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LETTERS

Comments in Response to "Low-Dose Aspirin Increases Aspirin Resistance in Patients with Coronary Artery Disease"

To the Editor:

We read with great interest the recent article by Lee et al, "Low-Dose Aspirin Increases Aspirin Resistance in Patients with Coronary Artery Disease."[1] Using a novel point-of-care device, the authors report a significant association between aspirin dose and a failure to respond according to a predetermined aspirin resistance threshold. The use of this and other means and methods have been used to determine whether an appropriate response to aspirin has been achieved. Despite the number of studies, none has prospectively correlated aspirin resistance to an increased risk for cardiovascular events.[2]

The current study exclusively enrolled Chinese patients who averaged a particularly low body mass index (BMI). We believe this provides difficulty in extrapolating the findings to patients in the US and Europe, as well as those with higher BMIs. Recent data have suggested that increased weight is associated with a variable response to low-dose aspirin therapy.[3,4] Also with respect to BMI, the Women's Health Study reported results from patients with baseline BMIs <25.0, 25.0 to 29.0, and ≥ 30.0. There appeared to be a trend which suggested that women with a higher BMI responded less to very low dose aspirin (100 mg every other day).

Furthermore, the authors cite several limitations, including the failure to confirm adequate compliance to aspirin therapy. The issue of aspirin compliance and subsequent platelet response was recently investigated.[5] Schwartz et al reported that in 129 patients with a history of myocardial infarction, 9% failed to respond to aspirin therapy, but upon observed aspirin ingestion, all but one patient responded appropriately. It also is known that concomitant use of ibuprofen and possibly other NSAIDs may attenuate the intended antiplatelet effects provided by aspirin therapy.[6,7] Finally, a previous study utilizing the same technology appears to be inconsistent with the current findings, including no relationship to aspirin dose (beta-coefficient: -0.0015, P value = not significant, 95% confidence interval: 0.997-1.000).[8]

We hope future efforts in this important area take into account compliance and drug-drug interactions, as well as emerging areas such as the impact of obesity. The focus of future work should relay clinically meaningful and practically applicable information given the broad role of aspirin in the primary and secondary prevention of cardiovascular events.

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The Reply:

We would like to thank Drs Fisher and Knappertz for their interest in our study.[1] The relationship of aspirin resistance and adverse cardiovascular events has been reported in several studies.[2-5] One of those is our observation on the increased risk of myonecrosis following elective percutaneous coronary intervention among aspirin-resistant patients measured by the same device used in the current study.

We agree that there may be potential ethnic differences in the response to aspirin, and extrapolating our findings to a different population should be made with caution. We are