the design matter? Dedicated coronary bifurcation stent BiOSS in patients with diabetes. Does TCT-395

KEYWORDS
rate in BiOSS LIM was 9.8% (n ¼ 14) [DM: 8.9% (n ¼ 9), non-DM 5.6% (n ¼ 4)]. In the pooled BiOSS group the TLR rate was 8.5% (n ¼ 20) [DM: 8.9% (n ¼ 10) vs non-DM: 10.5% (n ¼ 10)]. Whereas in rDES the TLR rate was 8.1% (n ¼ 18) [DM: 14.3% (n ¼ 9), non-DM 5.6% (n ¼ 9)]. In the pooled BiOSS group the TLR rate was 10.8% (n ¼ 24, p < 0.05) [DM: 8.9% (n ¼ 8, p < 0.05) vs non-DM: 12.1% (n ¼ 16, p < 0.05)]. After adjusting for age, sex and LM-bifurcation the OR for TLR in diabetic patients with BiOSS implantation was 0.67 (95 CI 0.57 – 0.76) comparing to rDES. Further statistical analysis revealed that nominal diameters of restenotic stents in both groups were significantly smaller in DM vs non-DM subgroup (BiOSS 3.266 mm vs 3.883.16 mm; rDES: 3.03 vs 3.36 mm). Restenotic lesions in all groups were less frequently encountered in LM bifurcations (BiOSS DM vs nonDM: 12.5% vs 25%, DES DM vs non-DM 22.2% vs 44.4%).

CONCLUSIONS Collected data demonstrate that both BiOSS stents act especially well in diabetic population compared with rDES. This finding might suggest the stent design is more important in bifurcation lesions treatment than the drug.

CATEGORIES CORONARY: Diabetes

KEYWORDS Dedicating bifurcation stent, Diabetes, Drug-eluting stent restenosis

TCT-396 Percutaneous Coronary Interventions in Chronic Total Occlusions Performed by Radial Approach: A Multicentric Registry

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BACKGROUND The use of trans-radial approach (TRA) to treat coronary complex lesions like chronic total occlusions (CTO), is increasing thanks to low rate of access site complications, good percutaneous coronary interventions (PCI) results and advances in material technology. The aim of the study was to retrospectively review the procedural and clinical results of PCI for CTO lesions performed by radial approach by radialists working in centers with an high number of PCI procedures performed by radial-approach.

METHODS We collected clinical and procedural data of CTO PCI performed using radial approach in the period from January 2008 to April 2014. Primary end-points were PCI success (stent implantation with residual stenosis < 20% and TIMI 3) and patient success (PCI success in a first or second attempt). Access site complications, cardiac intra-procedural complications and in-hospital major cardiac adverse events (MACEs: cardiac death, myocardial infarction (MI), re-PCI or CABG) were also assessed.

RESULTS Seven centers afferent to the Italian Radial Club (an association of italian centers dedicated to the dissemination of the radial approach between interventionalists) participated to the study. A total of 359 TRA PCI of CTO lesions in 347 patients were performed. The selection of the CTO lesions to be treated by TRA was done according to the operator choice. The complexity of CTO lesions treated was: tapered lesions in 43.7%, stump lesions in 40.4%, microchannels in 36%, occlusion site not visible and/or caput medusa in 14% of cases. CTO length was > 20 mm in 97.5% of cases. Majority of PCI (98.9%) were performed by antegrade approach with a double radial approach for collateral injections in 20% of cases. Only 4 cases were performed using a biradial retrograde approach. A 6 F guiding catheter was used in the majority of cases (55%). In only 2 patients (6%) was needed to switch from radial to femoral approach. The PCI success rate was 69% and patient success rate was 71%. In successful cases, stents were implanted in the majority (97.2%) with a mean number of stents per patients of 1.7 0.9. The rate of drug eluting stents use was 91%. Nine percent of patients only 1 access site was needed (96% of radial approach solved by compression) and only 4 cardiac intraprocedural complications (pericardial effusions). The rate of in-hospital MACEs was 1.7% with 1 cardiac death, 1 MI, 3 re-PCI and 3 patients undergoing CABG.

CONCLUSIONS According to our multicentric retrospective registry TRA PCI of CTO lesions, deemed feasible with this approach by an expert operator, is safe and associated with a good procedural and patient success.

