Response to Letter Regarding Article, “Coronary Artery Spasm: A 2009 Update”

In Dr Alvarez’s opinion, our patient should have been managed as if he had acute coronary syndrome (ACS) with “plaque rupture,” after which he had a “thrombosis” followed by “the phenomenon of spontaneous thrombolysis” with “spontaneous reperfusion.” According to Dr Alvarez, we should have consequently applied “early invasive strategy.” To make plausible the possibility of spontaneous thrombolysis, Dr Alvarez quotes the review article by Kovacs and Yamamoto.1 However, this review provides very little hard evidence for spontaneous coronary thrombolysis, and the authors cite only 5 references relating to this subject, stretching in time between 1980 and 2001, based mainly on not demonstrating a thrombus on coronary arteriography in patients with acute myocardial infarction.

We gave serious consideration to Dr Alvarez’s opinion, but under no circumstances can we accept his interpretation that our case was a “definite ACS.” As we wrote, in the emergency department, the ST elevation “returned to baseline quickly, concomitant with his pain subsiding.” Dr Alvarez, in quoting this from our article, uses an ellipsis, thereby avoiding what is written in continuation, that “cardiac biomarkers were normal.” As far as we are concerned, no diagnosis of definite ACS should be made in a patient after a quick disappearance of pain, an equally quick return of the ST segment to the isoelectric line, and normal biomarkers.

Coronary artery spasm as a frequent cause of ACS was mentioned in our article, citing Ong et al.2 who defined ACS according to the European Society of Cardiology Task Force3 as “acute chest pain (ie, chest pain at rest more than 20 minutes within the last 48 hours) together with ECG changes suggesting myocardial ischemia and/or elevation of cardiac markers”; obviously, our patient was far from this definition.

Even if we discuss our case in light of the possibility that it falls under the category of suspected ACS (although we do not think that this is relevant), our management of the patient was in full agreement with the American College of Cardiology/American Heart Association 2007 Guidelines4 (also referenced by Dr Alvarez) on the evaluation and management of patients suspected of having ACS. In this situation, if the symptoms are suggestive of ACS and the patient has a nondiagnostic ECG and normal initial serum cardiac biomarkers, the instruction is to observe. If the pain does not recur and the results of follow-up studies are negative, a stress study is indicated to provoke ischemia; if the results of this study are negative, outpatient follow-up is recommended.

As to the role of exercise testing in vasospastic patients, we cited Cannon and Braunwald,5 who described the limited value of exercise testing in this situation, but they certainly did not state that it is contraindicated. On the indication for stress testing in suspected ACS, see the Guidelines referenced above.

Disclosures

None.

Shlomo Stern, MD
Hebrew University of Jerusalem
Jerusalem, Israel

Antoni Bayes de Luna, MD
Autonomous University of Barcelona
Barcelona, Spain

References


Response to Letter Regarding Article, "Coronary Artery Spasm: A 2009 Update"
Shlomo Stern and Antoni Bayes de Luna

Circulation. 2011;123:e397
doi: 10.1161/CIRCULATIONAHA.110.015917
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2011 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the
World Wide Web at:
http://circ.ahajournals.org/content/123/13/e397