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The Impact of Pancreatitis on Postoperative Outcomes in Total Hip Arthroplasty with Minimum Two-Year Surveillance

Introduction: The objective of this study is to identify the impact of pancreatitis, a common condition in many western populations, on 2-year postoperative outcomes following total hip arthroplasty (THA) surgery. The relationship between pancreatitis and post-operative surgical outcomes for total hip arthroplasty is poorly characterized, showing the need for more research in this field.

Methods: The New York Statewide Planning and Research Cooperative System was queried to identify patients who underwent THA surgery with at least a 2-year follow-up. Age, sex and obesity designation were controlled to evaluate differences in post-operative outcomes in a cohort diagnosed with pancreatitis. This cohort was compared to a control group of similar size that did not have pancreatitis. Demographics and rates of 2-year postoperative surgical and medical complications were compared between the 2 cohorts utilizing Chi Square, T-test and logistical regression analysis.

Results: A cohort of 54 pancreatitis patients and 54 non-pancreatitis patients were identified. Pancreatitis and non-pancreatitis patients had comparable ages (63.56 vs 63.45 years) and sex distributions (48.1% vs 57.4% female). Pancreatitis patients had a higher risk of surgical complications (2.7 [1.2-6.0]; p=0.013), transfusion of blood (2.9 [1.3-6.5]; p=0.008), medical complications (5.4 [1.8-16.1]; p=0.003), and acute renal failure (4.3 [1.1-16.9]; p=0.035).

Conclusion: When compared to a control cohort, pancreatitis patients who undergo THA required more blood transfusions, a surgical complication. There was also a higher incidence of acute renal failure in this same patient population. Moving forward, considering these findings will offer a better standard of care to pancreatitis patients prior to THA surgery.