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Commentary: Shall we wait for two days more? Can we take this risk?

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Dual antiplatelet therapy (DAPT) with P2Y12-receptor inhibitors and aspirin is a well-recognized treatment aiming

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CENTRAL MESSAGE

In patients with acute coronary syndrome, mainly in subjects younger than 65 years, waiting for 2 more days before stopping DAPT might be reasonable to reduce the risk of major bleeding complications.

to reduce the incidence and recurrence of ischemic and thrombotic complications in coronary patients suffering from acute myocardial infarction and in patients who

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undergo percutaneous coronary intervention (PCI). Recent guidelines have well defined both the use of DAPT with P2Y12-receptor inhibitors such as clopidogrel and the more recent prasugrel and ticagrelor.^{1,2} Nevertheless, the association between antiplatelets agents and perioperative bleeding risk has not adequately addressed, and the literature shows conflicting evidence. Moreover, different bleeding classifications³⁻⁷ have limited the standardization of the bleeding definition.

On this topic, Qu and colleagues⁸ investigated the benefits and complications associated with early discontinuation of DAPT before surgery for patients with acute coronary syndrome. The authors observed a significant increase in 30-day composite outcome, stroke, major bleeding, reoperation for bleeding, and transfusions in patients in whom clopidogrel was stopped before 5 days compared with patients who had the therapy discontinued after 5 days. Although the results reported by the authors confirm the previously highlighted evidence, they deserve to be congratulated for having conducted their single-center observational study with a large sample of patients and an impressive statistical methodology.

The authors have reported outcomes in 3 subgroups based on the discontinuation days of clopidogrel: <3 days, 3-5 days, and >5 days. In patients who stopped clopidogrel <3 days, 30-day composite outcome, stroke, major bleeding, reoperation for bleeding, and transfusions were clearly more represented than in the other 2 subgroups. When the analysis was restricted to 3-5 days' subgroup, only bleeding complications and stroke had a greater incidence compared with patients in >5 days subgroup.

Stroke might be directly correlated to an increase in the rate of transfusions as a results of major bleeding.^{9,10} Hence, the following question may arise: in stable patients who had the clopidogrel therapy discontinuation between 3 and 5 days, was it safe and reasonable waiting for further 2 days to reduce the risk of major bleeding complications? After considering the data from Qu and colleagues,⁸ who described the same incidence of death and myocardial infarction between the 2 subgroups, it might be reasonable waiting for >5 days to strongly reduce bleeding complications, according to the patient's clinical status. The same question should be asked for patients younger than 65 years.

In these subjects, as stated by the authors, withdraw of clopidogrel before 5 days might be clinically feasible without an increasing risk of cardiac and cerebrovascular events, but with an increasing risk of bleeding events. Hence, waiting for a further few days might be considered to reduce the risks of bleeding and transfusions.

The introduction of P2Y12-receptor inhibitors provided interventional cardiologists with an effective therapy to reduce the risk of early and late thrombotic events following PCI procedures. Surgeons have to assess the right balance between thrombotic and postoperative major bleeding events by using ad hoc bleeding scores, especially in high-risk patients (primary PCI, obesity, older age, thrombocytopenia, anemia). Probably in this scenario, waiting for 2 more days might be a reasonable practice.

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