Characteristics of Patients with Left Atrial Appendage Thrombus Detected by Transesophageal Echocardiography

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Background: Transesophageal echocardiography (TEE) is often performed for prevention of strokes in patients with atrial tachyarrhythmia (atrial fibrillation; AF, 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 while taking warfarin. Methods: We studied 169 patients (124 males, mean age 65±11 yrs) who had TEE before cardioversion or catheter ablation for atrial tachyarrhythmia between 2008-2010 and retrospectively assessed the clinical, echocardiographic and electrocardiographic variables before TEE. All patients were taking warfarin. Results: Twelve patients (AF 139, AFL 30 and cardioversion 39, catheter ablation 130) had LAAT. Among these 12 patients, 62 had persistent atrial tachyarrhythmia and 48 patients had structural heart disease (25 prior ischemic cardiomyopathy, 4 hypertrophic cardiomyopathy and 6 non-ischemic cardiomyopathy). Left ventricular ejection fraction, persistent arrhythmia, prior heart failure and structural heart disease were revealed as significant variables. Conclusion: Patients with persistent arrhythmia, structural heart disease or prior heart failure might have high risk for LAAT before cardioversion or catheter ablation. Keywords: transesophageal echocardiography, atrial fibrillation, left atrial appendage thrombus