Abstract: P3842
One-year efficacy and safety of prasugrel and ticagrelor in patients with Acute Coronary Syndromes: results from a prospective and multicenter ACHILLES Registry

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On behalf: ACHILLES Registry

Topic(s):
Acute Coronary Syndromes: Pharmacotherapy

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Background: Prasugrel and Ticagrelor have demonstrated higher efficacy than clopidogrel in their main clinical trials for patients with Acute Coronary Syndrome (ACS). However, the long-term prognosis and different clinical characteristics related with the type of antiplatelet prescription in current clinical practice ACS patients have not been analyzed in depth.

Purpose: The objective of this study was to analyze the clinical profile of ACS and the efficacy and safety of new antiplatelet drugs (NAD) in current clinical practice patients discharged after an ACS.

Methods: We collected data from ACHILLES registry, and observational, prospective and multicenter registry of patients discharged after an ACS. We analyzed baseline characteristics, clinical profile and therapy during ACS admission and compared with the different treatments at discharge. After 1 year of follow-up, ischaemic and major bleeding events were analyzed. Multivariate Cox regression analysis and Kaplan Meier curves were also plotted.

Results: Of 1,717 consecutive patients, 1,294 (75.4%) were discharged with a P2Y12 inhibitor without oral anticoagulation. NAD was indicated in 47%. Patients treated with clopidogrel were elderly (69.1±13.4 vs. 60.4±11.5 years; p<0.001) and with a higher prevalence of cardiovascular risk factors. GRACE and CRUSADE score were higher in the clopidogrel than in NAD group (p<0.001). After 1 year of follow-up, 64 (5.0%/year) patients had a new myocardial infarction, 127 (10.0%/year) had a MACE and 78 (6.1%/year) patients died. Patients treated with clopidogrel had significantly higher annual rate of cardiovascular mortality, MACE and all cause-mortality (all of them p<0.001) without differences in major bleeding (p=0.587) compared with NAD therapy. After multivariate adjustment for the main clinical variables related with adverse prognosis in ACS patients, the discharge with NAD was independently associated with lower risk of all-cause mortality [HR 0.49, 95% CI (0.24–0.99); p=0.043] and lower risk of MACE [HR 0.65, 95% CI (0.43–0.99); p=0.049].

Conclusions: In this prospective, observational and current clinical practice ACS registry, the use of NAD was associated with a reduction of adverse events compared with clopidogrel in patients with ACS. NAD prescription at discharge was independently associated with lower all-cause mortality and MACE without differences in bleeding events. However, clopidogrel remained the most common P2Y12 inhibitor employed for ACS, especially in older and high risk population.
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Event Free Survival according NAD Use

![Graphs showing event-free survival for different outcomes with hazard ratios and p-values](image-url)