

Abstract 128 Figure 1 Survival in \leq median versus $>$ median GLS (median = -13.7%)

mortality in stable HD patients than the standard echocardiographic parameters LVEF and LVMIHt^{2,7}.

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IMPACT OF CARDIOVASCULAR MAGNETIC RESONANCE ON MANAGEMENT AND CLINICAL DECISION-MAKING IN ACUTE HOSPITALISED PATIENTS

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Background Cardiac Magnetic Resonance (CMR) is a valuable tool in the assessment of both ischaemic and non-ischaemic heart disease. The use of CMR in chronic cardiac conditions has already been demonstrated. However, evidence of the impact of CMR on the clinical management on the acute phase of hospital care, is scarce. We sought to evaluate the impact of CMR on diagnosis and clinical decision-making in acute hospitalised patients.

Methods We looked at the 1 year registry data of 2481 consecutive scans (Jan 2014-Dec2014) at a large tertiary cardiothoracic center and identified 283 patients referred for inpatient CMR scan. CMR protocol included short axis and long axis cines, T2 weighted oedema sequences, early and late gadolinium enhancement (LGE) images. Definitions for “significant clinical impact” of CMR were pre-defined and data was collected from clinical records. Categories of significant clinical

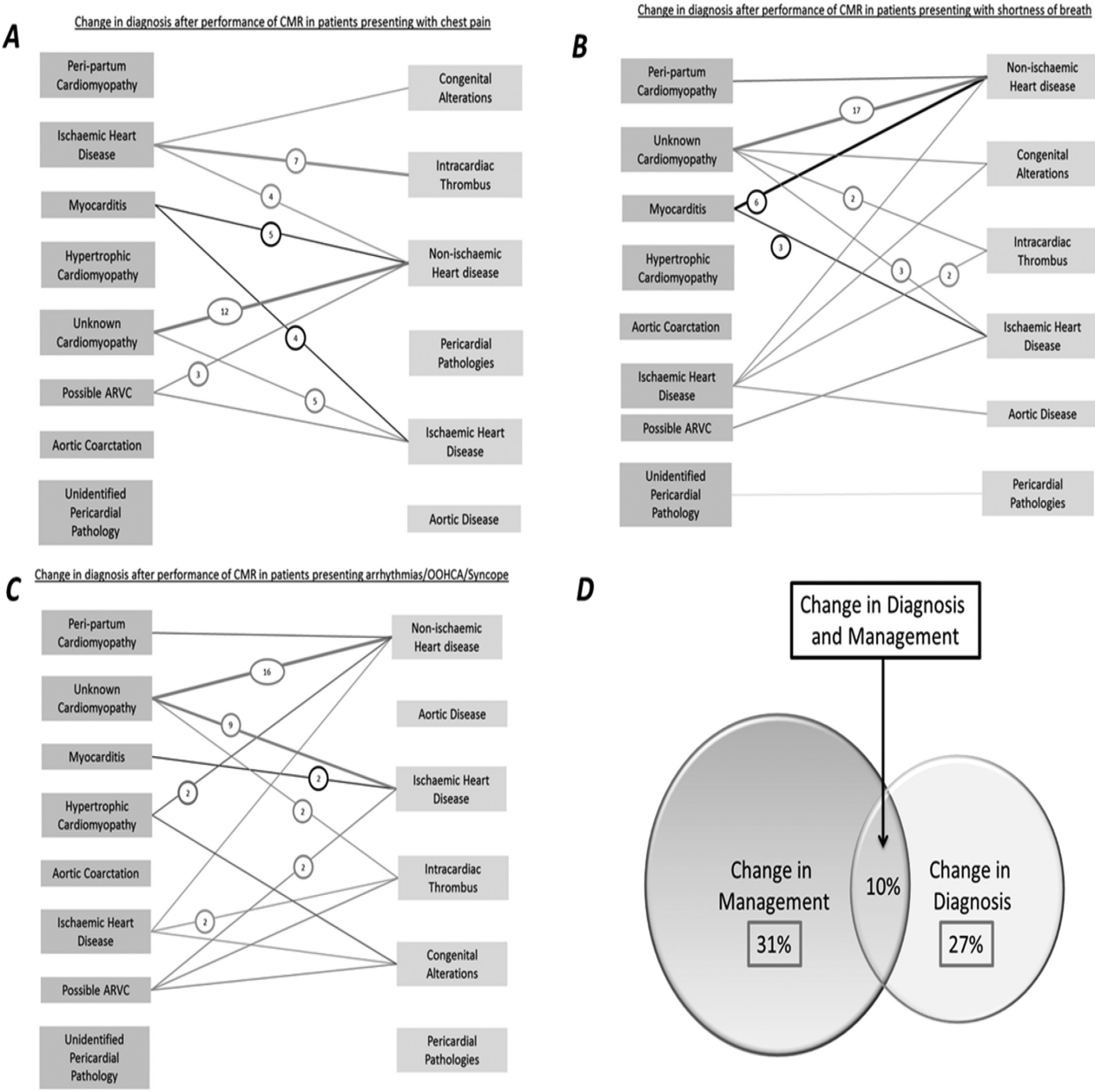
impact included change in pre-CMR diagnosis, influence on hospitalization period, change in medication, as well as influence on invasive medical procedures such as CABG, angiography and ICD implantation.

