P917

Additional value of atrial parameters evaluated by echocardiography on the scales of cardioembolic risk in atrial fibrillation

Moral S.[1]; Panaro A.[2]; Ballesteros E.[3]; Morales M.[1]; Frigola JM.[1]; Robles R.[1]; Albert X.[1]; Trucco E.[1]; Aboal J.[1]; Vilardell P.[1]; Palet J.[2]; Carballo J.[2]; Brugada R.[1]; Evangelista A.[4]

[1]Hospital Universitari Doctor Josep Trueta, Barcelona, Spain
[2]Centre Cardiovascular Sant Jordi / Hospital el Pilar, Cardiology, Barcelona, Spain
[3]Centre d"Atenció Primaria Pare Claret, ICS., Radiology Department, Barcelona, Spain
[4]University Hospital Vall d"Hebron, Barcelona, Spain

Background: Atrial morphological parameters may influence the presence of atrial thrombus, a factor strongly associated with cardiac thromboembolism, independently of those included in the CHA2DS2-VASc risk estimation scale in patients with a history of atrial fibrillation (AF). The aim of our study was to evaluate this possible association by transthoracic echocardiography (TTE).

Methods: Prospective multicenter study including 401 patients with a history of AF, in which a TTE and a transesophageal echocardiogram (TEE) were performed for evaluation of atrial thrombus between 2016-2019. The parameters included in the CHA2DS2-VASc scale, the heart rhythm at the time of the study and the anticoagulant treatment performed, as well as the atrial morphological parameters were collected.

Results: Twenty-three patients (6%) presented with atrial thrombus in TEE. The left atrial area (28 ± 6cm2 vs 33 ± 6cm2; p < 0.001), the presence of AF during the study (83% vs 17%; p = 0.002) and CHA2DS2-VASc (1.7 ± 1.5cm2 vs 3.0 ± 1.3cm2; p < 0.001) were associated with the presence of atrial thrombus. The left atrial area was a diagnostic predictor of atrial thrombus (area under the curve = 73%; p = 0.001): a value >30cm2 presented a sensitivity of 79% and a specificity of 70% to detect its presence. Logistic regression analysis, including heart rhythm during the study and anticoagulant treatment, showed that CHA2DS2-VASc (OR = 1.5; CI95%=1.1-1.9; p = 0.003) and left atrial area >30cm2 (OR = 5.2;CI 95% =1.7-16.0; p = 0.004) were independent predictors of atrial thrombus presence.

Conclusions: The left atrial area is associated with the presence of atrial thrombus in patients with a history of AF independently of the CHA2DS2-VASc scale, heart rhythm during the study, and anticoagulant treatment. This parameter should be evaluated to be included in the cardioembolic risk scales.