Stress echocardiography compared to exercise ECG for the assessment of acute coronary syndrome

We have read with interest the article by Jeetley et al. on the comparison of the clinical and economic impact of stress echo and exercise ECG for the assessment of acute coronary syndrome in patients with normal troponin. They showed that the cost of the exercise ECG approach was higher, mainly because of the higher performance of angiographies in this group (33 vs. 19%), which matches with the risk stratification achieved by each approach (intermediate or high risk by exercise ECG, 67%; by stress echo, 23%). In spite of this higher number of angiographies in the exercise ECG group, outcome was similar and revascularization procedures were the same (15 vs. 13, data from Figure 3). One might suspect that a significant number of angiographies in the exercise ECG intermediate risk patients did not translate into revascularization procedures. We have performed a similar study in patients after acute myocardial infarction. In our study ischemia was more frequently detected by exercise echo than by exercise ECG (59 vs. 27%, P < 0.001) and therefore the number of angiographies and revascularization procedures were higher in the former group (59 vs. 32 angiographies, P < 0.01 and 46 vs. 19 revascularizations, P < 0.001). The percentage of re-admissions for unstable angina, heart failure, and myocardial infarction after a follow-up of 4.5 ± 1.8 years was the same. There were 17 hard cardiac events (non-fatal myocardial infarction or cardiovascular death) in the exercise ECG strategy and 19 in the exercise echo strategy (21% vs. 23%). Thus, the performance of angiographies particularly after exercise ECG likely reflects different post-test referral patterns among centres. A more conservative referral pattern for the exercise ECG group in the study by Jeetley et al. (i.e. only angiography in the high risk group) would likely equal the number of angiographies within groups (and the cost). If this approach would translate into similar outcome deserve further studies.

Comparison of exercise echocardiography to exercise electrocardiography testing added to echocardiography at rest for risk stratification after uncomplicated acute myocardial infarction. Am J Cardiol 2003;92:373–376.

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References


Targeted stent use in clinical practice based on evidence from the Basel Stent Cost Effectiveness Trial (BASKET)

We read with great interest the accurate retrospective analysis of the database of the BASKET trial, performed by Brunner-La Rocca et al. with the purpose to find patient/vessel characteristics predictive of future events.