

Paper #56

Aspirin Is Safe for VTE Prophylaxis for Patients with a History of Gastrointestinal Issues

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Introduction: The safety of acetylsalicylic acid (ASA) in patients with prior history of gastroesophageal reflux or peptic ulcer disease remains unclear. The purpose of this study was to determine the safety of ASA for venous thromboembolism (VTE) prophylaxis following total joint arthroplasty (TJA) in patients with prior history of GI issues.

Methods: This was an institutional, retrospective cohort study of 19,044 patients who underwent primary total hip and total knee arthroplasty from 2016 to 2019. We divided the patients into two cohorts based on the presence or absence of a pre-existing gastric condition. Patient demographics, VTE prophylaxis and postoperative complications were collected. The primary outcome measure was GI bleed. Chi-square tests were utilized to determine differences in rates of dichotomous variables between cohorts, with a p-value <0.05 considered significant. The study had an 80% power to detect a 0.3% difference in GI bleeding rates between cohorts.

Results: In our series of 19,044 patients, 3,090 patients had a preoperative gastric condition and 15,954 did not have a gastric condition. ASA was the most common mode of VTE prophylaxis (89%), followed by coumadin (4.7%), direct oral-anticoagulants (4.2%) and low molecular weight heparin (1.7%). In the cohort of patients given ASA, there was no significant difference in postoperative GI bleeding between those with (2/1781, 0.11%) and without preoperative GI issues (8/7,628, 0.10%, $p=1.0$). For the overall cohort, preoperative gastric conditions were associated with an increased risk of postoperative GI bleeding (0.32% vs. 0.11%, $p=0.031$). Although patients with a history of GI bleed had a higher VTE risk score and increased use of low-dose aspirin, there was no difference in VTE rates between cohorts ($p=0.210$).

Conclusions: ASA is safe for VTE prophylaxis after TJA in patients with history of GI issues and is not associated with an increased risk of postoperative GI bleeds.

Notes
