The impact of short-term duration of dual antiplatelet therapy in patient with second generation drug eluting stent implantation

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PurposeTo assess the safety and efficacy of short-term (<180days) duration of dual antiplatelet therapy (DAPT) in patient with second generation drug eluting stent (DES) implantation. Method This is a prospective single-center observational study. We enrolled 118 patients (Male 88/30, 71±11 years)(147 lesions) who underwent second generation DES implantation under short-term DAPT therapy. Duration of DAPT therapy was decided before PCI procedure and we continued either aspirin or clopidogrel throughout life after the termination of DAPT therapy. The primary end point was a composite of death of any cause, myocardial infarction, stent thrombosis, target lesion revascularization. Results DAPT therapy duration were 153±45 days. Prevalence of hypertension, diabetes mellitus, dyslipidemia and hemodialysis was 85 patients (72%). 35 patients (30%), 65 patients (55%), 42 patients (36%) and 8 patients (6.8%). 5 lesions (4%) was presented with acute coronary syndrome and remaining 143 lesion (96%) was presented with stable angina pectoris. In lesion morphology, 6 lesions with chronic total occlusion (4%), 12 in stent restenosis (8%), 23 calcified lesions (16%), 8 ostial lesions (5%) were included. Kinds of stents were 61 everolimus-eluting stents (41%), 85 biolimus-eluting stents (58%) and 1 zotarolimus-eluting stents (1%). Implanted stent diameter and length were 2.9±0.4mm, 20.7±6.7mm, respectively. In follow-up duration (423±207 days), 2 patients died due to non-cardiac cause but no bleeding event or stent thrombosis was observed. Conclusion Short-term duration of DAPT therapy in patients with second generation DES did not increase mortality and stent thrombosis.