5903 | BEDSIDE
Is Cardiac Resynchronisation Therapy (CRT) feasible, safe and beneficial in the very elderly?

B. Olechowski, R. Sandz, D. Zacharsh, N. P. Andrews, R. Balasubramaniam, M. Sopher, J. Paisley, P. R. Kalra.
Royal Bournemouth Hospital, Bournemouth, United Kingdom; 2 Portsmouth Hospitals NHS Trust, Portsmouth, United Kingdom

Purpose: Chronic heart failure (CHF) predominantly affects the elderly. In the UK, the mean age of patients hospitalised with CHF is 78 yrs. Despite proven benefit of CRT, the mean age of UK patients undergoing CRT-P is 71 yrs. We evaluated whether CRT is feasible/safe and associated with improved symptoms in octogenarians.

Methods: Consecutive patients undergoing CRT implantation at 2 UK centres (2009-11). Patients grouped according to age: < 80 yrs and ≥ 80 yrs. Baseline demographics, complications and outcomes were compared between groups.

Results: A total of 439 patients were evaluated of whom 26 yrs were aged ≥ 80 yrs. See table. Octogenarians more often received CRT-P. Upgrade from pacemaker was common in both groups (16% <80yrs vs 22%, p=ns). Major co-morbidities were similarly common in both groups (overall diabetes 25%, AF 29%, hyperten-
sion 45%). More patients age ≥ 80 yrs had significant chronic kidney disease (CKD, eGFR < 45 mL/min/1.73m², 44% vs 22, p=0.01). Overall complication rates were similar in both groups (p=0.01). In Cox regression analysis, male gender demonstrated significant symptomatic benefit. One year mortality rates were almost 4 fold higher in the very elderly (13.9% vs 3.7%, p<0.01).

Conclusions: CRT appears to be safe in the very elderly despite extensive co-morbidity, and in particular frequent severe CKD. Symptomatic improvement is meaningful and similar to a younger population (mean age 15 yrs lower). Mortality at 1 year was higher in those aged ≥ 80 yrs. Strategies to increase the appropriate identification of elderly patients with CHF for CRT are required.

NEW MANAGEMENT STRATEGIES IN NON-STEMI

5902 | BEDSIDE
Exercise echocardiography and risk of all-cause mortality in patients referred to a chest pain unit for acute chest pain, nondiagnostic electrocardiograms and negative troponin I levels

A. Bouzas Mosquera, J. Peterso, F.J. Brouillon Molanes, N. Alvarez Garcia, D. Martinez Ruiz, J.C. Yanez Wonenburger, M.G. Garcia Guimaraes, A. Barrio Rodriguez, J.M. Vazquez Rodriguez, A. Castro-Beiras. Hospital Universitario A Coruña, A Coruña, Spain

Purpose: To determine the predictors of all-cause mortality in patients with acute chest pain and negative troponin I levels, and underwent exercise echocardiography within 24 hours of the chest pain episode. An abnormal exercise echocardiogram was defined as a peak wall motion score index (pWMSI) ≥1. The endpoint was all-cause mortality.

Results: Mean age was 63±12.3 years, and 1068 patients were male. During an average follow-up of 2.35±1.50 years, 55 patients died. The 5-year mortality rate was 4.1% in patients with a normal exercise echocardiogram vs. 13.1% in those who underwent exercise echocardiography (p<0.001). In Cox regression analysis, male gender (HR 2.25, 95% CI 1.13-4.48), age (HR 1.06, 95% CI 1.03-1.09), exercise workload in METs (HR 0.85, 95% CI 0.76-0.95) and pWMSI (HR 2.67, 95% CI 1.38-5.14) remained predictors of all-cause mortality.

Conclusions: Exercise echocardiography provides significant prognostic information for the prediction of all-cause mortality in patients with acute chest pain, nondiagnostic resting electrocardiograms and negative troponin results.

5903 | BEDSIDE
The outcome of patients with troponin T with and without an acute coronary syndrome

A. Torabi, A.L. Clark, P. Pellicieri, I. Shoabi, T. Mabote, R. Antony, A.S. Rigby, P.B. Atkin, B. Dicken, J.G.F. Cledan. Hull York Medical School, University of Hull, Department of cardiology, Hull, United Kingdom

Background: Troponin T (Tnt) measurement is important for diagnostic triage in acute coronary syndrome (ACS). The outcome of patients with a Tnt request who do not have ACS has rarely been reported.

