Abstract: P972

A subgroup analysis from the RAIN-CARDIOGROUP VII study: incidence of adverse events after DAPT cessation in patients treated with ultrathin stents in ULM or coronary bifurcations

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Introduction: Incidence and predictors of adverse events after dual antiplatelet therapy (DAPT) cessation in patients treated with ultrathin stents in unprotected left main (ULM) or coronary bifurcation remain undefined.

Methods: All consecutive patients presenting with a critical lesion of an ULM or a lesion involving a main coronary bifurcation and treated with very thin strut stents were included. MACE (a composite end point of cardiovascular death, myocardial infarction (MI), target lesion revascularization (TLR) and stent thrombosis (ST) was the primary endpoint, while target vessel revascularization (TVR) was the secondary endpoint. Moreover, type and occurrence of ST and occurrence of ST, CV death and MI during DAPT or after DAPT discontinuation were also evaluated. All analyses were performed according to length of DAPT dividing the patients in 3 groups: short DAPT (3-months), intermediate DAPT (3–12 months) and long DAPT (12-months).

Results: 117 patients were discharged with an indication for DAPT≤3 months (median 1:1–2.5), 200 for DAPT between 3 and 12 months (median 8:7–10) and 1958 with 12 months DAPT. After 12.8 months (8–20), MACE was significantly higher in the 3-month group compared to 3–12 and 12-month groups (9.4% vs. 4.0% vs. 7.2%, p≤0.001), mainly driven by MI (4.4% vs. 1.5% vs. 3%, p≤0.001) and overall ST (4.3% vs. 1.5% vs. 1.8%, p≤0.001). ST post DAPT cessation were comparable (1.7% vs. 0% vs. 0.7%, p=0.42) with a median time to ST post DAPT discontinuation of 1.67 months (0.48–4.7). At multivariate analysis, DAPT of 12-months compared to 3-months reduces the risk of overall ST (OR 0.103: 0.019–0.0563, 95% CI) while only a trend was noted for DAPT between 3 and 12 months (OR 0.61: 0.186–2.005, 95% CI). When analysed by stent strategy a 2-stent strategy predicted ST post DAPT cessation (OR 3.241: 1.048–10.026, 95% CI), which was reduced by use of FKB (OR 0.101:0.01–0.872, 95% CI).

Conclusion: Even stents with very thin strut when implanted in real-life ULM or coronary bifurcation patients discharged with short DAPT have a relevant risk of ST, which remains high although not significant after DAPT cessation. The correct identification before PCI of the more fragile patients who may receive a shorter DAPT regimen could help identify the safest PCI technique: provisional stenting and use of final kissing balloon (FKB) are the safest options.