Results Of the 283 patients, 8 (2.8%) were excluded due to poor image quality and/or incomplete scans, leaving a sample of 275 patients (66% male, mean age 59yrs) with mean ejection fraction of 46%±19.

Overall, CMR had a significant clinical impact on 68% of the patients. This included a completely new diagnosis in 27% of the patients, change in management in 31% and a total of 10% of patients had both a new diagnosis and a change in management (see Figure 2). CMR results led to invasive procedures on 27%, avoided invasive procedures on 16%, and had an influence on hospital discharge on 15% of the patients. 84% of the patients had echocardiography prior to CMR. CMR confirmed the echo diagnosis in 11%, complemented the echo findings by adding significant new information in 41% and changed the diagnosis made on echo in 30% of the cases.

In a multivariable model that included clinical and imaging parameters, age and presence of LGE were the only independent predictor of “significant clinical impact” (LGE p-value. 0.07, OR 2.782, CI 1.328–5.828) (see Figure 1).

Conclusions CMR had a significant clinical impact on both management and diagnosis in 68% of acutely hospitalised patients. The presence of LGE was the best independent predictor of significant clinical impact following CMR.



Abstract 129 Figure 1 (A) Change in diagnosis after CMR in patients with chest pain; (B) Change in diagnosis after CMR in patients with shortness of breath; (C) Change in diagnosis after CMR in patients with syncope, arrhythmias and out of hospital cardiac arrest

130 **AN INNOVATIVE AMBULATORY ECHOCARDIOGRAPHY SERVICE PROVIDES RAPID ACCESS TO TESTS, REDUCES LENGTH OF HOSPITAL STAY AND IMPROVES PATIENT CARE**

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Introduction Demand for urgent Echocardiography in NHS Hospitals is increasing.¹ Ambulatory care unit provides rapid access to investigations and improved quality of patient care in an outpatient setting. We recently introduced Echocardiography service in Ambulatory Emergency Care Unit (AECU) at Northwick Park Hospital for low-risk cardiac patients

Abstract 129 Table 1

	Sig.	Odds Ratio	95% Conf. Interval	
			Lower	Upper
Sex	.486	.766	.361	1.622
Age	.028	1.026	1.003	1.050
Troponin	.469	1.000	1.000	1.000
LVEF	.945	.999	.972	1.027
iEDV	.827	1.001	.989	1.014
RWMA	.053	2.440	.987	6.033
LGE	.007	2.782	1.328	5.828
Oedema	.672	.904	.566	1.444

Variable (s): Sex, Age, Troponin, iEDV, RWMA, LGE, Oedema