WHAT IS THE REAL INCIDENCE OF DEFINITE STENT THROMBOSIS AFTER BARE METAL STENT IMPLANTATION IN THE REAL WORLD CLINICAL PRACTICE?

i2 Poster Contributions
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Background: Stent thrombosis (ST) after stent implantation has been described as a rare event in the modern era of interventional cardiology (1-2%), however, its clinical impact can be catastrophic with mortality rates up to 50%. Importantly, even though most of concerns regarding ST has been focused on drug-eluting stents, it may still affect similarly pts treated with bare metal stents (BMS).

Methods: From Dec/07-Dec/08, all pts (n=1,602) undergoing routine or emergency percutaneous intervention were enrolled at one single institution, where BMS was used as the default strategy. ST was defined according to the ARC definition; definite ST was defined as acute coronary syndrome with angiographic evidence of stent occlusion. We report the 12-month clinical follow-up.

Results: Baseline clinical characteristics included mean age of 69 years, 70% male, 29% diabetes, 21% current smoking, 46% previous MI, and 29% had baseline serum creatinine >1.5mg/dL. The LAD was the most prevalent lesion location (40%). Overall, there were 14 definite ST (0.9%) up to 12 months, including 13 ST in the early phase (<30 days) and only 1 late (>1 month) ST. Compared to pts without ST, pts with ST had more previous interventions (73% versus 15%, p<0.0001), more pre-TIMI 0/1 at index procedure (87% versus 1%, p<0.0001), and more clinical presentation at index procedure of acute myocardial infarction with cardiogenic shock (13% versus 1%, p<0.0001). The cases of ST were treated with balloon angioplasty in 86% (12/14) and with a new BMS in 14% (2/14); however, ST was associated with 27% cardiac mortality, and during the follow-up period, 20% of pts with non-fatal ST experienced a new event of ST.

Conclusions: In this analysis including pts from the real-world clinical practice treated with BMS as the default strategy, definite ST rate up to 1-year was 0.9%, and was significantly associated to clinical presentation of acute myocardial infarction with cardiogenic shock, poor coronary flow, and previous percutaneous coronary interventions. The majority of ST occurred <30 days, and ST was associated with 27% cardiac mortality. Importantly, there was 20% recurrence of ST up to 1-year clinical follow-up.