Letter by Bisdas et al Regarding Article, “Aspirin Plus Clopidogrel Versus Aspirin Alone After Coronary Artery Bypass Grafting: The Clopidogrel After Surgery for Coronary Artery Disease (CASCADE) Trial”

To the Editor:

We read with great interest the article by Kulik et al1 reporting that the combination of aspirin plus clopidogrel compared with aspirin monotherapy does not reduce the process of saphenous vein graft intimal hyperplasia 1 year after coronary artery bypass grafting. In our opinion, however, 2 important topics should be taken under consideration in future studies: the incidence of aspirin and clopidogrel resistance.

Although aspirin has become the most cost-effective and widely used agent in the prevention of atherosclerotic disease, a persistent platelet reactivity in up to 70% of patients on aspirin therapy has been described. In particular, after coronary artery bypass grafting, aspirin resistance varies between 7% to 54%, depending on the platelet assay (bleeding time, CD62p flow cytometry, light transmission aggregometry, platelet function analysis [PFA-100], thromboxane B2 levels, and thromboelastography). On the other hand, several reports have addressed evidence of reduced or absent antiplatelet effect in response to clopidogrel. Carriers of defective alleles for CYP2C19 and CYP2C9 are at risk of clopidogrel resistance. In addition, omeprazole and atorvastatin, which are inhibitors of CYP2C19 and CYP3A4, respectively, may reduce the clopidogrel effect. Hence, the high incidence of aspirin resistance is contrary to the described results by Kulik et al, with an overall 1-year graft patency >95% for both groups. A possible reason for this unexpected result may be the restricted follow-up of 1 year. Furthermore, the inability of the additional administration of clopidogrel to prevent a statistically significant reduction of intimal hyperplasia or graft occlusion rates during this period can be correlated to a possible concomitant administration of inhibitors of the aforementioned cytochromes and decrease of the antiplatelet drug effect.

We congratulate the authors for the Clopidogrel After Surgery for Coronary Artery Disease (CASCADE) trial—the first randomized, controlled trial in this field—and for their contribution to conquering saphenous vein graft disease after coronary artery bypass grafting. We look forward to future research regarding the influence of aspirin and clopidogrel resistance on the inhibition of saphenous vein graft hyperplasia.

Disclosures

None.

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