

	LVEDP <12 mmHg (n=18)	LVEDP=12-20 mmHg (n=83)	LVEDP >20 mmHg N=97	p
Age	65.3±12	61.1±14	61.3±13	0.92
Male (%)	15 (83.3%)	55 (66.3%)	69 (71.1%)	0.36
Hypertension (%)	11 (61.1%)	47 (56.6%)	47 (48.5%)	0.46
Diabetes mellitus (%)	2 (11.1%)	20 (24.1%)	32 (33.0%)	0.10
Ejection fraction (%)	51.9%±16.9	49.9%±14.9	42.9%±15.4	0.02
Baseline GFR (ml/min/m2)	70.02	78.10	89.59	0.35
GFR at 24 hours (ml/min/m2)	75.21	87.50	87.82	0.70
GFR at 48 hours (ml/min/m2)	70.21	81.66	88.66	0.60
Delta GFR	3.034	13.72	-3.058	0.18
CIN (%)	1 (5.6%)	15 (18.1%)	22 (22.7%)	0.09
In-hospital mortality (%)	0	0	0	NS
12 month mortality (%)	3 (16.7%)	2 (2.4%)	9 (9.3%)	0.02
MACCE (Death/MI/Stroke)	6 (33.3%)	27 (32.5%)	32 (33.0)	0.96

CONCLUSIONS In ACS patients undergoing PCI, normal LVEDP values were associated with a better outcome, with lower 12-month mortality rates. There seems to be a strong trend (p=0.09) toward a higher rate of CIN in patients with elevated LVEDP on presentation.

CRT-100.06

Retroviral-positive Patients (HIV) Presenting With Acute Coronary Syndrome — Dilemma For Coronary Interventions: To Do or Not to Do



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INTRODUCTION The current spectrum of human immunodeficiency virus (HIV) infections dramatically shifted after the advent of effective antiretroviral therapy. Cardiovascular disease, including atherosclerosis and atherosclerosis-associated complications, is an increasing cause of morbidity and mortality in HIV patients in the post-antiretroviral therapy era. The aim of our study was to study the clinical and angiographic profile of HIV-infected patients presenting with acute coronary syndrome (ACS), their in-hospital outcomes, and therapeutic challenges with respect to coronary revascularization.

MATERIALS AND METHODS A prospective observational study conducted from January 2013 to September 2017. We studied 109 consecutive patients infected with HIV and presenting with ACS to our acute coronary care unit. The baseline clinical characteristics, response to fibrinolytic therapy, angiographic findings, and results of percutaneous coronary intervention and in-hospital outcomes were studied.

RESULTS The mean age of patients was 46 years, which is lower than HIV-uninfected patients. Most patients presented with Acute Anterior Wall ST-Elevation Myocardial Infarction (n=98, 89%). Thrombolysis was successful in 96 (78.33%) and failed in 13 (21.67%) patients. Four patients underwent rescue angioplasty, and primary PCI was done in 3 patients. Coronary angiography was done in all the patients, revealing significant residual stenosis in 51 patients. Three-vessel coronary artery disease (CAD) were seen in only 4 patients (3.7%); two-vessel CAD was seen in 16 patients (14.7%). Sixty-nine patients (81.6%) had significant single-vessel lesions. All patients with significant residual lesions (n=51) underwent PCI with drug-eluting stents. Only 1 patient died due to cardiogenic shock. All 108 patients were followed up for 3 years, and they are receiving adjuvant highly active antiretroviral therapy (HAART).

CONCLUSIONS HIV-associated atherosclerosis and its complications are a significant human health burden for which the pathogenesis remains elusive. The distinct pathological features of HIV-induced atherosclerosis are non-calcified and inflammatory plaques that are

more vulnerable to rupture, resulting in ACS. HIV-infected patients hospitalized for an ACS are relatively younger. Anterior wall STEMI is the most common presentation; hence, the left anterior descending artery is the most common culprit vessel. HIV status and HAART didn't interfere with revascularization approach or clinical outcome.

CRT-100.07

Clinical Outcomes Among Patients Requiring Acute Mechanical Circulatory Support for Cardiogenic Shock Supported by Impella or VA-ECMO



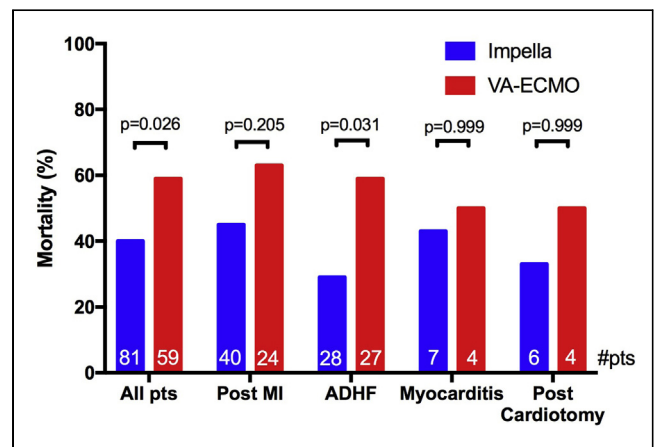
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BACKGROUND Clinical trials for acute mechanical circulatory support (AMCS) for cardiogenic shock (CS) have exclusively focused on patients with acute coronary syndrome (ACS). Outcomes for patients supported with AMCS for other indications have not been well-described.

METHODS We retrospectively analyzed all patients (n=140) between 2012-2016 receiving veno-arterial extra corporeal membrane oxygenation (VA-ECMO) (n=59) or Impella (n=81) for CS at two institutions.

RESULTS The indications for AMCS were acute ACS (46%: STEMI 30% and NSTEMI 70%), acute decompensated heart failure (ADHF) (39%), myocarditis (8%) and post-cardiotomy CS (7%). Compared to VA-ECMO, Impella patients were older (59±14 vs. 54±12 years, all comparisons p<0.01) and more likely to have hypertension (57% vs. 24%). Impella patients had a lower lactate (3.3±2.7 vs. 7.1±5.8 mEq/L), higher pH (7.33±0.17 vs. 7.24±0.16) and higher MAP (72±15 vs. 61±15 mmHg) compared to VA-ECMO. The median duration of support was longer for VA-ECMO than Impella (7.4 days vs. 5 days, p=0.026). In-hospital mortality across indications was lower for Impella than VA-ECMO (40% vs. 59%, p=0.03; Figure). Compared to VA-ECMO, mortality was lower with Impella for ADHF (31% vs. 57%, p=0.037).

CONCLUSION For patients with CS supported by AMCS, mortality is lower for patients supported with Impella, particularly for ADHF, although indices of CS severity are worse among VA-ECMO recipients. Investigation of outcome predictors for AMCS recipients is warranted.



CRT-100.08

Coronary Perfusion Pressure and Left Ventricular Hemodynamics as Predictors of Cardiovascular Collapse following Percutaneous Coronary Intervention



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BACKGROUND Percutaneous mechanical circulatory support (MCS) continues to evolve. Appropriate patient selection for MCS following percutaneous coronary intervention (PCI) remains a challenge. There may be a role for MCS prior to the development of shock to help