

Drug Eluting Balloon Angioplasty in Small Vessel Disease: A Study in Patients ≥ 75 Years Old

Tan Tock Seng Hospital, Singapore
Dasdo A Sinaga

[PURPOSE] Angioplasty in elderly is associated with more complications. Drug Eluting Balloon only Angioplasty (DEBA) has emerged as an alternative to treat small vessel coronary disease (SVCD) with shorter duration of dual antiplatelet therapy (DAPT).

[METHOD] To examine the efficacy and safety of DEBA in SVCD (< 2.8 mm) in elderly, we analyzed data of 447 PCB-treated patients (334 (aged < 75) and 113 (aged ≥ 75) respectively).

[RESULTS] In the older group, more patients have hypertension (89% vs 77%, $p=0.006$), renal insufficiency (21% vs 6%, $p < 0.001$), atrial fibrillation (17% vs 7%, $p=0.001$) and calcified lesions (33% vs 20%, $p=0.006$). The younger group received more aggressive antiplatelet regime (more prasugrel and ticagrelor used) and numerically higher proportion having DAPT for > 3 months (63.5% vs 69.9%, $p=0.215$). There was no difference in bailout stenting rate and in device success rate between the 2 age groups. At 30 days, there was 1 myocardial infarction requiring target lesion revascularization (TLR) at the younger group. No major adverse cardiac event (MACE) was observed in the older group. After 9 months, the MACE rate was 4.2% vs 6.1% ($p = 0.453$) and TLR was 3.9% and 3.0% ($p = 0.70$) in the younger and elderly patients respectively. There was no cardiac death observed.

[CONCLUSION] DEBA is as effective and safe in the elderly despite their complex anatomy and comorbidities.