

Introduction

Cardiac arrest (CA) is a potential complication of acute coronary syndromes (ACS) - it is important to assess its impact on prognosis and identify patients with higher risk of CA in the setting of ACS.

Objective: To evaluate predictors cardiac arrest in acute coronary syndrome.

Material and Methods

- › Based on a multicenter retrospective study, data collected from admissions between 1/10/2010 and 4/09/2019.
- › Patients (pts) were divided in two groups (G):
 - › A – pts without CA
 - › B – pts with CA

Results

	GB	GA	p value
Age (years)	65±15	67±14	p<0.001
Smoking	35.8%	26.4%	p<0.001
Arterial hypertension	62.3%	70.9%	p<0.001
Diabetes mellitus	25.7%	31.7%	p<0.001
Dyslipidaemia	53.8%	61.7%	p<0.001
Previous ACS	17.2%	20.6%	p=0.037
Time symptoms to admission	41.4%	78.6%	p<0.001
NSTEMI	52.5%	35.5%	p<0.001
STEMI	46.7%	18.1%	p<0.001
Anterior STEMI	54.9%	46.9%	p<0.001
Killip-Kimball class (KCC) ≥2	37.6%	14.6%	p<0.001
Atrial fibrillation	13.9%	7.0%	p<0.001
Common-trunk lesion	3.9%	1.6%	p<0.001
Anterior descending artery lesion	49%	37%	p<0.001
Single vessel lesion	53.4%	38.5%	p<0.001
LV dysfunction (<50%)	57.7%	38.7%	p<0.001
Mechanical ventilation	35.3%	1.1%	p<0.001
Non-invasive ventilation	6.8%	1.6%	p<0.001
Provisory pacemaker	9.4%	1.3%	p<0.001

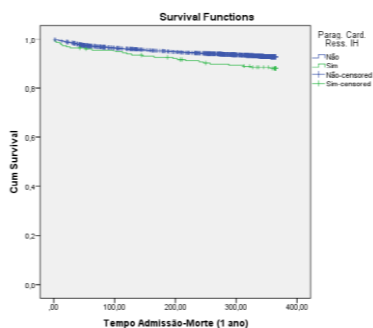
Pts with ACS: 25718

Pts with CA: 651 (2.5%)

Logistic regression confirmed

- Older age (p<0.001, OR 1.89, CI 1.35-2.64)
- Higher heart rate (p<0.029, OR 1.33, CI 1.03-1.71)
- Lower blood pressure (p<0.001, OR 2.67, CI 1.94-3.68)
- KCC ≥2 (p<0.001, OR 2.35, CI 1.84-3.00)
- Atrial fibrillation (p<0.001, OR 1.84, CI 1.34-2.51)
- STEMI (p<0.001, OR 4.08, CI 3.66-6.77)
- LV dysfunction (p=0.009, OR 1.38, CI 1.08-1.75)

We were predictors of CA



Conclusion: As expected, CA in the setting of ACS is associated with poorer prognosis. Several characteristics of the pts may help to predict the development of CA during hospitalizations.