SATURDAY, SEPTEMBER 13, 2014, 5:00 PM–7:00 PM
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TCT-237
Long-Term Clinical Outcomes of Multiple Overlapping (260mm) Everolimus-Eluting Stent Implantation
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Background: There are limited data regarding the clinical outcomes of very long stent implantation, particularly the use of second generation everolimus eluting stents (DES).

Methods: From the IRIS-DES Registry, we identified 406 patients who were treated for coronary stenosis using ≥ 60 mm of overlapping drug-eluting stents. Of these, 269 and 137 patients were treated using cobalt chromium everolimus eluting stent (CoCr-EES) and platinum chromium everolimus-eluting stents (PtCr-EES), respectively. Major adverse cardiac events (MACE) were defined using a composite measure consisting of death, myocardial infarction (MI; periprocedural or spontaneous), or target vessel revascularization (TVR).

Results: Per target lesion, the average stent length was 2.7 ± 0.7 and the average stent length was 76.3 ± 14.8 mm. On 2-year clinical follow-up, the rate of MACE, death, spontaneous MI, TVR, and stent thrombosis (definite or probable stent thrombosis) were 31.8%, 4.4%, 2.0%, 7.1%, and 0.5%, respectively. Although 88 patients (21.2%) suffered from periprocedural MI, this was not independently associated with death, spontaneous MI, or TVR (hazard ratio [HR], 1.097; 95% confidence interval [CI] 0.58–2.08, p = 0.775). In addition, there were no statistical differences between CoCr-EES and PtCr-EES implantation in terms of the adjusted risks of MACE (HR, 1.223; 95% CI 0.82–1.82, p = 0.321) as well as its individual components (death; HR, 0.846; 95% CI 0.31–2.035, p = 0.744; MI; HR, 1.135; 95% CI 0.686–1.768, p = 0.690; TVR; HR, 1.854; 95% CI 0.895–3.841, p = 0.097)

Conclusions: When treating diffuse coronary stenosis, multiple overlapping stent implantation using second generation DES appear to be safe and effective. Although periprocedural MI frequently occurred, it was not associated with an increase in long-term adverse clinical outcomes.

TCT-238
Long Term Efficacy and Safety of Ultra-long Everolimus-Eluting Stent Implantation
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Background: In the era of drug-eluting stents, multiple overlapping stents was performed more than 10% of patients with diffuse coronary artery diseases. However, correlation between the location of overlapping site and 9 month follow-up (FU) minimum lumen diameter (MLD) site after multiple overlapping everolimus-eluting stents (EES) was not well evaluated.

Methods: From the prospective, multi-center study of XILLION (Xience/promus for Long coronary LesION) registry to assess the efficacy of multiple overlapping EESs in patients with diffuse long coronary artery disease, serial quantitative coronary angiography (QCA) analyses at pre-, post-procedure, and 9month FU were performed for pre-, post EES implantation and underlying dual antiplatelet therapy showed acceptable TLR rate and safety profile for the patient’s hard events.

Results: A total of 330 patients with 348 lesions were enrolled and 9 month FU angiography was performed for all patients. In the 52% of the lesions, the location of post-procedural MLD was same as that of FU MLD. In all same lesions (pre−post procedure = FU) were observed in 44% of lesions. Although 88 patients (21.2%) suffered from periprocedural MI, this was not independently associated with death, spontaneous MI, or TVR (hazard ratio [HR], 1.223; 95% CI 0.82–1.82, p = 0.321) as well as its individual components (death; HR, 0.846; 95% CI 0.31–2.035, p = 0.744; MI; HR, 1.135; 95% CI 0.686–1.768, p = 0.690; TVR; HR, 1.854; 95% CI 0.895–3.841, p = 0.097)

Conclusions: The impact of overlapping site on long-term outcomes was similar among three groups. When treating diffuse coronary stenosis, multiple overlapping stent implantation using second generation DES appear to be safe and effective. Although periprocedural MI frequently occurred, it was not associated with an increase in long-term adverse clinical outcomes.

TCT-239
Impact Of Overlapping Site On 9 Month Angiographic Results After Multiple Overlapping Everolimus-eluting Stents Implantation: A Serial Quantitative Coronary Angiography Analysis
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Background: In the era of drug-eluting stents, multiple overlapping stents was performed more than 10% of patients with diffuse coronary artery disease. However, correlation between the location of overlapping site and 9 month follow-up (FU) minimum lumen diameter (MLD) site after multiple overlapping everolimus-eluting stents (EES) was not well evaluated.

Methods: From the prospective, multi-center study of XILLION (Xience/promus for Long coronary LesION) registry to assess the efficacy of multiple overlapping EESs in patients with diffuse long coronary artery disease, serial quantitative coronary angiography (QCA) analyses at pre-, post-procedure, and 9month FU were performed for pre-, post EES implantation and underlying dual antiplatelet therapy showed acceptable TLR rate and safety profile for the patient’s hard events.

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Conclusions: The impact of overlapping site on long-term outcomes was similar among three groups. When treating diffuse coronary stenosis, multiple overlapping stent implantation using second generation DES appear to be safe and effective. Although periprocedural MI frequently occurred, it was not associated with an increase in long-term adverse clinical outcomes.