

stents. We compared the results of PCI for restenosis with SF after DES implantation between lesions treated with first-generation DES and those treated with second-generation DES at both mid-term and long-term follow-up.

RESULTS Between lesions treated with first-generation DES and those treated with second-generation DES, the incidence of SF was significantly higher in lesions treated with first-generation DES (4.6% vs. 2.1%, $p < 0.001$) and that of re-restenosis was not significantly different between the two groups both at mid-term follow-up (37.1% vs. 36.8%, $p = 1.000$) and at long-term follow-up (24.3% vs. 39.3%, $p = 0.148$).

CONCLUSION The results of PCI for restenosis with SF after DES implantation were similar between lesions treated with first-generation DES and those treated with second-generation DES at both mid-term and long-term follow-up.

CATEGORIES CORONARY: Stents: Drug-Eluting

ADJUNCT PHARMACOLOGY AFTER TAVR

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TCT-574

Bivalirudin versus Heparin in Aortic valve interventions: A Meta-Analysis



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BACKGROUND Transcatheter aortic valve replacement (TAVR) and Balloon aortic valvuloplasty (BAV) bears specific procedural risks, including bleeding, vascular complications and atheroembolism causing stroke. Heparin is frequently used during these procedures to prevent atheroembolic events. There is limited data on the efficacy of bivalirudin compared with heparin in patients undergoing TAVR and BAV. We aimed to evaluate the safety and efficacy of the periprocedural bivalirudin versus heparin for aortic valve interventions.

METHODS A systematic search of database, including, Pubmed, Web of Science, Google scholar and Cochrane Database were performed by two independent reviewers to identify relevant studies. Studies were included comparing "heparin" versus "bivalirudin" in patients undergoing TAVR or BAV for severe aortic stenosis (AS). The primary outcome was in-hospital major bleeding. Secondary outcomes were in-hospital major adverse cardiovascular events (MACE), in-hospital net adverse clinical events (NACE), in-hospital all cause mortality, major vascular complications, acute myocardial infarction (MI), stroke and acute kidney injury (AKI).

RESULTS Three studies, including 1690 patients were included in the analysis. Overall, the incidence of major bleeding was 7.6% (6.5% in the bivalirudin group versus 9.2% in heparin group). The incidence of major bleeding was significantly less in the bivalirudin group as compared to heparin group (OR, 0.58 [CI 0.33, 0.99], I²=49%). The risk of NACE and MI were also significantly less in the bivalirudin group as compared to heparin group (NACE (OR, 0.68 [CI 0.48, 0.97], I²=26%), MI (OR 0.41 [0.18, 0.94], I²=0). There was no significant difference in in-hospital MACE (OR, 0.70 [CI 0.46, 1.07], I²=0%), mortality (OR, 0.81 [CI 0.46, 1.45], I²=0%), major vascular complications (OR, 0.95 [CI 0.6, 1.39], I²=0%), stroke (OR, 0.99 [CI 0.31, 3.17], I²=15%) and AKI (OR, 1.01 [CI 0.53, 1.90], I²=77%) between the two groups.

CONCLUSION In patients undergoing aortic valve interventions for severe AS, bivalirudin compared with heparin is associated with better in-hospital clinical outcomes in terms of reduced risk of major bleeding, MI and NACE.

CATEGORIES STRUCTURAL: Valvular Disease: Aortic

TCT-575

Abstract Withdrawn



TCT-576

Should short-term DAPT be indicated for post-TAVR patients? A Meta-Analysis

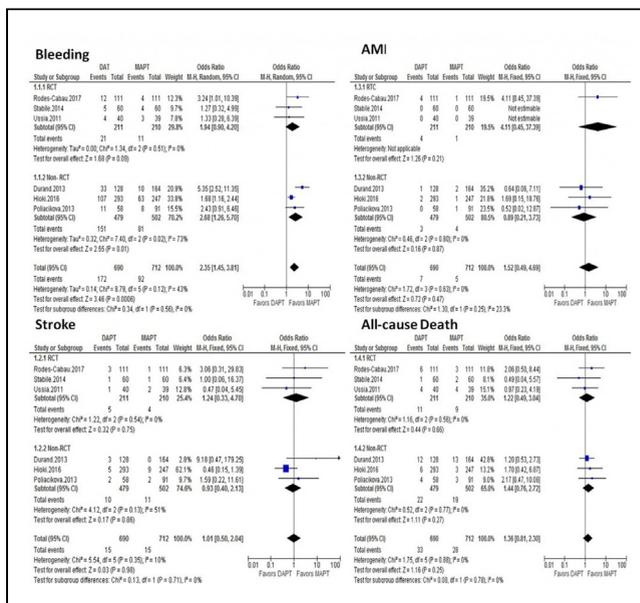


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BACKGROUND Dual antiplatelet therapy (DAPT) could add the benefit of reducing the ischemic complications and valve thrombosis in patients who underwent TAVR. There is a lack of data disclosing if those benefits outweigh the risks of increased bleeding risk. We evaluated all clinical data that compared DAPT to mono antiplatelet therapy (MAPT) for patients who underwent TAVR.

METHODS Pub Med and Cochrane databases were systematically searched for clinical studies comparing the short-term outcomes of DAPT and MAPT for patients who underwent TAVR. The primary endpoint was any bleeding at 30 days post-procedure. Secondary endpoints included AMI, stroke and all-cause death. We used fixed (I² < 55%) otherwise random effect analysis using the Cochrane Handbook of Systematic Reviews.

RESULTS A total of 6 studies (3 RCT's and 3 observational/registry) provided a total of 1402 patients (690 = DAPT and 712 = MAPT group). Overall, there was a significant less bleeding events in the MAPT group compared to DAPT (13% vs. 25%, $p < 0.01$), although subanalysis using only RCT's only showed a trend ($p = 0.09$). There was no significant difference in regards stroke between DAPT and MAPT (2% vs. 2%, $p > 0.05$), AMI (1% vs. 0.7%, $p > 0.05$) and all-cause death (5% vs. 4%, $P > 0.05$).



CONCLUSION Our analysis suggests that DAPT is not associated with any significant better clinical outcome compared to MAPT but with significant increased bleeding risks in the overall analysis but only a trend in the RCT's subanalysis. In-deep analysis with further RTC's should be pursued in order to investigate the short and long-term outcomes.

CATEGORIES CORONARY: Pharmacology/Pharmacotherapy