Is there a role for stress CMR in stable chest pain with >60% predicted risk of coronary artery disease?

Sir,

The 2010 NICE guidelines on stable chest pain of recent origin have revolutionized its management. The management strategy is based on the estimated likelihood of coronary artery disease (CAD) using age, sex, risk factors and the character of chest pain. Functional imaging (for e.g. stress CMR/stress echo/myocardial perfusion scintigraphy) is only recommended in the group with predicted risk between 30% and 60%. The recently published CE-MARC study has shown that stress CMR is superior to SPECT in assessment of stable chest pain. In the CE-MARC study the overall X-ray angiography proven CAD prevalence was 39% in the study group (average age of 60 years and at least 1 risk factor). The age, risk factor and typicality of chest pain would put the estimated pre-test likelihood of CAD >60% for most of the study population where the recommended investigation is X-ray angiography. Hence the study hints towards a possible role of CMR in assessment of patients with predicted CAD risk >60% thereby avoiding unnecessary invasive angiography.

In our audit we found a higher than expected frequency of negative or normal stress CMR in patients with >60% predicted risk of CAD. In these patients invasive coronary angiography could be avoided. In addition, CMR can identify unknown extracoronary cardiac pathology and LV or RV wall motion abnormalities. We propose a larger, prospective multicentre study to confirm the definitive role of stress CMR in patients with pre-test probabilities of CAD >60%.

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