

Abstract 53 Table 1 Device implantation according to device

Device	PPM	ICD	CRT-P	CRT-D	Device upgrade	Total
Number implanted	705	339	129	246	66	1419
Pneumothorax (%)	13 (1.8)	4 (1.25)	2 (1.6)	0	0	19 (1.3)
Lead displacement						
Patients (%)	31(4.4)	20(5.9) [¶]	2 (1.6)	13 (5.3)	3 (4.5)	68 (4.8)
RA	13* (1.8)	8 (2.3)	0	4 (1.6)	1 (1.5)	26 (1.8)
RV	22 [†] (3.1)	13 (3.8)	0	2 (0.8)	0	37 (2.6)
LV	0	0	2 (1.6)	7 (2.8)	2 (3)	11 (0.8)
Wound problem						
Haematoma (%)	3 (0.4)	1 (0.3)	0	0	0	4 (0.3)
Infection (%)	2 (0.3)	4 [‡] (1.2)	0	1 (0.4)	1 (1.5)	8 (0.6)
Painful pocket (%)	1 (0.1)	2 (0.6)	0	1 (0.4)	0	4 (0.3)
Effusion						
Conservatively managed	4 (0.6)	0	0	0	1 (1.5)	5(0.35)
Tamponade (requiring drain)	1 (0.1)	0	0	0	0	1(0.07)

*One patient had RA lead reposition followed by RA lead replacement

†One patient had RV lead reposition followed by RV lead replacement

‡One patient had both RA and RV lead displacement, both repositioned at the same procedure

§includes 2 post lead revision and 1 post new system post extraction

bradyarrhythmias, loss of pacing function when pacing-dependent or inappropriate defibrillator shocks. There were no device-related deaths or complications requiring ITU level care.

Conclusion Same day discharge appears safe in an unselected population of patients undergoing elective primary implantation of a CRM device at a high-volume cardiothoracic unit. Procedural difficulties, symptoms or signs suggestive of a potential complication should prompt further evaluation, and all patients should undergo device interrogation and chest radiography prior to discharge.

54 MEASURES OF ENDOTHELIAL DYSFUNCTION PREDICT RESPONSE TO CARDIAC RESYNCHRONISATION THERAPY

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Background Cardiac resynchronisation therapy (CRT) improves morbidity and mortality in heart failure (HF). Impaired endothelial function, as measured by flow mediated dilation (FMD) is associated with increased morbidity and mortality in heart failure (HF) and may help to differentiate responders from non-responders.

Methods FMD was measured at baseline and 12 months following CRT. The patient group were 94% male, mean age 69 ± 8 years, New York Heart Association (NYHA) functional class II-IV, QRSd 173 ± 21 ms and had a left ventricular ejection fraction (LVEF) 26 ± 8%.

Results 70% of patients were found to have responded at 12 months. Responders had significant improvements in VO₂ (12.6 ± 1.7 to 14.7 ± 1.5 ml/kg/min, *p* < 0.05), quality of life score (43 ± 23 to 24 ± 22, *p* < 0.01), left ventricular

end diastolic volume (210 ± 125 ml to 173 ± 125 ml, *p* < 0.01), NT-proBNP (2422 ± 829 ml to 1732 ± 976 ml, *p* < 0.01 and 6 min walk distance (379 ± 117 m at baseline to 418 ± 105 m, *p* < 0.05). Baseline FMD in responders was 2.9 ± 1.9% and 7.4 ± 3.73% in non-responders (*p* < 0.05). **Conclusions** This confirms that FMD identifies response to CRT, due to endothelium dependent mechanisms alone.

55 EVALUATION OF POTENTIAL CLINICAL RESPONSE AND CARDIOVASCULAR OUTCOMES PREDICTORS IN A TERTIARY CARDIAC RESYNCHRONISATION THERAPY IMPLANTATION CENTRE

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Background Cardiac Resynchronisation Therapy (CRT) is an effective treatment for dys-synchronous chronic heart failure (CHF), however there is a significant non-response rate. Clinic predictors of response and cardiovascular outcome are often inconsistently reported. The aim of the study was to examine previously reported clinical predictors of response and cardiovascular outcomes in a heterogeneous CHF patients undergoing CRT implantation at a UK tertiary centre.

Methods A retrospective single-centre cohort study of all consecutive CRT implantations (147 (49.0%) CRT-p; 153 (51.0%) CRT-d) performed over 5 years (Jan 2009–Dec 2013). Implants had to meet eligibility criteria; successful implant, follow-up case records availability and clinical response determination. Clinical response was defined by three independent reviewers as a New York Heart Association classification symptom reduction > 1 class or class I maintenance from pre-