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CORRESPONDENCE

Continuation of dual anti-platelet therapy after drug-eluting stents in primary angioplasty beyond 12 months [version 1; peer review: 2 approved]

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Abstract

In this correspondence we discuss the results of the meta-analysis by De Luca *et al.* (2012) in the Archives of Internal Medicine which found that late myocardial reinfarction and stent thrombosis is more common in drug-eluting stents than in bare-metal stents. We discuss the clinical implications of this paper for dual anti-platelet therapy which did not receive sufficient attention in the original publication and the accompanying editorial.

Open Peer Review

Approval Status

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Any reports and responses or comments on the article can be found at the end of the article.

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Competing interests: CAG is a member of the Asia-Pacific Advisory Board for Bayer Pharmaceuticals.

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The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

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The meta-analysis by De Luca *et al.*¹ showed that the incidence of late (> 2 years) myocardial reinfarction and stent thrombosis is significantly higher in drug-eluting stents (DES) compared to bare-metal stents (BMS) in primary angioplasty despite the significant reduction in long-term target vessel revascularization associated with DES.

While the Comment section of the paper briefly mentions the role of more potent and prolonged dual anti-platelet therapy in counteracting these worrisome findings, the related Commentary² does not. However, in our view the current practice of discontinuing dual anti-platelet therapy after 12 months in DES in most patients is the most likely explanation for the observed increase in late stent thrombosis and reinfarction incidence, in concordance with pathological evidence that even beyond 40 months, DES do not fully epithelialize³. In the De Luca *et al.*¹ meta-analysis, the DES survival curves for both reinfarction and stent thrombosis start diverging from the BMS curves one year after stent implantation until year 6.

This also raises the most relevant question for practitioners: should we prolong dual anti-platelet therapy beyond 12 months after DES implantation? The Dual Antiplatelet Therapy Study (DAPT) is expected to give us a definitive answer to this question in 2014⁴.

For the time being, it seems that the argument to continue dual anti-platelet therapy beyond 12 months, which is fully in line with the current ACCF/AHA/SCAI recommendation⁵ to continue dual anti-platelet therapy *for at least* 12 months after DES implantation, has gained in strength.

Author contributions

IM drafted the first version of this correspondence article and IM and CAG have substantially revised it after discussion.

Competing interests

CAG is a member of the Asia-Pacific Advisory Board for Bayer Pharmaceuticals.

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Competing Interests: No competing interests were disclosed.

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