

Abstract:

Title: Triple Antithrombotic Therapy after Percutaneous Coronary Intervention (PCI)- Warfarin vs. Direct Oral Anticoagulants (DOACs)

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Introduction: Combining oral anticoagulation (OAC) with dual antiplatelet therapy (DAPT), known as triple therapy, increases the bleeding risk in patients who have atrial fibrillation (AF) and undergo percutaneous coronary intervention (PCI). The ideal triple therapy combination remains uncertain.

Methods: This single-centered, retrospective, observational study examined adult patients ≥ 18 years of age who were hospitalized with AF undergoing PCI and treated with OAC plus DAPT during admission and at hospital discharge in two separate groups receiving triple therapy: DOACs plus DAPT or warfarin plus DAPT. Sample size calculation: 868 patients. Chi-squared or Fisher's exact tests were used for nominal data and the unpaired t-test was used for continuous data. The primary objective was to determine if there is a difference in bleeding incidence for patients with AF receiving triple therapy post PCI with DOACs vs. warfarin within a six-week follow up period.

Results: A total of 106 patients were included (DOACs: 63, warfarin: 43). There was no difference in the bleeding incidence when comparing DOACs vs. warfarin (12.7% vs. 13.9%, $p=0.851$). There was a statistical difference between clopidogrel vs. ticagrelor or prasugrel in bleeding incidence (9.9% vs. 33.3%, $p=0.038$, NNH=5). There was no difference in thrombotic events. The total duration of triple therapy days (85 vs. 99, $p=0.31$) between DOACs vs. warfarin was not different.

Conclusions: There was no difference found in bleeding incidence or thrombotic events when comparing DOACs vs. warfarin. The use of ticagrelor or prasugrel increased the bleeding incidence compared to clopidogrel when these medications were combined with aspirin and OAC in AF patients who received triple therapy post PCI.