CATEGORIES CORONARY: Complex and Higher Risk Procedures for Indicated Patients (CHIP)

TCT-397 10-year outcome after complete versus incomplete revascularization of patients with multivessel coronary artery disease

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BACKGROUND The importance of complete revascularization remains unclear and contradictory. This study compares the long term
progosis of complete revascularization (CR) versus incomplete revascularization (IR) on patients with multivessel coronary artery disease (CAD) who underwent percutaneous coronary intervention (PCI) or coronary artery bypass graft (CABG).

**METHODS** From May 2003 to December 2013, a total of 9,582 patients were analyzed who underwent PCI or CABG for multivessel disease. Major adverse cardiac event (MACE) including all-cause death, myocardial infarction and repeat revascularization was compared between CR and IR group.

**RESULTS** CR was achieved in 4,423 patients (46.2%); IR was more common after PCI than CABG (62.1% vs. 39.6%, p<0.001) and IR group presented with more myocardial infarction than CR group (30.4% vs.24.6%, p<0.001). During a 10-year follow-up, MACE occurred more in IR than CR group(44.4% vs. 36.9%, P<0.001). Relative to IR, CR was associated with lower long-term mortality (adjusted hazard ratio [HR]: 0.876, 95% confidence interval [CI]:0.782 to 0.982, p=0.005). During a 10-year follow-up, MACE occurred more in IR than CR group (44.4% vs. 36.9%, P<0.001). Relative to IR, CR was associated with lower long-term mortality (adjusted hazard ratio [HR]: 0.876, 95% confidence interval [CI]:0.782 to 0.982, p=0.005). And the survival free from MACE was most benefited in completely revascularized CABG patients (HR: 0.575, 95% CI: 0.509 to 0.648, p=0.005).

**CONCLUSIONS** In a 10-year follow-up, the achievement of CR in multivessel CAD was associated with reduced MACE rate, irrespective of revascularization strategy in the real world.

**BACKGROUND** Percutaneous management of ULM disease has gained guideline acceptance for those with low-to moderate SYNTAX scores. There are few data to guide best management of restenosis in this setting. We sought to evaluate the management and outcomes of restenosis after unprotected left main (ULM) stenting.

**METHODS** From a total sample of all patients presenting for angiography between January 2009 and December 2014 with ULM lesion >50% (n=1,362), we identified those with angiographically significant ULM in lesion restenosis (n=42). The primary end-point was long-term rate of major adverse cardiac events (MACE) — that is death, myocardial infarction (MI) or clinically driven target lesion revascularization (TLR).

**RESULTS** Significant ULM lesion restenosis was identified in 43 patients (3%). The clinical indication for angiography was stable angina in 33 (78%), non-ST-elevation MI in 8 (18%), ST-elevation MI in 1 (2%) and cardiac arrest in 1 (2%). The initial stenting strategy was a simple one-stent approach in 24 (56%) and a complex 2-stent technique in 19 (44%). Details of the initial stent utilized were available in 37 - drug eluting stent 29 (78 %), bare metal stent (BMS) 5 (14%) and bioresorbable vascular scaffolds 3 (8%). Restenosis was treated percutaneously in 26 patients (50%) - additional DES in 22 (84%); balloon angioplasty in 3 (12%); thromboaspiration in 1 (4%). The remaining 40% were managed surgically. Table 1 shows clinical details by treatment strategy. For those undergoing repeat PCI a simple 1-stent strategy was employed in 19 (86%). In-hospital MACE rates was 7% with individual components of death 4.7% (2) and MI 2.3% (1). After 30+19 months follow-up cumulative MACE rate was 23.3% comprising of death in 5 (12%), MI in 2 (4.7%) and re-TLR in 1 (2.3%). There was no reported MACE in the surgically managed group.

**CONCLUSIONS** Restenosis after ULM stenting presents with a stable clinical course and can be percutaneously managed with a simple one-stent strategy in the majority of cases with low repeat TLR rates. The higher MACE rates for those managed percutaneously may be explained by operator bias to treat older, more unstable patients with repeat PCI.

**KEYWORDS** Left main coronary artery disease, Restenosis, PCI, CABG, MACE, TLR, ULM, SYNTAX.