

In STEMI, C-reactive protein at presentation predicts MI, death

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For patients with ST-segment elevation myocardial infarction, high-sensitivity C-reactive protein measurements at presentation predict subsequent nonfatal myocardial infarction and cardiac death; and for patients with acute coronary syndromes, fetuin-A and C-reactive protein have prognostic value, according to two studies published in the Jan. 1 issue of *The American Journal of Cardiology*.

(HealthDay)—For patients with ST-segment elevation myocardial infarction (STEMI), high-sensitivity C-reactive protein (hsCRP) measurements at presentation predict subsequent nonfatal MI and cardiac death; and for patients with acute coronary syndromes (ACS), fetuin-A and CRP have prognostic value, according to two studies published in the Jan. 1 issue of *The American Journal of Cardiology*.

Stamatis S. Makrygiannis, M.D., from the "Tzanio" Hospital of Piraeus in Greece, and colleagues determined hsCRP measurements at presentation and at 24, 48, and 72 hours in 861 patients admitted for STEMI who received intravenous thrombolytic therapy within the first

six hours of the index pain. Over a median follow-up of 3.5 years, the researchers found that hsCRP levels at presentation independently predicted nonfatal MI and cardiac death (relative risk, 2.8 and 2.1, respectively), while levels at 24 hours predicted neither. Levels of hsCRP at 48 and 72 hours significantly predicted cardiac death (relative risk, 3.2 and 3.9, respectively) but not MI.

Pascal Lim, M.D., Ph.D., from the AP-HP-University Hospital Henri Mondor in Creteil, France, and colleagues examined the prognostic value of fetuin-A adjusted for CRP value and Global Registry of Acute Coronary Events [risk score](#) in 754 patients with ACS. The researchers found that the one-year [cardiovascular mortality](#) was 10 percent overall, 17 percent for those with low-fetuin-A, 18 percent for those with high CRP, 23 percent for those with low fetuin-A and high CRP, and 5 percent for those with neither low fetuin-A nor high CRP.

"In this large cohort of patients, we demonstrate that a severe inflammatory imbalance, characterized by a low fetuin-A concentration (anti-[inflammatory protein](#)) and a high CRP concentration, is associated with a higher risk for death after ACS," Lim and colleagues write.

Several authors from the Lim study disclosed financial ties to the pharmaceutical industry.

More information: [Abstract - Makrygiannis](#)
[Full Text](#)
[Abstract - Lim](#)
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