

**IMPACT OF PREPROCEDURAL THROMBOCYTOPENIA ON SAFETY OF PERFORMING PERCUTANEOUS CORONARY INTERVENTION IN CANCER PATIENTS**

Poster Contributions

Poster Hall, Hall C

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**Background:** Cancer patients with chronic thrombocytopenia and acute coronary syndrome (ACS) are thought to be at increased risk for bleeding complications during cardiac catheterization. We sought to investigate the safety of cardiac catheterization (CC) in cancer patients with ACS and thrombocytopenia.

**Methods:** We have conducted a retrospective analysis on cancer patients with pre-procedural thrombocytopenia ( $<100,000/\mu\text{L}$ ) who underwent CC at a tertiary center between November 2009 and November 2015. Thrombocytopenia was classified as: mild ( $>50,000/\mu\text{L}$ ), moderate ( $30,000\text{-}50,000/\mu\text{L}$ ), or severe ( $<30,000/\mu\text{L}$ ). We evaluated management strategies including vascular access and pre-procedural transfusions. Procedure or antiplatelet therapy bleeding complications were defined according to Bleeding Academic Research Consortium (BARC) and WHO; in hospital cardiac/non-cardiac deaths were registered and overall survival rates were calculated using uni and multivariate analysis.

**Results:** Out of 2300 cancer patients undergoing CC, 229 patients (10%) (mean age  $66.7 \pm 9.34$ ) had thrombocytopenia, severe in 83 patients (36.2%), moderate in 41 patients (17.9%), and mild in 105 patients (45.9%). Mean platelet count was  $48.15 \times 10^3/\text{mm}^3 \pm 29.93 \times 10^3/\text{mm}^3$ . Aspirin therapy was used in 117 patients (51.1%). One retroperitoneal hematoma (BARC type 2, WHO grade 2) and 3 small hematomas procedure-related (BARC type 1, WHO grade 2) were identified (0.017%). No major cerebrovascular events related to the procedure or to antiplatelet therapy were noted (BARC type 3, 4, 5). Decreased overall survival was associated with congestive heart failure (HR=1.79, 95%CI=1.24-2.58,  $p=0.0018$ ) and platelet counts less than  $50,000/\mu\text{L}$  (HR=2.17, 95%CI=1.448-3.626,  $p=0.0002$ ), while aspirin and statin therapy improved overall survival (aspirin: HR=0.52, 95%CI=0.360-0.750,  $p=0.0004$ ; statins: HR=0.58, 95% CI=0.410-0.833,  $p=0.0030$ ).

**Conclusions:** CC can be performed in cancer patients with chronic thrombocytopenia without a significant increase in bleeding risk when appropriate management strategies are implemented. Aspirin therapy should be considered in cancer patients with ACS and chronic thrombocytopenia.