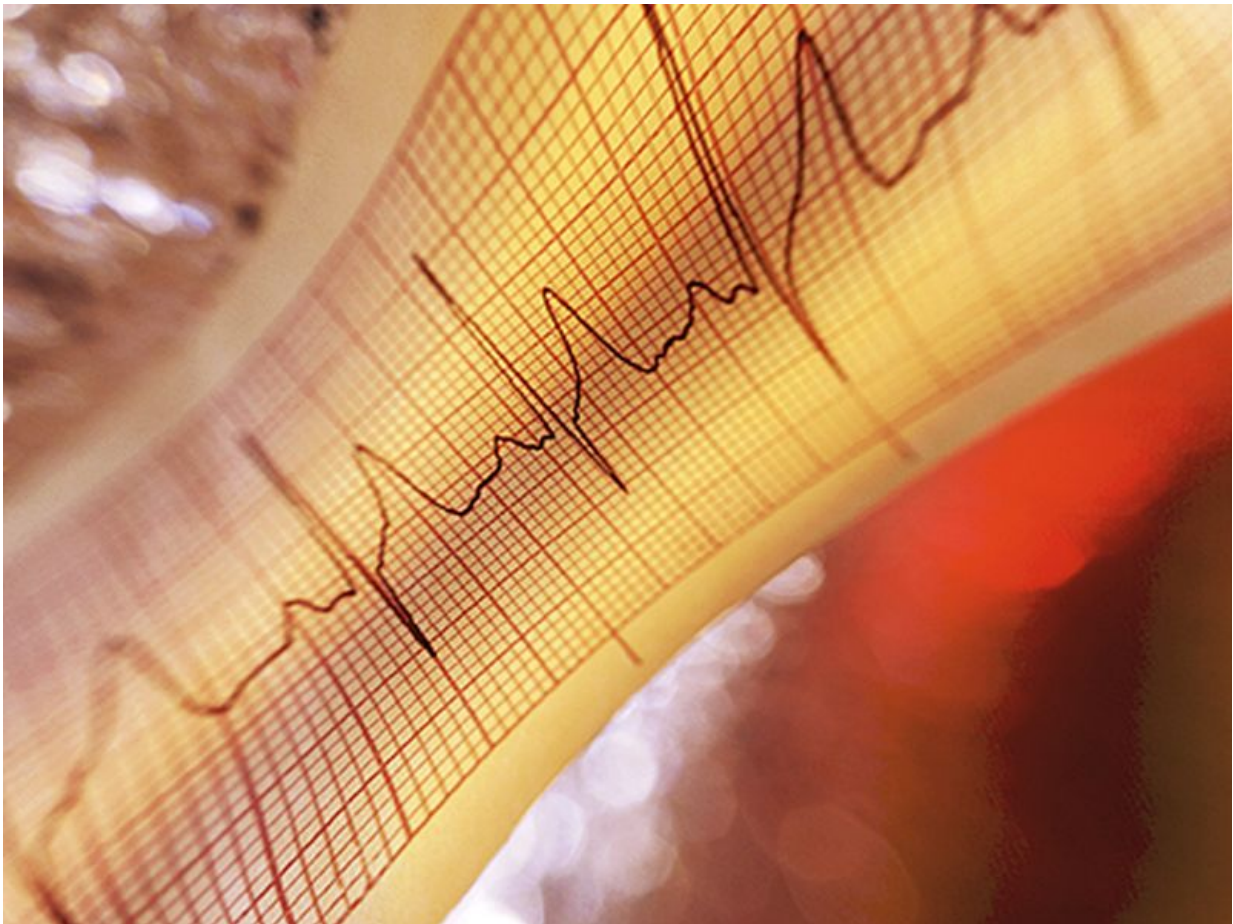


Plasma catecholamines predict post-op A-fib after cardiac Sx

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(HealthDay)—Assessment of plasma catecholamines on the morning of

surgery can predict the likelihood of postoperative atrial fibrillation (POAF) for patients undergoing elective cardiac surgery, according to a study published online April 26 in the *Journal of the American College of Cardiology*.

Ethan J. Anderson, Ph.D., from the University of Iowa in Iowa City, and colleagues examined the association of plasma catecholamines and monoamine oxidase-B with POAF in patients undergoing elective cardiac surgery. A total of 324 patients undergoing non-emergent coronary artery bypass graft and/or aortic valve surgery with cardiopulmonary bypass were included; blood samples were obtained before administration of anesthesia on the morning of [surgery](#).

The researchers found that norepinephrine (NE) and epinephrine levels in the fourth quartile were positively associated with POAF (P = 0.0006 and 0.047, respectively), while there was an inverse correlation for dopamine (DA) levels in the fourth quartile with POAF (P = 0.0034). The composite preoperative (adrenergic) plasma marker (Q4_{NE}⁺ versus Q4_{DA}⁻) was associated with a four-fold increased occurrence of POAF after adjustment for age, heart failure, and history of atrial fibrillation (adjusted P = 0.0001). There was no correlation between plasma monoamine oxidase-B and POAF.

"This information provides evidence that assessment of [plasma](#) catecholamines may be an easy-to-implement, low-cost method to predict which [patients](#) are likely to develop POAF," the authors write. "More investigation is needed to validate our results in a multi-centric setting."

More information: [Abstract/Full Text \(subscription or payment may be required\)](#)

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