Abstract: P2463

Advanced interatrial block is a surrogate for left atrial strain reduction which predicts atrial fibrillation and stroke.

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Background: The association between advanced interatrial block (aIAB) and atrial fibrillation (AF) is known as "Bayes' Syndrome". There is little information on the prognostic role that new speckle tracking echocardiographic (STE) imaging techniques could play in it.

Purpose: We have examined the relationship between left atrial (LA) STE and the prediction of new-onset AF and/or stroke in IAB patients.

Methods: Observational study with 98 outpatients: 55 (56.2%) controls with normal ECG, 21 (21.4%) with partial IAB (pIAB) and 22 (22.4%) with aIAB. The end-point was new-onset AF, ischemic stroke, and the composite of both.

Results: During a mean follow-up of 1.9 (1.7-2.3) years, 20 patients presented the end-point (18 new-onset AF and 2 strokes): 8 (14.5%) in the control group, 3 (14.3%) in pIAB and 9 (40.9%) in aIAB, p = 0.03. In multivariable comprehensive Cox regression analyses, a decrease of strain rate during the booster pump function phase (SRa) was the only variable independently related to the appearance in the evolution of the end-point, in the first model (age, P wave duration and SRa): HR 19.9 (95% CI, 3.12-127.5), p = 0.002 and in the second (age, presence of aIAB and SRa): HR 24.2 (95% CI, 3.15-185.4), p = 0.002.

Conclusions: In patients with IAB, a decrease in absolute value of LA SRa with STE predicts new-onset AF and ischemic stroke.