bifurcation lesions due to an increased late clinical restenosis, thus future DAPT study focusing on personalized medicine is warranted. (ClinicalTrials.gov Identifier: NCT01681381)

CATEGORIES CORONARY: Pharmacology/Pharmacotherapy

KEYWORDS Bifurcation lesion, Biodegradable polymer, Dual antiplatelet therapy

TCT-77

Risk and benefits of triple therapy in patients undergoing percutaneous coronary stent implantation requiring chronic oral anticoagulation: a meta-analysis of 12 trials

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BACKGROUND Patients with coronary artery disease who undergo stent implantation and have concomitant indication for long term oral anticoagulation represent a considerable percentage of the overall population. To date there is still no consensus about the optimal antithrombotic strategy to choose in this kind of patients, due to the difficult balance between an increased risk of bleeding and thromboembolic complications. Aim of this meta-analysis was to evaluate risk and benefits of triple antithrombotic therapy versus dual antiplatelet therapy in patients undergoing coronary stent implantation, requiring long term oral anticoagulation.

METHODS We performed formal searches of PubMed, EMBASE, Cochrane central register of controlled trials and major international scientific session abstracts from January 1990 to September 2014 regarding the use of triple antithrombotic therapy versus dual antithrombotic therapy in patients undergoing percutaneous coronary stent implantation that required chronic oral anticoagulation. Data regarding study design, inclusion/exclusion criteria, number of patients, and selected endpoints was extracted by 2 investigators. Disagreements were resolved by consensus.

RESULTS Twelve trials, with a total of 7838 patients undergoing stent implantation with indication to long term oral anticoagulation were finally included. A total of 2686 patients were treated with triple therapy whereas 5152 patients received dual antithrombotic therapy alone. The follow-up period ranged from 270 to 2000 days. Mortality occurred in 10.8% of patients receiving triple therapy versus 16.7% of patients in dual therapy (OR [95% CI] = 0.80 [0.69-0.94], p = 0.005; phet = 0.0003). By meta-regression analysis no relationship was observed between reduction in mortality and the risk of bleedings (p = 0.10). Data regarding secondary endpoints showed a significant association between triple therapy and an increased risk of bleedings (12.3% versus 9.9%) (OR [95% CI] = 1.37 [1.16-1.62], p = 0.0002; phet = 0.20), while we did not find any significant difference in term of recurrence of myocardial infarction (p = 0.39), stent thrombosis (p = 0.46) or stroke (p = 0.15).

CONCLUSIONS This meta-analysis showed that among patients undergoing coronary stent implantation, requiring chronic oral anticoagulation, the use of a triple antithrombotic therapy is associated with a significant reduction in mortality that largely outweighed the higher risk of major bleeding complications associated with triple therapy.

CATEGORIES CORONARY: Pharmacology/Pharmacotherapy

KEYWORDS Anticoagulation, Antiplatelet therapy

TCT-78

Efficacy of Long-Term Ticagrelor in Stented Patients in PEGASUS-TIMI 54

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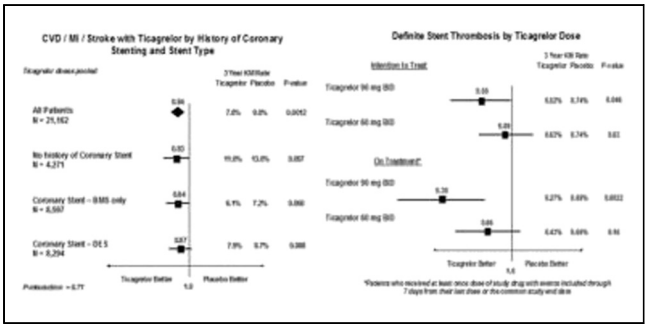
BACKGROUND Ticagrelor in patients with prior MI reduced the incidence of CV death, MI, or stroke by 15-16% in PEGASUS-TIMI 54. We investigated the efficacy of ticagrelor in patients based on the presence and type of stent.

METHODS Details of each patient's most recent PCI were collected at randomization. Stent thrombosis (ST) was prospectively adjudicated according to ARC definitions with angiographic confirmation when available.

RESULTS In PEGASUS-TIMI 54, 4271 patients had no history of stenting (20%), 8597 had a bare metal stent (BMS, 41%), and 8294 had a drug-eluting stent (DES, 39%). The median time from PCI to randomization was 1.7 yrs (IQR 1.2-2.3; 95% >1 year from PCI). Of the patients with DES, 52% had received either everolimus or zotarolimus-eluting stents (EES or ZES), 27% had received sirolimus or paclitaxel-eluting stents (SES or PES), and stent type was not specified in the remainder. Among patients with stents randomized to placebo, over a median of 33 months of follow-up, recurrent MI was most frequent ischemic event (5.2%), followed by CV death (2.3%) and stroke (1.7%), whereas ARC definite ST was rare (0.7%). Ticagrelor consistently reduced CV death, MI, or stroke regardless of stenting or stent type (pooled ticagrelor vs placebo; Fig Left) with similar magnitude of benefit for each dose and for each of the components. Rates of definite ST were 0.38% with BMS, 1.01% with SES or PES, and 0.65% with EES or ZES. Ticagrelor 90 mg bid significantly reduced ST whereas there was a trend with ticagrelor 60 mg bid (Fig Right). The effect was even more pronounced for both doses when patients were on study drug: HR 0.30 (0.14-0.65) & HR 0.66 (0.37-1.17), respectively.



CONCLUSIONS Patients with a history of MI more than 1 year from PCI remain at heightened risk for ischemic events, predominantly MI, CV death, and stroke, with stent thrombosis being rare. Long-term ticagrelor reduces CVD/MI/Stroke regardless of stenting history and reduces stent thrombosis in patients with stents.

CATEGORIES CORONARY: PCI Outcomes

KEYWORDS Antiplatelet therapy

TCT-79

Efficacy of Cangrelor in Lesions with High-Risk and Low-Risk Angiographic Characteristics: The CHAMPION PHOENIX trial

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BACKGROUND In the CHAMPION PHOENIX trial, the potent, rapidly acting, intravenous ADP antagonist cangrelor reduced the 48-hour incidence of major adverse cardiac events (MACE; death, MI, stent thrombosis, or repeat ischemia-driven revascularization) compared to a loading dose of clopidogrel across a broad cross-section of patients undergoing PCI. Whether this is true in patients with simple and complex coronary anatomy is unknown.