Abstract 60 Table 2 Clinical outcomes

Outcomes	All patients N=213	Severe LVSD (EF<35%) N=32	CKD 4/5 (eGFR<30) N=14	Patients above 80 years of age N=53
Target vessel revascularisation	3 (1.4)	1 (3)	0 (0)	0 (0)
Rehospitalisation with MI in 1 year	17 (8)	1 (3)	2 (14.3)	4 (7.5)
Rehospitalisation with heart failure in 1 year	5 (2.3)	4 (12.5)	1 (7)	1 (1.9)
30 day mortality	7 (0.5)	0 (0)	1 (7)	2 (3.8)
18 month mortality	28 (13.1)	8 (25)	5 (35.7)	9 (17)
Major adverse cardiovascular events (MACE)	38 (1.8)	8 (25)	5 (35.7)	9 (17)

Values are N (%).

MACE defined as composite of target vessel revascularisation, rehospitalisation with MI in 1 year, 30-day mortality and 18 month mortality.

6F sheaths (60.6%). 1.5mm burr was most frequently used (63.4%) but in 14.6% of cases, burr upsize was required. Additional equipment such as cutting balloons (4.7%), intra-vascular ultrasound (13.6%), microcatheters (58.2%), temporary pacing wires (2.3%) and intra-aortic balloon pumps (1.4%) were used. Complexity of procedures ranged from RA of unprotected left main stem (14.6%), more than 1 vessel RA (2.8%), chronic total occlusions (5.2%) and in-stent restenosis cases (0.9%). Mean stent diameter was 3.5 ± 0.8 mm and mean stent length was 37.6 ± 23.4 mm. Stents were successfully delivered in 96.2% of cases, with a complication rate of 10.3% (table 1). At 18 months, we observed no significant difference in mortality between the age groups ($p=0.26$). However, patients with eGFR less than 30 (35.7%, $p=0.004$) and ejection fraction <35% (17%, $p=0.03$) undergoing RA had a significantly higher mortality rate at 18 months (figure 1,2).

Conclusions Our study suggest that severe LVSD and CKD 4-5 may be a predictor for worse outcomes among rotablation patients. However, advanced age does not appear to be associated with poorer outcomes.

Conflict of Interest None

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THE INCONSISTENT CHOICES OF INOTROPIC AND VASOPRESSORS AT THE FRONT DOOR IN PATIENTS WITH ISCHAEMIC CARDIOGENIC SHOCK AND ITS IMPACT ON IN-HOSPITAL MORTALITY

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Background Despite no evidence of survival benefit, inotropes and vasopressors continue to be routinely used in the setting of acute myocardial infarction with cardiogenic shock (CS). ESC recommends noradrenaline as vasopressor and dobutamine as inotrope of choice. These are only class IIb recommendations with level B/C evidence. Yet on admission, these agents are initiated almost invariably by intensivists. We believe such prescriptions are inconsistent amongst intensivists and linked with adverse outcomes. After all, inattentive use increases the risk of infarct expansion and ventricular arrhythmias. We also hypothesize that some

patients with initial CS stabilize after revascularization without needing vasoactive support and are associated with lower mortality rates.

Method In this single-centre retrospective analysis of 116 patients with ischaemic CS, we examined the type of vasoactive agents initiated on admission and their respective baseline characteristics and angiography data (table 1). Four treatment groups were identified (vasopressors- noradrenaline and metaraminol; inotropes- adrenaline, dobutamine and dopamine; combination; no treatment), and analysed in relation to in-hospital mortality by adjusted multivariable logistic regression. We also performed a subgroup analysis of the same outcome for individual drugs and their combinations.

Results All vasoactive agents were decided by on-call intensivists. Overall, patients were aged 68 ± 13 years, with average systolic BP (SBP) 71 ± 16 mmHg. As expected, prescriptions of vasoactive agents were highly variable: vasopressors (16%), inotropes (15%), combination (34%) or no treatment (34%). Overall inpatient mortality was 43%. Patients on vasopressors ($p=0.015$), inotropes ($p=0.029$) or combination ($p=0.002$) were significantly more likely to die than those without treatment. Indeed, the latter group had a lower proportion of out-of-hospital arrests and marginally higher SBP. Compared to no treatment, adrenaline and metaraminol significantly increased the odds ratio of in-patient death by 3.82 (CI 1.49-9.79, $p=0.005$) and 2.9 (CI 1.23-6.97 $p=0.016$) respectively. In contrast, there was a trend of the noradrenaline group to be lower risk (OR 0.96) albeit non-significant. There were no differences with dobutamine or dopamine. A combination of adrenaline-dobutamine was associated with increased in-patient mortality ($p=0.009$) (table 2).

