

Conversion TKA after prior Tibial Plateau Fracture Demonstrates Similar Outcomes and Resource Burden to Conversion THA Despite Coding Discrepancy

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INTRODUCTION: Although conversion total knee arthroplasty (cTKA) after tibial plateau fracture (TPF) has been associated with worse patient-reported outcomes, increased operative times, and increased complications, the lack of a cTKA Current Procedural Terminology (CPT) code persists. The aim of this study was to retrospectively assess the outcomes and resource burden of cTKA compared to conversion total hip arthroplasty (cTHA), given cTKA lacks a separate billing code to reflect the increased work and complexity.

METHODS: All patients who underwent cTKA after TPF at our single academic referral center were retrospectively reviewed and compared to all patients who underwent cTHA. Patient age, sex, body mass index, Charleston Comorbidity Index (CCI), American Society of Anesthesiologists Physical Status (ASA) Score, operative time, and length of stay (LOS) were collected. Clinical outcomes included wound complications, reoperations, and periprosthetic joint infection (PJI).

RESULTS:

A total of 52 patients underwent cTKA after TPF, and 399 patients underwent cTHA. There were no differences in age or sex between the two cohorts, but the cTKA cohort had a higher ASA score (2.4 versus 1.5, $P = 0.0036$) whereas the cTHA cohort had a higher CCI (1.5 versus 2.3, $P < 0.001$). There were no differences in operative times or LOS between the two cohorts. The cTKA cohort had a significantly higher rate of wound complications (15.4% versus 2.5%, $P < 0.001$) and comparable rates of reoperation (9.6% versus 8.8%, $P = 0.841$) and PJI (3.8% versus 2.3%, $P = 0.368$).

DISCUSSION AND CONCLUSION:

Conversion TKA demonstrates similar operative times, LOS, and rates of reoperation and PJI when compared to cTHA, which is distinctly coded. However, the increased incidence of wound complications in cTKA suggests greater surgical complexity and risk. These findings highlight the need for a distinct procedural code for cTKA that reflects the additional work and risk undertaken by surgeons.