

LONG-TERM BLEEDING IN PATIENTS ON PROLONGED DUAL ORAL ANTIPLATELET THERAPY AFTER DES IMPLANTATION: PREVALENCE, PREDICTORS, AND PROGNOSTIC IMPLICATIONS

i2 Poster Contributions

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Background: Bleeding has emerged as a predictor of early and late mortality after percutaneous coronary interventions. However, the prevalence and predictors of long-term bleeding events in patients (pts) on prolonged dual antiplatelet therapy after drug-eluting stent (DES) implantation has been poorly explored.

Methods: We studied 1358 consecutive pts undergoing DES implantation and discharged on dual antiplatelet therapy with aspirin and clopidogrel for 1 year. Pts were followed-up for 12 months and the prevalence and predictors of in-hospital and long-term TIMI major and minor bleeding events were evaluated. The impact of bleeding events on all cause death, major adverse cardiac events (MACE), probable, possible and definite stent thrombosis, and premature discontinuation of antiplatelet therapy were also assessed.

Results: The incidence of in-hospital major and minor bleeding was 1.2% and 3.7%, respectively. The incidence of cumulative long-term major and minor bleeding was 4.2% and 8.2%, respectively. At multivariable analysis, cumulative long-term major bleeding was predicted only by haemoglobin at admission (OR=0.44 [0.35-0.55], $p<0.001$), whereas haemoglobin at discharge (OR=0.62 [0.54-0.72], $p<0.001$), beta-blockers (OR=0.53 [0.30-0.95], $p=0.03$), and oral anticoagulants at discharge (OR=5.59 [2.28-13.70], $p<0.001$) predicted cumulative long term minor bleeding. The incidence of one-year mortality (23.6% vs 3.8%, $p<0.001$), MACE (47.3% vs 12.5%, $p<0.001$), and stent thrombosis (12.7% vs 3.1%, $p=0.002$) was significantly higher in pts who experienced a major bleeding event. Pts who had a major bleeding event were more likely to prematurely discontinue antiplatelet therapy (11.5% vs 63.6%, $p<0.001$). Minor bleeding was associated with increased rates of MACE (25.2% vs 13%, $p=0.001$) and premature antiplatelet therapy discontinuation (44.9% vs 10.9%, $p<0.001$).

Conclusions: In DES treated pts on dual antiplatelet therapy, long-term major bleeding is predicted by lower levels of haemoglobin at admission. Pts experiencing any bleeding event are more likely to discontinue prematurely antiplatelet therapy and have a higher risk of MACE.