ROLE OF CHA2DS2-VASC SCHEMA IN PREDICTION OF THROMBOEMBOLIC RISK IN PATIENT UNDERGOING TRANSESOPHAGEAL ECHO GUIDED CARDIOVERSION

ACC Poster Contributions
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Background: The CHA2DS2-VASc schema is a new scoring system that was developed to improve the risk prediction of stroke in patients with atrial fibrillation. However, the effectiveness of this scoring system in assessing thromboembolic risk, prior to transesophageal (TEE) guided direct current cardioversion (DCC) is not yet established.

Method: 849 unique patients from January 2006 to December 2008 (mean age 66 ± 13 yrs, M: F ratio 2:1) in which TEE was performed for pre-DCC screening, were analyzed. Left atrial/ left atrial appendage (LA/LAA) thrombogenic milieu [Spontaneous echo contrast (SEC), sludge and thrombus] was investigated. The results were correlated with the CHA2DS2-VASc (Congestive Heart failure, Hypertension, Age≥75 [2 points], Diabetes, Stroke/TIA [2 points], Vascular disease, Age 65-74, Sex category/Female gender) score findings.

Results: The CHA2DS2-VASc score of 0, 1, 2, 3, 4, 5 and 6-9 were present in 6%, 13%, 15%, 20%, 19%, 16% and 11% of the patients, respectively. The prevalence of LA/LAA thrombus/sludge increased with rising CHA2DS2-VASc score [Score 0 (0%), 1 (4%), 2(15%), 3(41%), 4-9 (50%), p< 0.005]. In the multivariate model, ejection fraction < 25 % were significantly associated with LA/LAA sludge/thrombus.

Conclusions: CHA2DS2-VASc schema is a good predictor of LA/LAA thrombus and sludge in patient with atrial fibrillation prior TEE guided DCC. In addition, TEE may not be necessary in patients with score of 0 prior to DCC.