9.4 - Treatment

# Major impact of left auricular cardiopathy when associated to supraventricular ectopy?

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**INTRODUCTION:** Left atrial cardiopathy (LAC) is an independent predictor of atrial fibrillation (FA) and embolic stroke. It is more frequent in patients with embolic stroke of undetermined source (ESUS) than in non-embolic strokes. The current definition doesn't include supraventricular ectopy.

AIM

The aim of this work was to describe the importance of LAC in ESUS and to study the impact of adding the number of atrial premature complexes per hour (APC/h) to LAC criteria.

**METHODS:** Retrospective analysis of 123 ESUS patients (pts) admitted to Neurology service from 2014 to 2019.

LAC was defined according to two criteria (LAC2: severe left atrial enlargement or p-wave terminal force in lead V1 [PTFV1] >5000 μV*ms) or 3 criteria (LAC3: additionally, >30 APC/h).

Survival analysis for the occurrence of AF, stroke recurrence and death according to LAC2 and LAC3. Diagnostic test performance analysis for each criterion with ROC curves.

**RESULTS:** 43 (35%) of the ESUS pts had LAC2.

Pts with LAC2 (35.0%) were older (p = 0.007), more frequently had hypertension (p = 0.004) and lower total cholesterol levels (p = 0.044) than patients without LAC2.

The incidence of AF (median follow-up 21 months, IQR = 9-35) was higher both in LAC2 (p = 0.038) and LAC3 (p = 0.001).

There were no differences in stroke recurrence or death between patients with or without LAC2 or 3.

Among the 3 atrial dysfunction criteria included in LAC3 definition, the number of APC/h was associated with a higher area under the curve for the occurrence of AF (AUC = 0.822).

Cox regression revealed that PTFV1 > 5000 μV·ms (HR = 5.12, IC95%=1.28-20.56, p = 0.021) and >30 APC/h (HR = 13.02, IC95%=3.57-47.56) were independent predictors of AF.

In addition, the single predictor of the composite endpoint (occurrence of AF, stroke recurrence and death) was >30 APC/h (HR = 5.2, p < 0,001).

**CONCLUSION:** In ESUS pts, the subgroup with LAC2 had different clinical characteristics and a higher AF incidence.

APC/h were also independently associated with AF incidence and had better diagnostic test performance than the other criteria.

In sum, APC/h inclusion as a diagnostic criterion for LAC should be considered and may help in a better therapeutic approach.