findings in the two groups would not differ in a short-term followup.

The variables of data in this article were continuous and normally distributed. The sample size was not too small to test with Wilcoxon's matched pairs signed rank test.

When we started using the Medial Pivot TKA, we tried to follow the designers' concepts of preserving and balancing the posterior cruciate ligament. From the results of our

current series, we believe the posterior cruciate ligament must be resected whenever a Medial Pivot TKA is used. We are not sure whether you would interpret this as a poorer surgical technique.

Reference

1. Kim YH, Yoon SH, Kim JS. Early outcome of TKA with a Medial Pivot fixed-bearing prosthesis is worse than with a PFC mobile-bearing prosthesis. *Clin Orthop Relat Res*. 2008 May 9. [Epub ahead of print]