

Is It Safe to Continue Clopidogrel During Primary Total Hip Arthroplasty?

Galen Berdis¹, Mason Frederick Carstens, Kellie Allyse Robbins, Jessica Ann Grimm, Robert T Trousdale, Matthew Philip Abdel¹

¹Mayo Clinic

INTRODUCTION:

Clopidogrel is increasingly utilized by patients undergoing primary total hip arthroplasty (THA) given their comorbid conditions. However, there continues to be debate between whether clopidogrel should be temporarily held or continued in the perioperative period. The purpose of this study was to compare transfusion rates, perioperative hemoglobin levels, complications, and implant survivorship between patients who held or continued clopidogrel at the time of primary THA.

METHODS: We identified 192 patients between 2011 and 2020 who were actively using clopidogrel at the time of primary THA, of which 69% (133) held it and 31% (59) continued its use. Outcomes assessed included allogenic blood transfusion rates, perioperative hemoglobin levels, complications, and implant survivorship. Tranexamic acid (TXA) was used in 63% and 56% of the held and continued groups, respectively. Mean age was 71 years, 30% were female, and the mean BMI was 31 kg/m². Mean follow up was 4 years.

RESULTS: Transfusion rates were significantly higher in the held group than the continued group (9.8% vs 1.7%, respectively; $p=0.047$). The mean preoperative hemoglobin of those transfused was 11.7 g/dL vs. 13.4 g/dL in those who were not transfused. There was a single adverse cardiac event within the held group. The 5-year survivorship free of any revision was 99% in the held group vs 98% in the continued group. The 5-year survivorship free of any reoperation was 97% for the held group and 98% for the continued group ($p=0.95$).

DISCUSSION AND CONCLUSION: Clopidogrel can be safely continued during the perioperative period for patients undergoing primary THA. Interestingly enough, higher transfusion rates were noted in those who held their clopidogrel, but that was related to a lower preoperative hemoglobin levels and TXA use. Continuing clopidogrel and utilizing TXA appeared to be safe and effective.