

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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To the Editor:

I read with great interest the article “Early Outcome of TKA with a Medial Pivot Fixed-bearing Prosthesis Is Worse Than With a PFC Mobile-bearing Prosthesis” by Kim et al. [1]. This is an important contribution because comparing two different knee designs in the same patient eliminates many of the patient-dependent variables. In this series, the same surgeon performed the procedures at the same time. I agree with Kim et al. that the unusually high infection rate that led to premature closing of their study reduces the power of some of the conclusions.

I would like to comment on the point raised by them regarding the posterior cruciate ligament (PCL). They performed a recession of the PCL in 16% of the Medial Pivot knees. I also selectively recessed the PCL in the first 50 patients I treated with the Medial Pivot prosthesis, but in the last 369 patients I have completely excised the ligament (unpublished data). Range of motion and patient satisfaction are superior in the excised group, including 27 patients with an intact PCL on one side and an excised PCL on the other. Also, they state: “Although we tried to resect an equal amount of bone from the distal and posterior femoral condyles, posterolateral condyles were resected less than posteromedial condyles.” I routinely resect more of the medial femoral condyle for the same reason given by Kim et al. (the medial femoral condyle is larger), but also

prepare and place the femoral component in 3° valgus rather than the 5° valgus as they described. These technical points may play an important role in the quality of the results achieved when using the Medial Pivot prosthesis, which is a highly technique-sensitive procedure.

Since 1987, I have reviewed patient preferences in knee prostheses when one type of prosthesis is used in one knee and another design in the other. I find patients usually can detect a difference and express a preference [2]. Since that report I evaluated patients with a mobile-bearing prosthesis on one side and a Medial Pivot prosthesis on the other. Among 83 patients, I found 51 (61%) preferred the Medial Pivot side. All the Medial Pivot prostheses were implanted with complete resection of the PCL and using a femoral guide set for 3° valgus. There were no differences in range of motion, infection rate, or other outcomes in these patients. Among patients who preferred the Medial Pivot prosthesis, the reason given was a greater sense of stability, particularly during weightbearing flexion. Patients also stated their Medial Pivot knee felt more natural.

I suggest surgeons resect (not recess) the PCL when performing a TKA using the Medial Pivot prosthesis. The results in the patients of Kim et al. may have been quite different if this were part of their technique. Also, there is a small typographical error (the authors stated 98 patients with 198 knees, however, I believe this should be 196 knees) when they state their case numbers.

(Re: 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])

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