

C10

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The Impact of Congestive Heart Failure on Outcomes and Complications Following Total Hip Arthroplasty With Minimum 2-Year Surveillance

Introduction: Congestive Heart Failure (CHF) is a condition in which the heart has difficulty pumping blood through the body. There is limited literature evaluating the impact of CHF on long-term outcomes following Total Hip Arthroplasty (THA) surgery. **Methods:** Using the New York Statewide Planning and Research Cooperation System, patients admitted from 2009 to 2011 with diagnoses of CHF who underwent THA with a minimum 2-year follow-up surveillance were retrospectively reviewed. A 1:1 propensity score-match by age, sex, and obesity status was performed before analyzing data. Univariate analyses evaluated demographics, complications, and subsequent revision. Multivariate binary logistic regression models were also conducted to identify associations between CHF and postoperative outcomes, controlling for sex, age, and obesity status.

Results: 1534 CHF patients were matched to 1534 non-CHF patients. With a 1:1 PSM, patients with CHF had higher risk for overall surgical complications (OR: 1.4 [1.1 – 1.6], $p < 0.001$), overall medical complications (OR: 1.3 [1.1 – 1.6], $p = 0.002$), and readmission (OR: 1.2 [1.04 – 1.5], $p = 0.016$) within 2 years of surgery. However, the risk of revision (OR: 0.9 [0.6 – 1.4], $p = 0.584$) and reoperation (OR: 0.8 [0.6 – 1.2], $p = 0.345$) was comparable between both cohorts.

Conclusion: Patients undergoing THA with CHF had a greater risk of overall surgical and medical complications and readmission compared to those without CHF. Medical optimization should be considered in this cohort to reduce postoperative THA complications.