Poster Session

## P1441

# Predictors of systemic embolisms in a large cohort of left ventricular noncompaction patients

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## **BACKGROUND**

Left ventricular noncompaction (LVNC) is associated with an increased risk of systemic embolisms (SE). However, incidence and risk factors are not well established.

#### **PURPOSE**

To evaluate the rate of SE in LVNC and describe risk factors.

#### METHODS

LNVC patients were included in a multicentric registry. Those with SE were considered for the analysis.

## RESULTS

514 patients with LVNC from 10 Spanish centres were recruited from 2000 to 2018. During a median follow-up of 4.2 years (IQR 1.9-7.1), 23 patients (4.5%) had a SE. Patients with SE (Table 1) were older at diagnosis, with no differences in gender and had similar cardiovascular risk factors. They were more frequently under oral anticoagulation (OAC). Besides, they had a more reduced LVEF, and more dilated LV and left atrium (LA). Late gadolinium enhancement (LGE) was more frequent, altogether suggesting a more severe phenotype.

Patients with SE had non-significantly higher rates of hospitalization for heart failure (33% Vs 24%, p = 0.31) and atrial fibrillation (35% Vs 19%, p = 0.10). In multivariate analysis, only LA diameter was an independent predictor of SE (OR 1.04, p = 0.04). A LA diameter > 45 mm had an independent 3 fold increased risk of SE (OR 3.04, p = 0.02) (Image 1).

### CONCLUSIONS

LVNC carries a moderate mid-term risk of SE, which appears to be irrespective of atrial fibrillation and associated with age, LV dilatation and systolic dysfunction and mainly LA dilatation. This subgroup of patients should be considered for oral anticoagulation in primary prevention.

Table 1

	Systemic embolisms $(n = 23)$	No systemic embolisms $(n = 491)$	p
Men, n (%)	15 (65)	289 (56)	0.52
Median age at diagnosis (IQR) - yr	60 (48-76)	48 (30-64)	0.02
Median follow up (IQR) - yr	5.9 (3.1-7.8)	4.2 (1.8-7.1)	0.18
OAC, n (%)	19 (83)	118 (24)	0.01
LVEF (SD) - %	37 (15)	48 (17)	0.01
LVEDD (SD) - mm	58 (11)	54 (10)	0.04
LA diameter (SD) - mm	46 (9)	39 (9)	0.01

Characteristics of patients with and without systemic embolisms Abstract P1441 Figure. Image 1

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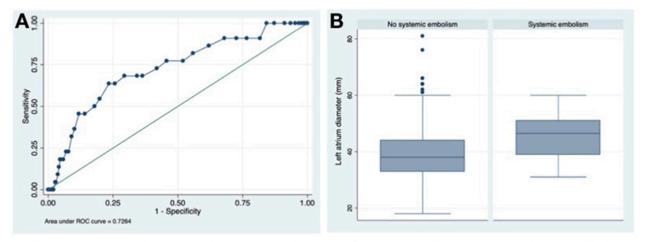


Image 1. A) Receiver operator curve for the predictive value of left atrium diameter for systemic embolisms (AUC 0.73). B) Box plot demonstrates different left atrium diameter values in patients with and without systemic embolisms.