Paper #30

Revision Total Knee Replacement for Arthrofibrosis

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Introduction: Arthrofibrosis after total knee arthroplasty (TKA) is a difficult problem for patients and surgeons. Although relatively uncommon, it is a significant of cause patient dissatisfaction when it occurs. The purpose of this study was to evaluate outcomes after revision TKA for arthrofibrosis.

Methods: We report the results of 65 patients who underwent revision TKA for arthrofibrosis. Infected cases were excluded from this analysis. All patients underwent full revision TKA performed by one of 5 fellowship trained arthroplasty surgeons at a single institution between 2007 and 2015. Preoperative and postoperative range of motion (ROM), as well as Knee Society Scores (KSS) were recorded. Average follow-up was 47 months with minimum 2-year follow-up.

Results: Mean extension, flexion, KSS pain, KSS function, Knee scores and Total scores improved to a statistically significant extent after full revision TKA for arthrofibrosis. Mean preoperative flexion improved from 89.5 degrees to 103.3 degrees. Mean flexion contracture improved from 10.6 degrees to 3.4 degrees. BMI, age and gender were not statistically significant predictors of successful treatment, except that females had a modest but greater improvement in extension when compared to males. Patients who underwent revision for unidentified causes of arthrofibrosis in this study achieved similar improvements in ROM and KSS to patients who had identified causes such as malignment or oversized components. We did not find that the time to revision surgery was a significant factor in our patients' outcomes, which is contrast to previous reports.

Conclusions: This is the largest series of complete revision TKA performed for arthrofibrosis to our knowledge. While arthrofibrosis after TKA can be a difficult problem to manage, consistent improvements in ROM, function and quality of life can be achieved with revision TKA.

Notes