Failed Primary Percutaneous Coronary Intervention: A 10-Year Contemporary Experience of the Incidence, Predictors and Outcomes

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Conflict of interest:

There are no potential sources of conflict for this research

Introduction

 Study goal: to evaluate the prevalence, predictors and outcomes of failed primary PCI

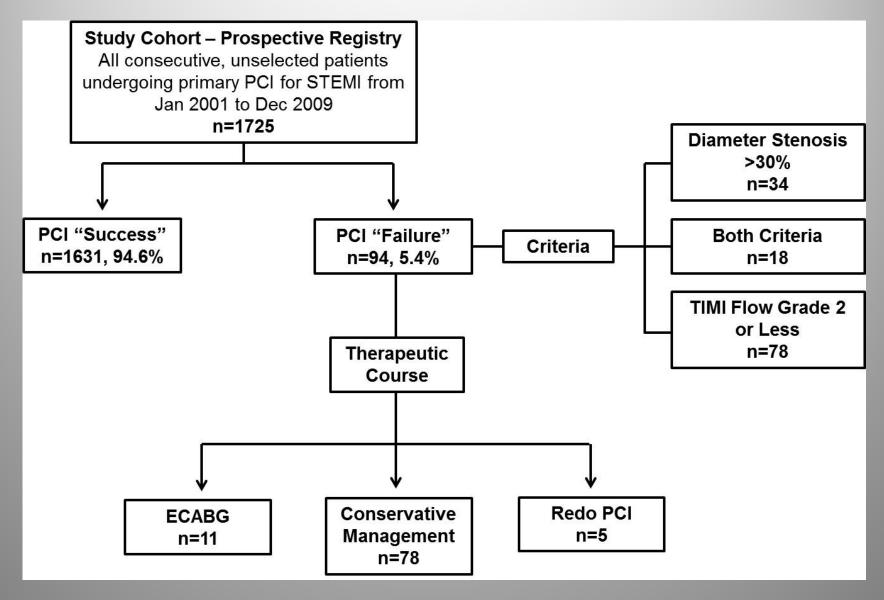
PCI failure was defined as:

final diameter stenosis > 30%

or

post-dilatation TIMI flow grade 2 or less

Study design



ResultsIndependent predictors of PCI failure:

■ Age greater than 65 (OR 1.7; 95% CI 1.0–1.7, p=0.02)

■ Procedure date 2001 to 2005 (OR 2.4; 95% CI 1.0-6.1, p=0.05)

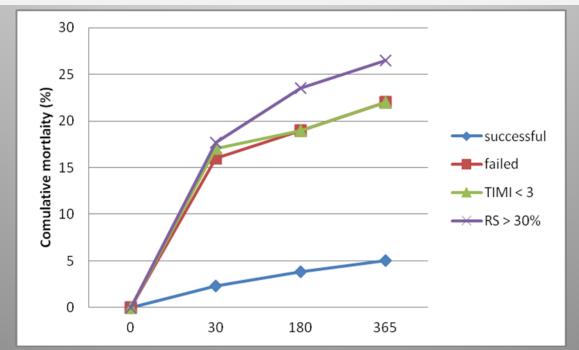
■ Night-time PCI (OR 1.9; 95% CI 1.9–2.9, p=0.008)

■ Calcific lesion (OR 2.1; 95% CI 1.2-3.5, p=0.008)

■ Lower pre-procedural TIMI flow grade (OR 1.4 (1.3-2.0, p=0.006)

Clinical Course after PCI Failure

		Mortality Rates		
All STEMI Patients Undergoing Primary PCI (n=1725)	n	30-day	6-month	1-year*
Successful PCI	1631	38 (2.3%)	62 (3.8%)	68 (5.0%)
Failed PCI	94	15 (16%)	18 (19%)	21 (22%)
TIMI Flow Grade < 3	78	13 (17%)	15 (19%)	17 (22%)
Final Diameter Stenosis > 30%	34	6 (18%)	8 (24%)	9 (27%)



Therapeutic Course after PCI Failure

		Mortality Rates	
Failed <u>proceduere</u> (n=94)	n	30 -day	
CABG	11	3(27%)	
Conservative management	78	12 (16%)	
Re-do PCI	5	0(0%)	