

Letter to the Editor

A CHADS₂ score of zero is not necessarily associated to a low risk of thromboembolic events

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I have read with interest the paper by Decker and colleagues "CHADS₂ score is predictive of left atrial thrombus on precardioversion transesophageal echocardiography in atrial fibrillation [1], recently published on American Journal of Cardiovascular Disease. It assesses the role of CHADS₂ score for precluding the need of performing transesophageal echocardiogram before non-valvular atrial fibrillation cardioversion. The authors suggest that pre-cardioversion transesophageal echocardiogram may be unnecessary before performing cardioversion of these patients.

We remind that a score of "0" when using the CHADS₂ score has been associated with a stroke rate of 1.9% / year [2]. This cannot be truly considered as low risk. Moreover, our group has recently published a paper, where a 4.2% prevalence of left atrial appendage thrombus was observed in patients with atrial fibrillation and CHADS₂ = 0. Other changes associated with thromboembolic risk, like dense spontaneous echocardiographic contrast and low flow velocities (<20cm/s) in the left atrial appendage were also found in these patients (in 4.2% and 10.2%, respectively) [3]. Therefore we think that caution should be exerted regarding the findings by Decker and colleagues [1]. We should continue to strictly adhere to the guidelines [4, 5] and perform transesophageal echocardiography (TEE) before cardioverting a subject not undergoing oral anticoagulation that presents with atrial fibrillation lasting for more than 48 hours. In our paper, we have also found that CHA₂DS₂VASc subjects with a 0 score had no relevant changes on TEE. This fits well in the

data presented by Lip et al. where these patients were truly low risk for stroke (0%) [6]. Still, the question regarding whether these patients should undergo transesophageal echocardiography still remains open and needs to be clarified by further larger scale studies.

References

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