Arrhythmias

LEFT VENTRICULAR WALL THICKENING COULD PREDICT LEFT ATRIAL APPENDAGE THROMBUS

ACC Moderated Poster Contributions
McCormick Place South, Hall A
Monday, March 26, 2012, 11:00 a.m.-Noon

Session Title: Arrhythmias: AF/SVT: Outcomes in Patients with Atrial Fibrillation: Beyond CHADS2
Abstract Category: 16. Arrhythmias: AF/SVT
Presentation Number: 1236-176

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Background: Transesophageal echocardiography (TEE) is often performed for prevention of strokes in patients with atrial tachyarrhythmia (atrial fibrillation; AF or atrial flutter; AFL) before cardioversion or catheter ablation. Some patients show left atrial appendage thrombus (LAAT) despite taking warfarin. We aimed to clarify the characteristics of patients with LAAT during warfarin dministration.

Methods: We studied 221 patients (162 males, age 65±11 yrs) who underwent TEE prior to cardioversion or catheter ablation for atrial tachyarrhythmia between 2008-2010 and retrospectively assessed the clinical, echocardiographic and electrocardiogrphic variables prior to performing TEE. All patients were taking oral warfarin.

Results: LAAT was detected in 14 patients (6.3%) using TEE. LAAT was significantly associated with left ventricular ejection fraction (p=0.0004), left atrial diameter (p=0.02), left ventricular wall thickening (LVWT; defined as left ventricular posterior wall or interventricular septum≥12mm) (p<0.0001), AF/AFL rhythm at TEE (P=0.01) and persistent arrhythmia (p=0.001), while left ventricular diastolic diameter and prothrombin time was not significantly associated. Logistic regression analysis showed only LVWT (P=0.0004, OR 15.491, 95%CI 3.406-70.447) to be independently associated with LAAT.

Conclusions: LVWT could be useful for predicting LAAT in patients with atrial tachyarrhythmia. Patients with LVWT should undergo TEE before cardioversion or catheter ablation even if taking warfarin.