

POSTER PRESENTATION

Open Access

# Adenosine cardiac magnetic resonance: follow-up of patients with very high cardiovascular risk

Alberto Esteban-Fernández<sup>1\*</sup>, Isabel Coma-Canella<sup>1</sup>, Gorka Bastarrika-Aleman<sup>2</sup>, Joaquín Barba-Cosials<sup>1</sup>, Nahikari Salterain-Gonzalez<sup>1</sup>, Pedro M Azcárte-Aguero<sup>1,2</sup>

From 18th Annual SCMR Scientific Sessions  
Nice, France. 4-7 February 2015

## Background

Stress cardiac magnetic resonance with adenosine (CMR-A) is a valid test to rule out myocardial ischaemia. We follow-up a cohort of patients with CMR-A due to suspected myocardial ischaemia, considering patients with very high cardiovascular risk.

## Methods

We included all patients with CMR-A between June 2009 and November 2012, considering two groups: those with a very high cardiovascular risk (prior myocardial infarction or/and Diabetes mellitus) and the rest of the patients. The follow-up was done in outpatient cardiology clinic or by

**Table 1 Characteristics of the patients with CMR-A to rule out myocardial ischaemia considering cardiovascular risk**

	High cardiovascular risk (n=134)	Non-high cardiovascular risk (n=105)
Age-years old	68.0±8.3	63.8±11.8
Diabetes mellitus-no (%)	93 (69.4)	-
Basal glucose (mg/dL)	125±41	103±33
HbA1c (%)	7.0±1.4	6.1±1.3
No tobacco history-no (%)	48 (35.8)	55 (52.4)
Arterial hypertension-no (%)	97 (72.4)	69 (65.7)
Dyslipidaemia-no (%)	104 (77.6)	53 (50.5)
BMI (kg/m <sup>2</sup> )	29.8±6.1	27.1±4.7
Previous ictus-no (%)	12 (9.0)	4 (3.1)
Peripheral arterial disease-no (%)	33 (24.6)	7 (6.7)
Previous myocardial infarction-no (%)	68 (50.7)	-
PCI revascularization-no (%)	51 (38.1)	-
CABG revascularization-no (%)	29 (21.6)	-
Result in CMR-A	-	-
Positive-no (%)	56 (41.8)	27 (25.7)
Negative-no (%)	78 (58.2)	78 (74.3)
Events in follow-up-no (%)	51 (38.1)	17 (16%)
ACS-no (%)	21 (15.7)	5 (4.8)
Death for any cause-no (%)	8 (6)	8 (7.6)
Admission for HF-no (%)	2 (1.5)	3 (2.9)
Revascularization-no (%)	20 (14.9)	1 (1)

<sup>1</sup>Cardiology Department, Clínica Universidad de Navarra, Pamplona, Spain  
Full list of author information is available at the end of the article

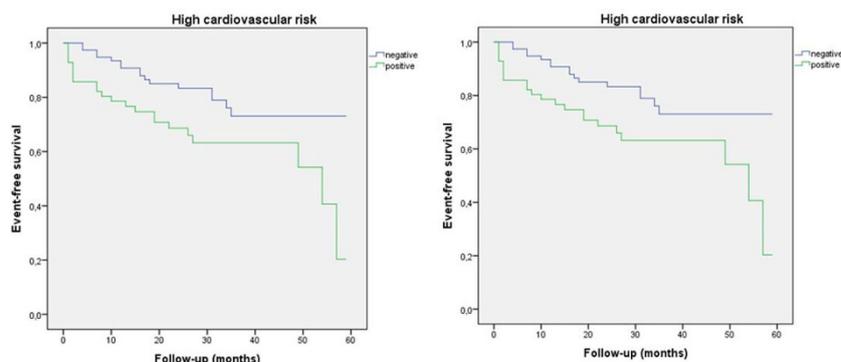


Figure 1

phone. We analyse free-event survival considering: acute coronary syndrome (ACS), death for any cause, admission for heart failure (HF) or necessity of revascularization as endpoints. The statistical analysis was made with SPSS 20.0.

## Results

The follow-up of 239 patients (180 male) was done. 134 (56%) were re-classified as high cardiovascular risk patients and 105 (44%) as non-high cardiovascular risk ones. The basal characteristics of each group are summarize in table 1.

CMR-A was positive for myocardial ischaemia in 83 patients (35%) and negative in 156 (65%). The follow-up median was 25 months, with events in 68 patients. The results of the test and the events during the follow-up in each group are attached in table 1.

The analysis of Kaplan-Meier survival curves (1 and 2), considering the cardiovascular risk and the result of the test, showed statistical differences only in very high cardiovascular risk patients (Long Rank test;  $p=0.024$ ).

## Conclusions

In this cohort of patients with very high cardiovascular risk, those with a negative result have fewer events in the follow-up. CMR-A allows a better classification of the global cardiovascular risk

## Funding

There is not any funding to support this trial.

## Authors' details

<sup>1</sup>Cardiology Department, Clínica Universidad de Navarra, Pamplona, Spain.

<sup>2</sup>Radiology Department, Clínica Universidad de Navarra, Pamplona, Spain.

Published: 3 February 2015

doi:10.1186/1532-429X-17-S1-P193

**Cite this article as:** Esteban-Fernández *et al.*: Adenosine cardiac magnetic resonance: follow-up of patients with very high cardiovascular risk. *Journal of Cardiovascular Magnetic Resonance* 2015 17(Suppl 1):P193.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at  
www.biomedcentral.com/submit

 BioMed Central