

Long-term angiographic and clinical outcomes after coronary intervention using drug-coated balloons in acute coronary syndrome

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Aim: Aim of the study was to compare angiographic and clinical outcomes after percutaneous coronary interventions (PCI) using drug coated balloons (DCB) between patients treated for "de novo" lesions and in-stent restenosis (ISR) in acute coronary syndrome (ACS).

Patients and Methods: Study included 128 ASC patients treated with DCB between 2012 and 2019. All coronary angiographies were reviewed to determine indication, lesion complexity, vessel size and procedural success. Baseline and follow up clinical data were extracted from hospital digital database.

TABLE 1. Differences in clinical, angiographic and procedural characteristics between groups.

	ISR (N=24)	Non-ISR (N=104)	P value
Clinical characteristics			
Patient age	68.36±6.85	62.85±11.37	0.002
Family history	7 (29.2)	44 (42.3)	0.23
Active smokers	3 (12.5)	40 (38.5)	0.015
Diabetes mellitus	7 (29.2)	35 (33.7)	0.67
Arterial hypertension	21 (87.5)	90 (86.5)	0.90
Hyperlipidaemia	21 (87.5)	88 (84.6)	0.72
Previous myocardial infarction	20 (83.3)	16 (15.4)	< 0.001
Atrial fibrillation	3 (12.5)	6 (5.8)	0.24
Ejection fraction	51.4±21.1	54.3±18.2	0.33
Angiographic and procedural characteristics			
Vascular access - femoral	6 (25)	36 (34.6)	0.36
Multivessel disease	6 (25)	59 (56.7)	0.005
Bifurcation	5 (20.8)	45 (43.3)	0.042
Number of used DCB	1.0±0	1.1±0.3	0.004
Length (mm)	23.38±3.23	21.24±5.24	0.012
Diameter (mm)	2.85±0.59	2.48±0.49	0.007
Bail out PCI	0	8 (7.7)	0.16
Concomitant PCI	8 (33.3)	79 (75.9)	<0.001
Total number of stents per person	0.5	1.2	0.002

Results are presented as mean ± standard deviation or absolute number (%).

ISR = in-stent restenosis; DCB = drug coated balloons; PCI = percutaneous coronary intervention.

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