

C7

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### **Gastric Bypass in Total Knee Arthroplasty Patients is Associated With Increased Rates of Postoperative Outcomes**

**Introduction:** Past studies have not explored the relationship between Gastric Bypass(GB) and postoperative outcomes after Total Knee Arthroplasty(TKA) surgery. The purpose of this study is to compare postoperative outcomes in TKA patients with and without GB.

**Methods:** Data from the National Inpatient Sample database from 2010 to 2019 were retrospectively analyzed to isolate TKA patients. 1,359,957 TKA patients were then grouped into two cohorts based on GB status with a 1:1 propensity score matching based on age, gender, and obesity status. 27,429 of these patients had undergone GB surgery. Procedure related complications(Acute myocardial infarction, sepsis) and other medical complications(Acute kidney injury, Urinary tract infection) were compared between the two groups. A multiple regression was performed to account for confounding variables. Either chi-square or Fisher tests were used for categorical variables, while the Wilcoxon rank test was used for continuous variables.

**Results:** GB patients were found to have more mechanical complications(0.9% Non-GB, 1.5% GB,  $p < .001$ ) and more Periprosthetic Joint infections(0.5% Non-GB, 0.7% GB,  $p < .001$ ). Other medical complications(Blood loss anemia) were also more common among GB patients. GB patients also had increased total surgical charges(\$58,488 Non-GB, \$61,541 GB,  $p < .001$ ) (Table 1).

**Discussion and Conclusion:** This retrospective study found that GB is a significant predictor of increased rates of postoperative medical and surgical complications. This data could serve as valuable information for orthopaedic surgeons, who will know the risks and benefits associated with GB patients undergoing TKA surgery.