

Meeting abstract

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## 2066 Clefts can be seen in the basal inferior wall of the left ventricle and the interventricular septum in healthy volunteers as well as patients by cardiovascular magnetic resonance

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### Introduction

Indentations or crypts in the inferoseptal wall of the left ventricle have recently been reported in carriers of hypertrophic cardiomyopathy mutations.

### Purpose

To report the visibility of intramyocardial clefts in cardiovascular magnetic resonance (CMR) cine acquisitions in healthy volunteers and four patient groups.

### Methods

CMR was performed in 399 adults for reasons other than the identification of intramyocardial clefts in 120 healthy volunteers, 91 patients with hypertrophic cardiomyopathy (HCM), 44 with systemic hypertension, 104 with repaired Tetralogy of Fallot (rToF) and 40 with relieved pulmonary stenosis (rPS). We reviewed the 2, 3 and 4-chamber long axis steady state free precession cines for discrete V-shaped extensions of blood signal penetrating >50% of the thickness of the compact myocardial wall of the left ventricle in diastole, interpreting these as clefts.

### Results

Single or, more rarely, paired clefts were seen in the basal inferior wall in 2-chamber cines in 7/120 volunteers (6%), 5/91 HCM patients (5.5%), 5/44 hypertensives (11.4%), 1/104 rToF patients (1%) and 9/40 rPS patients (22.5%). Clefts were seen in the interventricular septum

in 24/399 (6%), most of these being adjacent to the insertions of trabecular bands.

### Conclusion

Single or paired clefts are occasionally visible in routine CMR cine acquisitions in the basal inferior wall of the left ventricle and the interventricular septum in healthy volunteers as well as patients. Awareness of this may, in certain cases, avert unwarranted further investigation and anxiety.