PROMUS STENT TREATMENT OF CHRONIC TOTAL OCCLUSIONS USING TWO DIFFERENT RECANALIZATION TECHNIQUES IN JAPAN- J-PROCTOR REGISTRY: A MULTICENTER REGISTRY TO EVALUATE CLINICAL OUTCOME OF DRUG ELUTING STENT IN SUBINTIMAL AREA AFTER CTO REVASCULARIZATION USING ANTEGRADE OR RETROGRADE APPROACH

Poster Contributions
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Background: Since the current retrograde approach for percutaneous coronary interventions in chronic total occlusions (CTO) was introduced in 1995, this approach has continued to increase PCI success rates in CTOs. Despite the increased success rate, short and long term Drug Eluting Stent (DES) clinical outcomes comparing the various retrograde strategies, to those of the antegrade approach for CTOs, have yet to be adequately evaluated.

Methods: The J-PROCTOR registry is a prospective, multi-center registry to assess the efficacy of DES in subintimal area after CTO revascularization using antegrade or retrograde approach. After crossing a lesion with a guidewire, all cases required confirmation of its position by intravascular ultrasound (IVUS) before implanting a DES. Cases were classified into two potential categories; (1) a sub-intimal tracking group, if the IVUS catheter was located in a dissection plane outside of intimal plaque but inside of external elastic membrane (EEM), even when it was localized, or (2) into an intimal tracking group if the IVUS catheter was in the true lumen, yet surrounded by dissection with/without hematoma. The primary endpoint was clinically driven target vessel revascularization (TVR) rates, at 12 months.

Results: A total of 163 lesions (retrograde arm: 104 lesions, antegrade arm: 59 lesions) were enrolled. IVUS analysis showed that sub-intimal tracking in the retrograde arm was higher than that of the antegrade arm (24.7% vs.12.3 %, p=0.10) There was no significant difference in MACE rate at 9 months between Intimal tracking and Sub-intimal tracking, in both antegrade (8.0% vs. 0.0%, p=0.58) and retrograde (13.7% vs. 16.7%, p=0.47) approach arms.

Conclusions: The primary endpoint 12 months TVR will be presented at ACC 2013.