

Introduction

Sustained ventricular tachycardia (SVT) complicates up to 20% of acute coronary syndromes (ACS) - it is important to assess its impact on prognosis and identify patients with higher risk of SVT.

Objective: To evaluate predictors of early onset (<48h) and late onset (≥48h) SVT.

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 that presented early onset SVT (ESVT)
 - › B – pts that presented late onset SVT (LSVT)

Results

Pts with ACS: 29851

SVT: 364 (1.2%)

ESVT: 251 (69%)

LSVT: 91 (25%)

	ESVT	LSVT	p value
Age (years)	74±13	68±14	p=0.003
Admission directly to cath lab	10.1%	24.8%	p=0.003
Times symptoms to admission (minutes)	440	261	p<0.001
Previous stroke	14.4%	6.8%	p=0.028
NSTEMI	35.2%	23.1%	p=0.025
STEMI	53.8%	71.7%	p=0.002
SBP (mmHg)	130±33	122±33	p=0.050
Killip class ≥ 2	52.5%	35.5%	p=0.005
Atrial fibrillation	21.2%	12.4%	p=0.045
NT-pro-BNP (pg/ml)	1075	329	p<0.001
3 vessel disease	58.5%	70.8%	p=0.017
LV severe dysfunction	32.9%	15.4%	p<0.001
Non-invasive ventilation	23.1%	6.8%	p<0.001

MACE	ESVT	LSVT	p value
Heart failure	34.7%	19.1%	p=0.006
Atrioventricular block	15.7%	1.1%	p<0.001
Atrial fibrillation	20.4%	7.7%	p=0.006
Major haemorrhage	5.2%	0.0%	p=0.024
In-hospital death	44.4%	20.9%	p<0.001
In-hospital stay (days)	14	7	p<0.001
Re-infarction	1.6%	4.4%	p=0.216
Shock	18.4%	12.2%	p=0.179
Mechanical complications	1.6%	1.1%	p=1.000
Cardiac arrest	40.6%	30.8%	p=0.097
Stroke	2.4%	0.0%	p=0.348

Logistic regression confirmed

- ESVT was predictive of

in-hospital heart failure (p=0.010, OR 2.67)

De novo AF (p=0.001, OR 5.56)

- LSVT was predictive of

In-hospital death (p=0.002, OR 2.70)

Conclusion: LSVT was associated with higher rates of in-hospital complications, but ESVT was associated with higher in-hospital mortality.