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Rebleeding vs Thromboembolism After Hospitalization for Gastrointestinal Bleeding in Patients on Direct Oral Anticoagulants

Neil Sengupta, MD, Ariela L. Marshall, MD, Blake A. Jones, MD, Sandra Ham, MS, Elliot B. Tapper, MD

Article Info

Abstract

Background and Aims

Little is known about outcomes of patients hospitalized for gastrointestinal bleeding (GIB) while they are taking direct oral anticoagulants (DOAC). We aimed to determine the frequency at which patients resume DOAC therapy following hospitalization for GIB in a real-world setting, and the risks and benefits.

Methods

We conducted a retrospective analysis of medical claims data from the Truven Health Marketscan Commercial Claims and Encounters Database, from January 1, 2010 through December 31, 2014. We collected data on 1338 adults treated with DOACs and hospitalized for GIB (dabigatran, n=679; rivaroxaban, n=608, apixaban, n=51). Patients who developed GIB within 1 year of DOAC initiation, and had a DOAC claim filled within 1 month of GIB, were included in the analysis. Post-discharge readmissions due to thromboembolism and recurrent GIB within 90 days were reviewed. We used proportional hazards to identify factors associated with thromboembolism and recurrent GIB.

Results

The median age of patients who did not resume DOAC therapy was older (79 years vs 78 years for patients who did resume DOAC therapy; *P*=.0005). Higher proportions of patients who did not resume DOAC had heart failure (25% vs 20% who did resume DOAC therapy, *P*=.01), received blood (36% vs 24%; *P*<.0001), and required intensive care (18% vs 12%; *P*=.003). Restarting DOAC therapy within 30 days was not associated with thromboembolism within 90 days (hazard ratio [HR], 0.98; 95% CI, 0.37–2.21) or recurrent GIB (HR, 1.44; 95% CI 0.72–2.68). On multivariate regression, prior venous thromboembolism was associated with post-discharge thromboembolism (HR, 3.30; 95% CI, 1.29–7.38), and thienopyridine use was associated with recurrent GIB (HR, 3.12; 95% CI, 1.55–5.81). A higher proportion of patients who resumed treatment with rivaroxaban, compared to other DOACs, had recurrence of GIB (log rank, *P*=.04).

Conclusions

In a retrospective analysis of medical claims data from adults treated with DOACs and hospitalized for GIB, we found that older patients who require blood and intensive care were less likely to restart treatment with DOACs after GIB. Resuming DOAC therapy was not associated with thromboembolism within 90 days or recurrence of GIB; a history of venous thromboembolism and thienopyridine use were associated with risk of subsequent thromboembolism and GIB respectively.

Keywords:
GI bleeding, anticoagulation, thromboembolism, outcomes

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