Background: Treatment of CTO with Nobori DES showed favourable short- and long-term outcomes of patients with CTO treated with the latest generation drug eluting stent.

Methods: NOBORI2 and eNOBORI are two large, prospective, single-arm, multi-center, registries that enrolled 3067 and 7750 patients respectively, out of which 97 and 302 had treated CTO. All adverse events were adjudicated by an independent clinical event committee in NOBORI 2, while adjudication in eNOBORI (including stent thrombosis) is ongoing. The primary endpoint was Target Lesion Failure (TLF), a composite of cardiac death (CD), target vessel related myocardial infarction (MI) and target lesion revascularization (TLR).

Results: CTO patients were ~60y old, 83% males, 50% with prior MI, 28% prior PCI and 5% previous cardiac surgery. Multiple vessels were treated in 33% of patients (2,20±1.43lesions per patient). The lesions were complex (82% B2/C type), ostial (17%), calcified (43%), contained thrombus (2%) and 7% required bifurcation treatment. The mean procedure time, fluoroscopy time, and radiation exposure and catheters and wires used are summarized in the Table.

Conclusions: In pts with LV systolic dysfunction there is demonstrable ischemia (FFR<0.80) in the CTO territory, that is relieved after CTO PCI (FFR ≥0.80) with an improvement in the LV systolic function.

TCT-451

Application of the “Hybrid Approach” To Chronic Total Occlusion Interventions

Tesfaldet Michael1, Danyaal Moin2, Aristotelis Papayannis3, Mohammed Alomar1, Suhbash Banerjee6, Emmanuel Brilakis1

1University of Texas Southwestern Medical Center & Dallas VA Medical Center, Dallas, TX, 2University of Texas Southwestern Medical Center/Dallas VA Medical Center, Dallas, TX, 3Dallas VA Medical Center, Dallas, TX, 4UT Southwestern Medical Center and VA North Texas Health Care System, Dallas, TX, Dallas, TX, 5VA North Texas Healthcare System and UT Southwestern Medical Center, Dallas, USA

Background: The “hybrid approach” to chronic total occlusion (CTO) interventions advocates early and frequent change of the utilized strategy to maximize efficiency.

Methods: We prospectively recorded detailed procedural information (strategy change with corresponding procedural and fluoroscopy time and patient radiation exposure in 61 consecutive patients undergoing CTO intervention between July 2011 and May 2012.

Results: Fifty-five of 61 patients had successful CTO intervention with an overall procedural success rate of 90.2%. Mean age was 65±7 years, all patients were men and 32% had prior coronary artery bypass graft surgery. The primary approach was retrograde for 7 patients (11.5%) and antegrade for 54 patients (88.5%), of whom 21 patients (34.5%) underwent retrograde intervention after failed antegrade approach (Table). Thirty-three patients (54%) had no approach change, but 28/61 patients (46%) required 3.8±1.4 approach changes (range 2–7) (Figure). The mean procedure time, fluoroscopy time, radiation exposure and catheters and wires used are summarized in the Table.