

one case of atrioventricular block of first degree, two cases of ventricular extrasystolies bigémínées. The echocardiographies are normal except for a case of diastolic dysfunction. The standard therapeutic SST in 5 patients.

The TSM MIBI such as NMR is a good diagnostic examination and scalable for a proper and early treatment. Available in our institution, it enabled us to diagnose 19% of cases of myocardial sarcoid lesions.

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Prognosis value of QRS duration in patients with heart disease and syncope

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Background: Patients with heart disease (HD) and syncope are at high risk of sudden death. Implantable defibrillator (ICD) is recommended in patients with unexplained syncope and left ventricular ejection fraction (LVEF) < 30% or in patients with LVEF >30% and inducible ventricular tachycardia (VT).

Aim: The purpose of the study was to evaluate the prognostic significance of QRS duration measurement in patients with HD and syncope.

Methods: 528 patients, 89 women and 439 men, mean age 65±12 years, were admitted for syncope. All of them had an HD, either ischemic HD (n=382) or left ventricular impairment of other origin (n=115). Holter monitoring, electrophysiological study and head-up tilt test were systematic. Filtered QRS duration was measured at signal-averaged ECG (Fidelity 2000 of Cardionics) (filter 40 Hz, noise level < 0.6 μV). The patients were followed from 3 months up to 18 years (mean 5 ±4 years).

Results: Mean LVEF was 40±14%. Cardiac defibrillator was implanted in 73 patients. 30 patients died suddenly, 75 died from heart failure or were transplanted (n=9). Remaining patients are alive or died from non cardiac death (n= 8). The last group differed from group who died suddenly by an higher LVEF (42±14% vs 32±13) (p< 0.00001) and a shorter QRS duration (125±34 msec vs 144±31) (p< 0.026). They tended to be older (65±12 years vs 61±13) (p<0.09). The alive group differed also from group who died from heart failure by an higher LVEF (42±14% vs 33±13) (p< 0.001) and a shorter QRS duration (125±34 msec vs 141±31) (p< 0.0033). They tended to be younger (65±12 years

vs 67±10) (p<0.08). Patients who died suddenly and those who died from heart failure had similar LVEF and QRS duration but patients who died suddenly are younger than patients who died from heart failure (p<0.01).

Conclusions: Low LVEF is a classical risk of worse prognosis in patients with HD and syncope. A longer QRS duration is also a noninvasive and simple test of worse prognosis. A QRS duration more than 125 msec had a sensitivity of 73% and a specificity of 64% to predict cardiac mortality.

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Associations between clinical characteristics and NT-proBNP in heart failure with preserved ejection fraction: data from the KaRen study

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Purpose: In heart failure with reduced ejection fraction, N-terminal pro brain natriuretic peptide (NT-proBNP) is useful for diagnosis and prognosis, and is higher with older age, female gender, renal failure and lower in obesity. In heart failure with preserved ejection fraction (HFPEF), NT-proBNP is also useful for diagnosis and prognosis, but clinical correlates are less well established.

Methods: KaRen is a multicenter prospective registry of HFPEF. Inclusion criteria are acute presentation with Framingham symptoms and signs of heart failure together with NT-proBNP ≥300 ng/L and LVEF ≥45%. The association between clinical characteristics and log NT-proBNP was assessed with uni- and multivariate linear regression, with backward step-wise selection based on p<0.05.

Results: We studied 400 patients, mean (SD) age 77 (9) years, 56% women. The table lists variables independently associated with log NT-proBNP, their baseline values and Beta coefficients.

Conclusions: In HFPEF, NT-proBNP is determined mainly by NYHA class and clinical signs of heart failure. Clinical signs are important predictor of severity of disease. As in reduced EF, NT-proBNP is inversely associated with BMI and GFR, but unlike in reduced ejection fraction, it is not associated with age or gender.

Table – Independent associations with log NT-proBNP

Variable	BMI	GFR	NYHA I / II / III / IV	pulmonary rates	peripheral edema	hepatomegaly	pleural effusion
Mean (SD) or n (of 400)	29±6	63±28	2 / 28 / 159 / 211	304	277	21	92
Beta	-0.39±0.01	-0.009±0.002	0.22±0.07	0.22±0.10	0.27±0.09	0.45±0.19	0.25±0.10
p	< 0.0001	<0.0001	0.001	0.032	0.004	0.02	0.01

BMI, body mass index; GFR, glomerular filtration rate; NYHA, New York Heart Association Class