ACC.14
TCT@ACC-i2 | innovation in intervention

A1857
JACC April 1, 2014
Volume 63, Issue 12

TCT@ACC-i2: The Interventional Learning Pathway

IMPACT OF ANEMIA ON CLINICAL OUTCOME IN PATIENTS WITH ATRIAL FIBRILLATION UNDERGOING PERCUTANEOUS CORONARY INTERVENTION: INSIGHTS FROM THE AFCAS REGISTRY

Poster Contributions
Hall C
Sunday, March 30, 2014, 3:45 p.m.-4:30 p.m.

Session Title: Complexities and Complications
Abstract Category: 38. TCT@ACC-i2: Complex Patients/Comorbidities
Presentation Number: 2108-295

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Background: Anemia has an adverse impact on the outcome of patients undergoing percutaneous coronary intervention (PCI). The aim of this study was to analyze the impact of anemia on the 12-month clinical outcome of patients with atrial fibrillation (AF) undergoing PCI and therefore requiring intense antithrombotic treatment.

Methods: Data from the prospective, multicenter AFCAS (Atrial Fibrillation undergoing Coronary Artery Stenting) registry with AF patients undergoing PCI were analyzed. Anemia was defined as a hemoglobin concentration <12 g/dl for women and <13 g/dl for men. The primary endpoints were 1) occurrence of MACCE defined as a composite of all-cause mortality, any non-fatal MI, any revascularization, definite/probable stent thrombosis, transient ischemic attack (TIA) or stroke, and peripheral arterial embolism; and 2) bleeding events defined according to the Bleeding Academic Research Consortium (BARC) criteria

Results: A total of 861/929 (92.7%) patients had available preprocedural hemoglobin concentration, of whom 258 (30%) had anemia. Anemic patients were older, had more often diabetes, prior history of heart failure, chronic renal impairment, a higher CHA2DS2VASC score and more frequently presented with acute coronary syndrome. At 12-month follow-up, MACCE was more frequent in anemic than non-anemic patients (29.1% versus 19.4%, respectively, p=0.002). Anemic patients had more minor bleeding events (7.0% versus 3.3%, respectively, p=0.028), with a trend toward more total bleeding events (25.2% versus 21.7%, respectively, p=0.059). No difference was observed in prescribed antithrombotic regimens at discharge. In multivariate analysis anemia was an independent predictor of all-cause mortality at 12-months follow-up (HR 1.62, 95% CI 1.05 - 2.51, p=0.029), but not MACCE.

Conclusions: Anemia was a frequent finding in patients with AF referred for PCI. Anemic patients had a higher rate of thrombotic events, higher mortality and more bleeding events. Anemia seems to identify patients at risk for cardiovascular events and death.