Single Center Experience using Drug Eluting Balloons

Vaknin-Assa, Hana; Assali, Abid; Lev, Eli; Brosh, David; Dvir, Dany; Teplizky, Igal Rabin Medical Center, Interventional Cardiology, Petach Tikva, Israel

Background: Drug Eluting Balloon (DEB) has emerged as an alternative treatment for In Stent Restenosis (ISR).

Objectives: The aim of this study was to investigate the efficacy of DEB for the treatment of ISR.

Methods: We analyzed the clinical and angiographic data of 50 consecutive patients with ISR using DEB (5 X SeQuent-Please, 45 X De-Lux DEBs) between 2/2010-4/2011.

Results: The mean age was 69 ± 13 years with high risk features of Diabetes-53%, Dyslipidemia-84% and Hypertension of 78%. The majority presented with Acute Coronary Syndrome (71%). Angioplasty with DEB were mostly used for DES ISR, DES Stent type restenosis: Cypher-9%, Endeavor 4% Xience 3% and Taxus, 32% of cases were BMS ISR. Focal Restenosis was the presentation of 54% according to Mehran Classification. Time to Restenosis 22±24 month and Recurrent ISR occurred 1.4 ± 2.4 month (mean 1-6). The mean Balloon diameter and Length were 3.1 ± 0.4 mm and 16.4 ± 13.3 mm respectively. At six month One patient hat stent thrombosis presented as acute myocardial infarction and had target vessel revascularization, and another patient had restenosis ten days after Drug eluted balloon angioplasty. The overall mace (Death, MI, TVR) was 17%.(Fig.1).

Conclusions: The treatment of in-stent restenosis (2/3 within DES) using drug eluting balloons showed good intermediate term clinical results. Expanded long-term data are awaited.

