

Capsule Commentary on Baumgartner et al., Aspirin Compared with Anticoagulation to Prevent Venous Thromboembolism after Knee or Hip Arthroplasty: a Large Retrospective Cohort Study



Gregory J. Misky, MD

University of Colorado Anschutz Medical Campus, Aurora, CO, USA.

J Gen Intern Med 34(10):2187
DOI: 10.1007/s11606-019-05170-9
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Baumgartner et al. examined the prophylactic practices of elective primary hip and knee arthroplasties over 2 years, comparing aspirin with other pharmacologic agents in preventing venous thromboembolism (VTE).¹ As might be expected, based upon the most recent American College of Chest Physician (ACCP) guidelines that includes aspirin (ASA) as an acceptable pharmacologic alternative in VTE prophylaxis, use of aspirin in this patient population has increased over time.² And despite this increase in postoperative joint patients receiving aspirin only (vs. other agents), no increase in clinically significant venous thromboembolism was identified out to 90 days.

The interpretation of the results of this retrospective study may be methodologically limited, as data was obtained through administrative billing data and ICD codes. In addition, caution is also warranted based on confounding variables including patients who received both anticoagulation and ASA were older and had higher cardiovascular comorbidities and higher Caprini scores, while ASA-only patients were generally healthier. Thus, a selection bias may exist in who received ASA and skew meaningful results.

For clinicians who care for joint arthroplasty patients postoperatively, this study adds to the growing literature supporting the use of aspirin as an acceptable option in preventing post-operative VTE.³⁻⁵ As acknowledged by the authors, an ongoing randomized, head-to-head comparison of aspirin vs. other agents will likely better answer this question

(PEPPER trial). Moreover, this work further establishes the need to develop a risk assessment tool and best practice recommendation that incorporates individual thrombosis risk (e.g., malignancy, h/o prior VTE) balanced by bleed risk to prospectively select appropriate candidates for aspirin prophylaxis in patients following arthroplasty.

Corresponding Author: Gregory J. Misky, MD; University of Colorado Anschutz Medical Campus, Aurora, CO, USA (e-mail: Gregory.misky@ucdenver.edu).

Compliance with Ethical Standards:

Conflict of Interest: The author declares that he does not have a conflict of interest.

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