

Mental stress tied to abnormal left atrial electrophysiology

July 27 2017



(HealthDay)—Acute mental stress is associated with abnormal left atrial



electrophysiology, according to a study published online July 20 in the *Journal of Cardiovascular Electrophysiology*.

Wesley T. O'Neal, M.D., M.P.H., from the Emory University School of Medicine in Atlanta, and colleagues examined whether acute <u>mental</u> <u>stress</u> results in abnormal left atrial electrophysiology in 422 patients with stable <u>coronary heart disease</u>. Patients underwent mental stress testing with a speech task. P-wave terminal force in lead V₁ (PTFV₁) was defined as the duration times the value of the depth of the downward deflection of the P-wave in lead V₁ measured on digital electrocardiograms (ECGs). PTFV₁ \leq -4,000 µV/ms defined electrocardiographic left atrial abnormality. Mean PTFV₁ values were compared during stress and recovery with those at rest.

The researchers found that $PTFV_1$ became more negative during mental stress compared with rest (mean change, -348; 95 percent confidence interval, -515 to -182; P

"Acute mental <u>stress</u> alters left atrial <u>electrophysiology</u>, suggesting that stressful situations promote adverse transient electrical changes to provide the necessary substrate for atrial fibrillation," the authors write.

More information: Abstract

Full Text (subscription or payment may be required)

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Citation: Mental stress tied to abnormal left atrial electrophysiology (2017, July 27) retrieved 2 May 2024 from <u>https://medicalxpress.com/news/2017-07-mental-stress-tied-abnormal-left.html</u>

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