Aims and methods: To report the relationship between clinical ACS, Tnt testing and the proportion with and without ACS who have an Tnt request. The Hull and East Yorkshire Hospitals serve a population of approximately 560,000. All Tnt tests are done in a single laboratory. Patients admitted with ACS were identified prospectively by trained nurses from 1st January to 31st December 2005. Patients with a death or discharge code of MI were also identified by the hospital information department and from the Myocardial Infarction National Audit Project (MINAP) records. Values of Tnt < 0.03 ng/L were considered positive. High-sensitivity Tnt was not introduced until after December 2010. WHO criteria for anaemia were used (male <13 g/dL, female <12 g/dL).

Results: Of 5522 patients who were tested,1679 had a raised Tnt and of these 856 were and 823 were not reported to have ACS. Of 3843 patients with Tnt <0.03 g/L, 669 were and 3174 were not reported to have ACS.

Table 1

| Parameter | Age ≥ 80 yrs | p | Age < 80 yrs | p |
|-----------|-------------|---|-------------|---|
| Age (yrs, mean ± SD) | 68 ± 18 | 68 ± 12 | <0.001 | 80 ± 18 | 80 ± 12 | <0.001 |
| Male (%) | 72 | 77 | 0.399 | 72 | 77 | 0.309 |
| Ischaemic aetiology (%) | 54 | 69 | 0.005 | 81 | 92 | 0.004 |
| CRT-D (%) | 51 | 14 | <0.01 | 57 | 16 | <0.01 |
| eGFR (mL/min, mean ± SD) | 57 ± 17 | 46 ± 19 | <0.01 | 68 ± 17 | 57 ± 19 | <0.01 |
| Pneumonia (median, mean ± SD) | 1.2 | 4.3 | 0.043 | 1.2 | 4.3 | 0.043 |
| Lead displacement (%) | 8.6 | 7.0 | 0.571 | 8.6 | 7.0 | 0.571 |
| Infection with system extracts (%) | 3.1 | 4.4 | 0.447 | 3.1 | 4.4 | 0.447 |
| Improvement ≥ 1 NYHA class (%) | 69 | 61 | 0.234 | 69 | 61 | 0.234 |

Conclusions: Amongst patients with ACS, those with a negative Tnt have a much better prognosis than those with a positive test. However, patients who have a raised Tnt but are reported not to have ACS have an even worse outcome. This may partly reflect the age and underlying disease in this patient group but could also reflect sub-optimal management of cardiovascular risk. All patients with a raised Tnt should be carefully assessed, especially when a diagnosis of ACS has been rejected.

5904 | BEDSIDE
How do we treat patients with type 2 (secondary) myocardial infarction in clinical practice? Data from the SWEDEHEART registry

T. Baror, K. Hambraus, D. Erlinge, J. Jemborg, B. Lindahl. 1Uppsala Clinical Research Center, Uppsala University, Department of Medical Sciences, Uppsala, Sweden; 2Lund University, Skane University Hospital, Department of Cardiology, Lund, Sweden; 3Karolinska Institute, Karolinska University Hospital, Huddinge, Department of Cardiology, Stockholm, Sweden

Aim: Evidence based guide-line recommendations on how to treat patients with type 2 AMI are lacking and there is limited knowledge of how these patients are treated in current clinical practice. We therefore compared the in-hospital treatment and medications at discharge in a large cohort of patients with type 2 (secondary) myocardial infarction (AMI).

Methods: A total of 1646 patients were referred to our chest pain unit for acute chest pain, nondiagnostic resting electrocardiograms and negative troponin I levels, and underwent exercise echocardiography within 24 hours of the chest pain episode. An abnormal exercise echocardiogram was defined as a peak wall motion score index (pWMSI) ≥1. The endpoint was all-cause mortality.

Results: Mean age was 63±12.3 years, and 1068 patients were male. During an average follow-up of 2.35±1.50 years, 55 patients died. The 5-year mortality rate was 4.1% in patients with a normal exercise echocardiogram vs. 13.1% in those who underwent exercise echocardiography (p<0.001). In Cox regression analysis, male gender (HR 2.25, 95% CI 1.13-4.48), age (HR 1.06, 95% CI 1.03-1.09), exercise workload in METs (HR 0.85, 95% CI 0.76-0.95) and pWMSI (HR 2.67, 95% CI 1.38-5.14) remained predictors of all-cause mortality.

Conclusions: Exercise echocardiography provides significant prognostic information for the prediction of all-cause mortality in patients with acute chest pain, nondiagnostic resting electrocardiograms and negative troponin results.