

Abstract 2 Table 1 ARVC/D phenocopies identified by CMR

Patients	ARVC/D Phenocopies (n = 12, 9.6%)	
	Ischaemic Heart Disease	Non-ischaemic Heart Disease
Patient A	✓	
Patient B		Congenital absence of pericardium
Patient C		Idiopathic dilated cardiomyopathy
Patient D	✓	
Patient E		Left ventricular non-compaction
Patient F		Arrhythmogenic left ventricular cardiomyopathy
Patient G		Anomalous venous return
Patient H	✓	
Patient I	✓	
Patient L		Atrial septal defect
Patient M		Asymmetric pectus excavatum
Patient N	✓	

3 **ROLE OF CARDIAC MAGNETIC RESONANCE IN NON-TRAUMATIC OUT OF HOSPITAL CARDIAC ARREST SURVIVORS: A MULTI-CENTRE STUDY**

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Background Non-traumatic out of hospital cardiac arrest (OHCA) is the leading cause of death in Europe and USA. Acute coronary syndromes represent the most common aetiology and in 2/3 of patients a culprit lesion can be identified on angiogram. Among patients with unobstructed coronaries, the differential diagnosis remains unclear. Cardiovascular Magnetic Resonance (CMR), with its superior tissue characterisation, can establish differential diagnosis over and above echocardiography.

Methods This retrospective observational study was performed in two tertiary centres on consecutive patients surviving OHCA referred for CMR (October 2009–January 2015). Coronary angiography and echocardiography were performed as part of the diagnostic work-up. A comprehensive CMR protocol (cine, late gadolinium enhancement, T2 weighted STIR imaging or adenosine perfusion) was performed within 6 weeks from index event.

Results We identified 140 patients (109 male, age 56.1 ± 15.7 years) surviving OHCA. 134 patients underwent coronary angiography, with evidence of coronary artery disease (CAD) in

71 (53%). Sixty-three (47%) showed unobstructed coronaries. Among patients with CAD, sixty (85%) had ischaemic cardiomyopathy on CMR. Among patients with unobstructed coronaries, CMR identified a normal scan in 17 (27%), ischaemic cardiomyopathy in 9 (14%), non-ischaemic cardiomyopathy in 27 (43%) (Figure 1), and non-specific findings in 10 (16%). Different underlying cardiomyopathies have been identified by CMR among patients with non-ischaemic cardiomyopathy, as shown in Table 1. Overall, the diagnostic pick-up rate of CMR was 91%.

Conclusion Cardiac MRI identified the underlying diagnosis in the large majority of patients, particularly in those with unobstructed coronaries (pick-up rate 84%), leading to a change in management in all. CMR has therefore a promising role in the clinical work-up of patients surviving OHCA.

Abstract 3 Table 1 CMR findings among patients with non-ischaemic cardiomyopathy

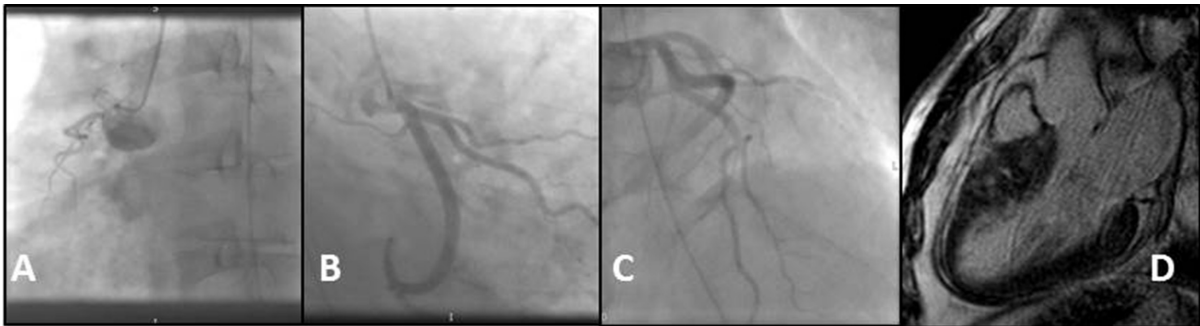
CMR diagnosis	n = 27
Dilated cardiomyopathy	6
Hypertrophic cardiomyopathy	3
Myocarditis	7
Tako-Tsubo cardiomyopathy	2
Mitral valve prolapse	4
Hypertensive heart disease	1
Cardiac amyloid	1
Left ventricular non compaction	1
Biventricular arrhythmogenic cardiomyopathy	1
Heart failure with preserved ejection fraction	1

4 **EXTRACELLULAR VOLUME IN THE INFARCT ZONE IS ASSOCIATED WITH CLINICAL AND MRI MEASURES OF INFARCT SEVERITY IN SURVIVORS OF ACUTE STEMI**

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Background The clinical significance of extracellular volume (ECV) expansion in infarcted myocardium post-STEMI is unknown. Myocardial ECV can be estimated by cardiac magnetic



Abstract 3 Figure 1 Unobstructed coronaries (A, B, C) in a patient with hypertrophic cardiomyopathy with patchy septal myocardial late enhancement (D).