Response to Letter Regarding Article, “Systematic Review of Patients Presenting With Suspected Myocardial Infarction and Nonobstructive Coronary Arteries”

We agree with the comments made by Mahajan et al, that the 6% (95% confidence interval, 5%–7%) estimated prevalence of myocardial infarction and nonobstructive coronary artery disease (MINOCA) in our systematic review is potentially an underestimate of contemporary cardiology practice. Indeed, preliminary analysis from the Coronary Angiogram Database of South Australia suggests a prevalence of MINOCA ≈11% (Pasupathy et al, unpublished data, 2015). This prompts the question of why there is a disparity between the systematic review and these contemporary databases.

The prevalence of MINOCA in our systematic review was determined from 27 studies published between 1995 and 2013. It is noteworthy that important changes in the contemporary management of acute myocardial infarction have occurred during this period, including (1) a revised acute myocardial infarction definition using the troponin assay, and (2) the more widespread use of diagnostic angiography following an early invasive strategy for non–ST-segment–elevation myocardial infarction attaining level A evidence status in guideline recommendations. Thus, our systematic review is likely to have underestimated the prevalence of MINOCA in comparison with contemporary practice because (1) only 7 of the studies exclusively used the troponin assay in the diagnosis of acute myocardial infarction, and (2) approximately half of the patients in the 27 studies were recruited before the guideline recommendation advocating the more widespread use of angiography. These differences underscore the importance of undertaking contemporary research in this evolving field.

Disclosure

None.

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