








# Patterns of dual antiplatelet therapy in patients after myocardial infarction who underwent coronary artery bypass grafting

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**Introduction:** Current guidelines for management of acute coronary syndromes (ACS) point out that in patients after acute myocardial infarction (AMI), dual antiplatelet therapy (DAPT) is recommended for 12 months, regardless of the method of revascularization.<sup>1</sup> It is evident from routine clinical practice that there are variations in the prescription of DAPT and that the guidelines are not being sufficiently adhered to. The aim of this study was to investigate the frequency and variations in DAPT prescribing patterns among patients who underwent coronary artery bypass grafting (CABG) following an AMI.

**Patients and Methods:** This was a registry-based study, conducted at Dubrava University Hospital. We recruited patients diagnosed with AMI who underwent CABG from December 2016 to January 2024. We collected data on gender, age, body-mass index (BMI), type of AMI: ST-elevation (STEMI) or non-ST-elevation (NSTEMI-ACS), prescribed medications after discharge (single antiplatelet therapy (SAPT) with acetylsalicylic acid (ASA), DAPT with ASA plus clopidogrel, ticagrelor and prasugrel) and data on major adverse cardiovascular events (MACE) which were divided into three groups: non-MACE, adverse coronary events and others: stroke, pulmonary embolism, atrial fibrillation and bleeding.

**Results:** We included total of 126 patients. The median follow-up was 21.8 months (IQR:32.1:2.7). Median age was 67 years (IQR:59-73), 76.2% were male and 87.3% had NSTEMI-ACS. Total of 73.8% patients received DAPT after CABG of which majority (88.8%) were discharged with clopidogrel plus ASA. Of the remaining patients, 28.6% received SAPT with ASA and 7.9% were discharged with DAPT including ASA and ticagrelor. No patient received prasugrel. A chi-square test showed a statistically significant difference ( $p < .001$ ) in prescribing DAPT depending on STEMI vs. NSTEMI-ACS but no statistically significant differences were found comparing prescribed DAPT and MACEs ( $p < 0.197$ ). There was also no difference in DAPT prescribing patterns in relation to gender, age and BMI.

**Conclusion:** The most common prescribed pattern remains DAPT with clopidogrel even though the guidelines of the European Society of Cardiology give priority to the DAPT with ticagrelor.

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## LITERATURE

- Byrne RA, Rossello X, Coughlan JJ, Barbato E, Berry C, Chieffo A, et al; ESC Scientific Document Group. 2023 ESC Guidelines for the management of acute coronary syndromes. *Eur Heart J.* 2023 Oct 12;44(38):3720-3826. <https://doi.org/10.1093/eurheartj/ehad191>