Medical journey and short-term outcome of acute heart failure: the OFICA study

Damien Logeart (1), Pascal Degroote (2), Jean-Jacques Dujardin (3), Guillaume Jordeau (4), Yves Jullièrie (5), Geneviève Mulak (6), Luc Hittinger (7), Marie-France Seronde (8), Jean-Michel Tartière (9), Jean-Michel Tartière (9), Jean-Noel Trochu (10)

(1) CHU Lariboisière, Cardiologie, Paris, France – (2) CHU Lille, Cardiologie, Lille, France – (3) Centre hospitalier de Douai, Cardiologie, Douai, France – (4) CHU Bichat, Cardiologie, Paris, France – (5) CHU Nancy, Cardiologie, Nancy, France – (6) Société Française de cardiological, Paris, France – (7) CHU Henri-Mondor, Créteil, France – (8) Hôpital Jean Minjoz, Besançon, France – (9) CHU Toulon-La Seyne Sur Mer, Toulon, France – (10) CHU Nantes, Institut du Thorax, Nantes, France

Aims: OFICA is a nationwide, observational study of characteristics, management and outcome of acute heart failure (AHF) during hospitalization as well as after discharge.

Methods: A single-day snapshot was performed on 12 March 2009 in French public and private hospitals. Investigators were encouraged to include all hospitalized patients with a diagnosis of AHF, irrespective of the time of admission. Planned hospitalizations and cardiac surgery setting were excluded. Relevant data was recorded about medical journeys and outcome was assessed after discharge.

Results: The survey included 1817 patients (77±13y, 45% females) in 170 centers from cardiology wards (58%) as well as intensive care units (41%) of left ventricle (LV) ejection encountered in clinical practice.

Objective: To determine the prevalence, predictors, and prognostic value of RV function measured by the tricuspid annular plane systolic excursion (TAPSE) in patients with symptoms suggesting CHF.

Background: Few reports exist of the prognostic significance of right ventricular function (RV) variables in chronic heart failure (CHF) and the broad range of left ventricle (LV) ejection encountered in clinical practice.

Methods: Analysis of referrals for diagnosis and management of CHF to a specialist clinic serving a local community.

Results: Of 1547 patients studied, mean (SD) age was 71±11 years, 48% were women, mean LV ejection fraction (LVEF) was 47±16% and median (IQR) TAPSE was 18.5mm (14.0-22.7). LVEF was >45% in 47% and 67% were classified as heart failure. During a median (IQR) follow-up of 63 (41-75) months, overall mortality was 34%. In multivariable analysis, increasing age, NT-proBNP, NYHA class, atrial fibrillation, right atria volume, systolic pulmonary artery pressure (sPAP), lower TAPSE, lower diastolic blood pressure (DBP), lower haemoglobin, diagnosis of COPD, and digoxin and betablocker treatments were all associated with an adverse prognosis but not HF class. A receiver operator curve analysis investigating the relationship between TAPSE and prognosis showed an area under the curve of 0.69 (95%CI (0.64-0.74); p=0.0001), with a value of 15.9mm of TAPSE best able to predict outcome.

Conclusions: In patients with symptoms of chronic heart failure, TAPSE, but not variables related to LV systolic function, was an independent predictor of outcome. This simple measure could be used to stratify patient risk in routine clinical practice.

Prevalence, determinant and prognostic value of TAPSE in an outpatient CHF clinic.

Thibaud Danny (1), Anna Bennet (2), Kevin Goode (2), Jean-Luc Dubois-Rande (1), Luc Hittinger (1), John Gf Cleinard (2), Andrew Clark (2)

(1) CHU Henri Mondor, Fédération de Cardiologie, Créteil, France – (2) NHS trust East Yorkshire, Academic Cardiology, Cottingham, Royaume-Uni

Background: Few reports exist of the prognostic significance of right ventricular function (RV) variables in chronic heart failure (CHF) and the broad range of left ventricle (LV) dysfunction might occur in patients with Friedreich ataxia (FA) who presented with troponine I elevation. Echocardiography showed moderate global left ventricular dysfunction in 6 cases and segmental wall motion abnormalities in 18. MRI performed early after admission never showed myocardial first-pass perfusion defect after gadolinium injection but subepicardial delayed-enhancement (DE) areas in 29 cases mainly located in lateral segments. Three months after the acute episode, re-evaluation including cardiac MRI could help to identify patients at risk for unfavourable evolution. The use of MRI has rarely been investigated in AM prognosis stratification.

Methods and results: We report a prospective series of 31 consecutive patients hospitalized for AM: 28 men and 3 women, 33 years old on average, without sign of heart failure. All patients presented with troponine I elevation. Echocardiography showed moderate global left ventricular dysfunction in 6 cases and segmental wall motion abnormalities in 18. MRI performed early after admission never showed myocardial first-pass perfusion defect after gadolinium injection but subepicardial delayed-enhancement (DE) areas in 29 cases mainly located in lateral segments. Three months after the acute episode, no patient was symptomatic. Echocardiography, Holter monitoring and biological check-up were normal. MRI showed the persistence of DE in 17 cases without wall motion abnormality in the affected segments. The presence of these latter abnormalities led to effect an annually clinical examination with an ECG. One patient was lost at further follow-up. Among the other 16 patients, none was symptomatic or displayed ECG abnormalities at 3-year mean follow-up.

Conclusions: At the time of admission, the absence of early perfusion defect at cardiac MRI after gadolinium injection and the subepicardial localization of the DE constitute reliable criteria in favour of AM diagnosis, allowing to rule out an acute coronary syndrome. During the follow-up the persistence of a DE does not allow any prognosis stratification. In our series after a mean 3-year follow-up, it is not associated with any clinical and paraclinical disorder.

105

Left ventricular twist in patients with Friedreich Ataxia and normal left ventricular ejection fraction and mass

Chantal Dedobbeleer (1), Massimo Pandolfo (2), Philippe Unger (1)

(1) Hôpital Erasme, Cardiologie, Bruxelles, Belgique – (2) Hôpital Erasme, Neurologie, Bruxelles, Belgique

Background: Iron deposits, diffuse fibrosis and focal necrosis are found in Friedreich’s cardiomyopathy. We hypothesized that subclinical left ventricular (LV) dysfunction might occur in patients with Friedreich ataxia (FA) who present with normal LV ejection fraction (LVEF) and mass.