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Abstract 15440: Bleeding Complications May Outweigh the Risk of Thrombosis in Patients With End-stage Liver Disease Taking Dual Antiplatelet Therapy After Percutaneous Coronary Intervention

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## Abstract 15440: Bleeding Complications May Outweigh the Risk of Thrombosis in Patients With End-stage Liver Disease Taking Dual Antiplatelet Therapy After Percutaneous Coronary Intervention

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### Abstract

**Introduction:** Randomized trials have demonstrated the safety and efficacy of one month of dual antiplatelet therapy (DAPT) after placement of drug-eluting stents in patients with high bleeding risk. Patients with end-stage liver disease (ESLD) are underrepresented in these trials. Patients who undergo percutaneous coronary intervention (PCI) in preparation for orthotopic liver transplantation (OLT) exhibit a high incidence of bleeding complications on DAPT. The rates of bleeding versus thrombotic complications in ESLD patients placed on DAPT following PCI are poorly described.

**Methods:** We retrospectively collected data from 61 patients who were evaluated for OLT between 2016 and 2019 and underwent PCI prior to listing. Bleeding events were classified using the Bleeding Academic Research Consortium (BARC) definitions and included if the following criteria were met: events occurred in the setting of DAPT, were non-procedural in etiology, and occurred during the time following PCI and prior to OLT. Ischemic complications were evaluated by the incidence of myocardial infarction (MI), stent thrombosis, in-stent restenosis (>50%) and all-cause mortality at 1 year follow-up.

**Results:** A total of 55/61 patients (90%) were placed on DAPT following PCI. Among them, 21/55 patients (38%) bled while taking DAPT, including 15 patients (27%) with BARC types 3-5 first-time bleeding events and 10 patients (18%) requiring early discontinuation of therapy. The median time to first bleeding event was 8 days (range 1 to 477 days, 85<sup>th</sup> percentile 17 days). Among ischemic complications, MI occurred in 11/55 patients (20%) however only one patient had a type 1 MI with the remaining being type 2 in etiology. There were no episodes of stent thrombosis and 2 episodes of in-stent restenosis during the 1 year follow-up. A total of 12/55 patients (22%) went on to receive OLT and 18/55 (33%) passed away by 1 year post-PCI.

**Conclusions:** Patients with ESLD exhibit a high rate of clinically significant bleeding on DAPT when compared to overall thrombotic events. The majority of bleeds occurred within the first month after PCI. These findings illustrate the need for larger studies to assess the safety of single instead of dual antiplatelet therapy in patients with ESLD who receive PCI.

### Footnotes

Author Disclosures: For author disclosure information, please visit the AHA Scientific Sessions 2020 [Online Program Planner](#) and search for the abstract title.

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