23 [10064]

Asian data on the safety of bailout stenting with drug eluting stents after paclitaxel coated balloon angioplasty

Introduction

There are safety concerns with the "double-dose" of antiproliferative drug in the same vessel segment when drug eluting stents (DES) are used to bailout a suboptimal paclitaxel-coated balloon (PCB) angioplasty result.

Objective

We compared the safety of DES-PCB combination versus bare metal stent (BMS) plus PCB.

Methods

We retrospectively evaluated patients requiring DES or BMS bailout following PCB angioplasty from 2011-2014. Clinical safety and bleeding complications at one year were analysed.

Results

12 patients were treated with PCB+DES and 37 patients with PCB+BMS. The demographics of the 2 groups were comparable with a high percentage of diabetics (66.7% vs 56.8%; HbA1c 7.6% vs 6.7%). All PCB studied was Sequent Please with no difference in balloon size in the 2 groups (DES, 2.5 x 30.3mm vs BMS, 2.6 x 28.8mm, p= 0.95). DES and BMS size were similar (2.6mm x 29.6mm vs 2.6mm x 25.2mm, p= 0.60). PCB+DES group received longer dual antiplatelet therapy (12.0 vs 6.4 months, p<0.05) but more TIMI minor bleeding (8.3% vs 2.7%, p<0.005). There were no TIMI major bleeding reported. Major adverse cardiovascular event at 1 year in the PCB+DES group were comparable to PCB+BMS (8.3% vs 13.5%, p=0.63), with no reported stent thrombosis in either group. There was less TLR in PCB+DES group (0% vs 8.1%, p=0.0001).

Conclusion

Our initial experience using DES instead of BMS to bailout suboptimal PCB result appears to be safe with lower TLR at 1 year. Larger studies will be required to address long term safety.