



Interventional Cardiology

MID-TERM OUTCOMES AFTER PERCUTANEOUS CORONARY INTERVENTION IN PATIENTS WITH CIRRHOSIS

Poster Contributions

Poster Hall, Hall F

Sunday, March 17, 2019, 3:45 p.m.-4:30 p.m.

Session Title: Interventional Cardiology: Complex Patients/Comorbidities 4

Abstract Category: 19. Interventional Cardiology: Complex Patients/Comorbidities

Presentation Number: 1250-013

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Background: Although patients with cirrhosis are at increased risk of complications after percutaneous coronary intervention (PCI), there are limited data on outcomes after PCI in this high-risk cohort. We sought to identify predictors of adverse events and readmission following PCI in patients with cirrhosis.

Methods: Using the Nationwide Readmissions Database, we evaluated 785,955 admissions for PCI performed between 2010 and 2014. We identified rates of in-hospital mortality as well as 90-day outcomes including readmissions, bleeding, renal failure, and major adverse cardiovascular events (MACE; composite of myocardial infarction, repeat revascularization, or stroke) after PCI in patients with and without cirrhosis. Multivariate logistic regression was used to assess for independent predictors of adverse events.

Results: We examined 3,217 patients with cirrhosis and 782,738 patients without cirrhosis who underwent PCI. Cirrhotics were more likely to receive bare metal stents compared to drug eluting stents than patients without cirrhosis (45.1% vs 21.3%, $p < 0.01$). Cirrhotics had higher rates of in-hospital mortality (6.3% vs 1.8%, $p < 0.01$), readmission (37.4% vs 19.7%, $p < 0.01$), and acute kidney injury (AKI) requiring dialysis (4.5% vs 0.7%, $p < 0.01$). Rates of bleeding were significantly higher in patients with cirrhosis (10.7% vs 3.2%, $p < 0.01$), particularly gastrointestinal bleeding (7.3% vs 1.5%, $p < 0.01$). MACE were more common in cirrhotics (7.5% vs 6.1%, $p < 0.01$). Multivariate analysis showed that cirrhosis was one of the strongest independent predictors of in-hospital mortality (Odds Ratio (OR) 1.80, Confidence Interval (CI) 1.55-2.10, $p < 0.01$), readmissions (OR 1.92, CI 1.79-2.07, $p < 0.01$), bleeding (OR 2.80, CI 2.49-3.14, $p < 0.01$), gastrointestinal bleeding (OR 4.15, CI 3.60-4.77, $p < 0.01$), and AKI requiring dialysis (OR 2.02, CI 1.67-2.44, $p < 0.01$) after PCI.

Conclusion: In a nationally representative cohort of patients, patients with cirrhosis had significantly worse outcomes after PCI. Cirrhosis was a strong predictor of early mortality, bleeding, AKI requiring dialysis, and 90-day readmissions after PCI.