bipole but was found with another. Furthermore, differences in whether phrenic nerve stimulation (PNS) occurred were seen when using different LV lead bipoles within the same branch of the CS.
Conclusion Our data suggest that only a small difference in AHR is seen when pacing along the same branch of the CS compared to pacing within different branches of the CS within the same patient. This means that although the site of LV lead placement is important, a proximal or distal position within a CS branch is much less important than choosing the right branch in terms of acute haemodynamic response. A choice of bipoles on the LV lead may mean, however, that problems with capture thresholds or PNS can be overcome without the need to reposition the LV lead.

154 PATIENTS RECEIVING STANDARD PACEMAKER GENERATOR REPLACEMENTS FREQUENTLY HAVE IMPAIRED LEFT VENTRICULAR FUNCTION AND EXERCISE INTOLERANCE, RELATED TO THE PERCENTAGE OF RIGHT VENTRICULAR PACING

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[1]G A Begg, [1]J Gierula, [1]Z L Waldron, [2]K K Witte. *[1]Leeds General Infirmary, Leeds, UK; [2]University of Leeds, Leeds, UK*

Background Right ventricular (RV) pacing is an accepted treatment for symptomatic bradycardia. However, long-term RV pacing is increasingly recognised to be detrimental to left ventricular (LV) systolic function. We wanted to establish the prevalence, associated features and predictors of LV systolic dysfunction (LVSD) and outcome in a contemporary group of patients with long–term RV pacemakers.
Methods We prospectively recruited consecutive patients listed for PGR between 2008 and 2010 at Leeds General Infirmary. We performed echocardiography, exercise testing and recorded indications for pacing, pacing variables and duration of pacing, co-morbidities, current medication and renal function.
Results Of 399 PGR procedures 342 subjects (86%), 184 men, attended. Non-attendees had similar pacing variables and were of similar age as attendees. Mean age (SE) was 76 (1), and mean duration of pacing was 10 (0.3) years. Comorbidites were common: diabetes mellitus in 11%, previous myocardial infarction in 15%, previous cardiac surgery in 26% and atrial fibrillation (AF) in 26%. Medical therapy included β-blockers in 60% and ACE inhibitors in 70%. Dual chamber devices were implanted in 77% (45% of all patients had rate responsive (RR) pacing programmed). Mean percentage of ventricular pacing (%VP) was 61 (2)%. Mean left ventricular ejection fraction (LVEF) was 49 (1)%, (44% had an LVEF <50%). Mean peak oxygen uptake (pVo_2) (in 107 subjects) was 17 (1) ml/kg/min and mean creatinine was 108 (3) µmol/l. There was an inverse relationship between LVEF and %VP (0.42; $p<0.0001$), and years since first implanted ($p=0.09$) but there was no effect on LVEF of age, the presence of AF and the pacing mode. In single chamber devices, RR pacing was associated with higher %VP ($p=0.01$), and a trend to worse LVEF ($p=0.09$). These differences were not seen in RR programmed dual chamber devices. There was a negative relationship between pVo_2 and %VP ($r=0.21$; $p<0.03$). Even with a short follow-up period of 16 (0.5) months, 23 (7%) patients are dead. Patients dead at the censor date were older at the time of the assessment ($p<0.005$), had a higher %VP ($p<0.03$) and worse renal function ($p<0.001$), but did not have significantly worse LVEF or pVo_2. The presence of a single chamber device was associated with a poorer outcome ($p<0.002$) despite patients with a single chamber device being of similar age as those with a dual chamber device.
Conclusions Patients receiving standard pacemaker generator replacements frequently have cardiovascular comorbidities, left ventricular dysfunction and impaired pVo_2 and suffer a high mortality rate. In an unselected population of patients with pacemakers, we have established that the amount of RV pacing is related not only to important surrogate measures of outcome such as exercise tolerance and LVEF but also mortality. Whether an aggressive policy of limiting RV pacing in patients at risk reduces mortality is unknown.

155 INCIDENCE SCREENING OF PATIENTS FOLLOWING ST ELEVATION MYOCARDIAL INFARCTION FOR PRIMARY PREVENTION IMPLANTABLE CARDIOVERTER DEFIBRILLATOR (ICD) IMPLANTATION HAS A LOW THERAPEUTIC YIELD

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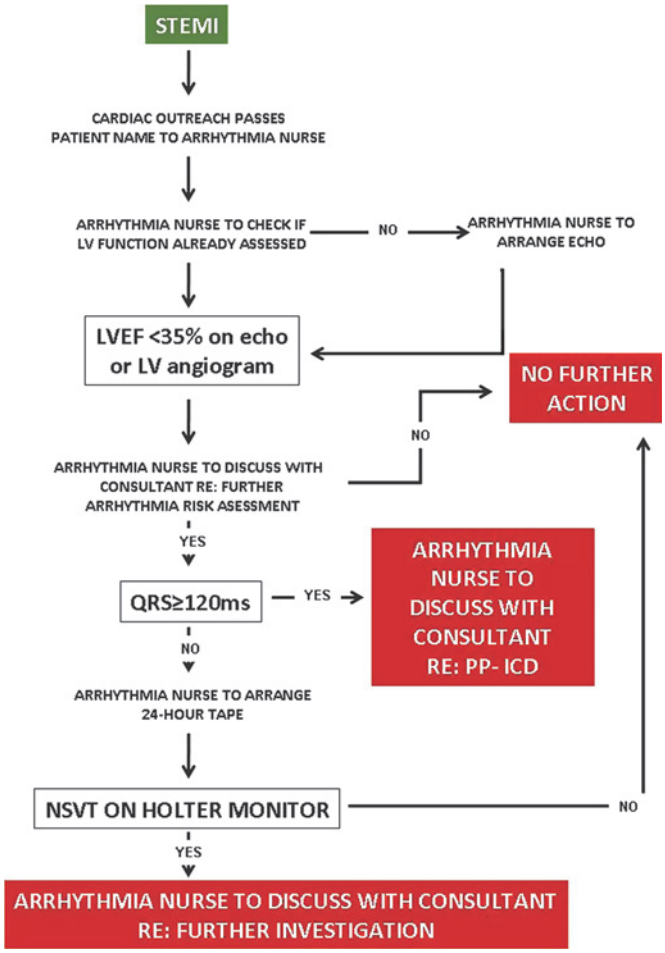
E L Berry, H C Padgett, A J Ahsan, A D Staniforth. *Nottingham University Hospitals NHS Trust, Nottingham, UK*

Introduction The ICD implant rate for the United Kingdom is low compared with the European Union and United States of America. National Institute of Clinical Excellence guidance TAO95 (NICE 2006) makes recommendations for primary prevention ICD implantation. Our study investigated the feasibility of systematically screening patients following an acute ST elevation myocardial infarction (STEMI) to improve local ICD implant rates.
Method A prospective single centre study was performed over 14-months, in tertiary centre setting. All patients with a diagnosis of an acute STEMI had an echocardiogram at 6 weeks to assess left ventricular ejection fraction (LVEF). Patients with impaired LVEF then underwent screening for primary prevention ICD as per TA095 recommendations (Abstract 155 figure 1).



Abstract 155 Figure 1