Procedural and early clinical outcome of the PROMUS PREMIER fracture-resistance architectured stent

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Purpose: The PROMUS PREMIER (PP) stent has an increased fracture-resistance architecture; 4 connectors in proximal end, and 2 connectors throughout the body of stent. However, it is unclear in the real-world setting. To address the issue, we evaluated procedural and short-term clinical outcome of PP implantation in our hospital.Methods: From May 2014 to June 2014, consecutive 59 patients treated by at least one PP were enrolled. The procedural and in-hospital clinical outcome was retrospectively evaluated.Results: The mean of age was 71±;8; 29% of female and 37% of diabetes. Total of 87 PP was implanted in the 61 PCI. The lesion was located in RCA in 40%, LAD in 38%, LCX in 17% and Left main in 5%. Among them, 13 lesions (21%) were located at ostium. Stent implantation was successfully performed in all cases. In one case with severe calcified lesion at RCA, longitudinal stent deformation occurred after the insertion of 4Fr child guinding catheter via the implantaed PP. During hospitalization, none had cardiac death, myocardial infarction, target vessel failure and stent thrombosis.Conclusion: The PROMUS PREMIER fracture-resistance architectured stent showed favorable procedural and initial clinical outcome in the real-world setting. Further studies are needed to clarify long-term clinical outcome.