Tobias Koppara, 1 Russell M. Jones, 2 Fumiyuki Otsuka, 3 by transmission electron microscopy in the porcine coronary model Absorb Bioresorbable Vascular Scaffold: ultrastructural changes assessed TCT-541

CONCLUSIONS In our study, while PD resulted in a marginal increase in RVD and MLD after BRS implantation, acute lumen gain was smaller in the PD group and short term procedural outcome and mortality remained similar between the 2 groups.

CATEGORIES CORONARY: Bioresorbable Vascular Scaffolds
KEYWORDS Bioabsorbable scaffolds, Mortality, Quantitative coronary angiography

TCT-542
Stenting of Coronary Bifurcation Lesions with Bioresorbable Everolimus-Eluting Scaffolds. Poznan Bifurcation-Absorb Pilot Registry
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METHODS The study is a prospective, nonrandomized clinical registry of patients with coronary bifurcation lesion treated with everolimus-eluting BVS. Sixty consecutive patients (male 71.7%, mean age 62.6 ± 9.5 years) were included, 18 of them had diabetes mellitus (30%) and 10 chronic kidney disease (17%). True bifurcation lesion was found in 27 patients (45%). Nine lesions (15%) comprised the left main coronary artery. On QCA the mean proximal and distal main vessel reference diameter were 3.12 ± 0.36 mm and 2.65 ± 0.43 mm respectively, whereas the mean lesion length and diameter stenosis were 12.73 ± 9.51 mm and 59.72 ± 27.33 mm. The mean side branch (SB) reference diameter was 2.34 ± 0.36 mm, SB lesion length 5.66 ± 5.27 mm, and lesion diameter stenosis 44.58 ± 27.47%. A total of 71 BVS were implanted. Provisional T stenting was performed in 42 patients (70%), distal main vessel stenting in one patient, systematic T stenting in 6 (10%), and T with minimal protrusion (TAP) in 2 patients (2%). SB ostial stenting was performed in additional 9 patients (15%).

CONCLUSIONS Our investigation reveals the nature of the changes seen within the polymeric struts. As polymer resorbs (30-36 months) it shows increasing granularity (nonfibrellar glycoprotein) with eventual replacement by a proteinaceous matrix with integrated collagen and myofibroblasts at 48-months.

CATEGORIES CORONARY: Bioresorbable Vascular Scaffolds
KEYWORDS Bioabsorbable scaffolds, Biocompatibility, Polymer