

The Impact of Immediate Postoperative Portable Radiographs on Reoperation in Primary Total Knee Arthroplasty

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Background: Cost-containment strategies are of increasing importance in total knee arthroplasty (TKA). Obtaining immediate postoperative radiographs following primary TKA is a common practice, but their utility is controversial. The aim of this study was to evaluate the impact of immediate postoperative portable radiographs on reoperation following TKA within sixty days of surgery.

Methods: Using a billing registry at our institution, we determined the number of TKAs performed from 2000 to 2011. Of those, we determined which had undergone a reoperation within sixty days. We evaluated those that had immediate postoperative radiographs following their primary TKA, and determined those that had been reoperated on as a result of information obtained from these films.

Results: Of 6603 of patients who underwent primary TKA from 2000-2011, 136 (2%) had a reoperation within the first sixty days. The causes leading to reoperation were: arthrofibrosis, infection, wound healing complications, and hematoma. Of the 136 who underwent a reoperation, 76 had immediate postoperative radiographs. None of those underwent a reoperation as a result of findings noted in the radiographs.

Conclusion: The results of the current study demonstrate that these radiographs do not impact the decision for reoperations that occur within sixty days of the index procedure. Although there may be a benefit to immediate postoperative radiographs in selected clinical situations, the decision for routine use needs to be weighted in light of the significant cost and limited clinical utility.

Keywords: Total Knee Arthroplasty, Reoperation, Postoperative Radiographs