Conclusion This study confirms the inconsistent use of vasopressors and inotropes at the front door in patients with acute MI and CS. This needs to be more aligned to address the disparity between ESC guidance and intensivist practice. Metaraminol with its ease of use peripherally is associated with a 3-fold increase in inpatient mortality. This study also reminds us that not all ischaemic CS cases are sustained since with prompt revascularization, vasoactive agents and their associated

Abstract 61 Table 1 Baseline clinical characteristics and in-hospital mortality

	Vasopressor (n=19)	Inotrope (n=18)	Combination (n=39)	No treatment (n=40)	P value*
Demographic					
Age in years (Mean±SD)	64 ± 13	76 ± 15	64 ± 12	70 ± 13	NS
Gender (% male)	84%	67%	83%	70%	NS
BMI (Mean±SD)	28.2 ± 5.0	25.8 ± 3.9	27.7 ± 4.7	27.7 ± 5.8	NS
Medical history					
Past history of MI (%)	36%	44%	33%	40%	NS
Past history of HF (%)	26%	33%	10%	10%	NS
CKD Stage IV-V	21%	11%	8%	13%	NS
Diabetes (%)	37%	22%	28%	35%	NS
Hypertension (%)	58%	50%	54%	55%	NS
Admission presentation					
Lowest SBP mmHg** (Mean ± SD)	74 ± 11	69 ± 16	63 ± 18	78 ± 13	0.002
Heart rate, bpm (Mean ± SD)	89 ± 6	75 ± 6	94 ± 4	72 ± 4	NS
STEMI (%)	68%	100%	90%	90%	NS
Resuscitation from cardiac arrest (%)	58%	22%	51%	20%	0.005
Lactate >2 (%)	47%	33%	77%	40%	NS
Pulmonary oedema (%)	58%	44%	33%	43%	NS
LVEF >50% (n, %)	3 (16%)	2 (11%)	4 (10%)	8 (20%)	NS
LVEF ≤35% (n, %)	5 (26%)	10 (56%)	17 (44%)	12 (30%)	NS
Revascularization					
Door to balloon time in minutes (Mean ± SD)	38.4 (±10.8)	150.6 (±74)	109.8 (±28.9)	78.2 (±17.8)	NS
Triple vessel disease on coronary angiography	4 (21%)	5 (28%)	12 (31%)	16 (40%)	NS
In-hospital death, n=50	11 (58%)	10 (56%)	22 (56%)	7 (18%)	0.001

BMI: body mass index; CKD- chronic kidney disease; SBP- systolic blood pressure. *p value based on comparison between all patients treated with inotropic/vasopressor agents versus no treatment. **SBP persistent > 30 minutes from admission.

adverse effects can be avoided or used for the shortest possible duration.

Conflict of Interest None

62 A COMPARISON OF PERCUTANEOUS AND SURGICAL REVASCULARISATION STRATEGIES FOLLOWING AN EQUIPOISE DECISION IN A HEART TEAM MEETING

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Introduction Current guidelines advocate a Heart Team (HT) approach to decision making in complex coronary artery disease (CAD). Available evidence suggests that PCI is non-inferior to surgery in patients with three vessel or left main stem disease in the setting of a low-intermediate anatomical syntax score. The majority of HT discussions result in a recommendation of percutaneous coronary intervention (PCI) or coronary artery bypass surgery (CABG), however a decision is deemed to be equipoised when one revascularisation strategy is not felt to carry significant prognostic benefit. In this study we sought to evaluate clinical outcomes following an equipoise decision in a Heart Team meeting.

Methods This was a single centre retrospective study. All patients requiring intervention for structural heart disease in addition to CAD were excluded. Between January 2015 and December 2018 a total of 134 patients were deemed to be equipoise following discussion at a Heart Team meeting (7.1% of all discussions). Demographics, procedural details and clinical outcomes were obtained from our national electronic health care record. The primary outcome was the 3-year rate of major adverse cardiovascular and cerebrovascular events (MACCE). This was a composite of cardiovascular death, non-procedural myocardial infarction (MI), stroke and unplanned revascularisation.

Results A total of 108 patients underwent PCI and 26 CABG. Mean follow-up was 1177 ± 384 days in the PCI cohort and 1201 ± 349 days in the CABG cohort ($p=0.77$). Baseline demographics did not differ significantly with the exception of chronic kidney disease and CAD involving 3 vessels (tables 1 & 2). In the PCI cohort advanced calcium modification (intravascular lithotripsy or rotablation) was performed in 11.1% of procedures and intravascular imaging in 58.3%. The mean number of stents used was 3.3 ± 1.5 and total stent length was

Abstract 62 Table 1 Baseline demographics

Variable	PCI (n=108)	CABG (n=26)	p value
Age- mean $\pm$ SD	66.1 $\pm$ 9.3	63.9 $\pm$ 7.0	0.26
Male Gender- n (%)	88 (81.5)	22 (84.6)	1.0
Risk Factors- n (%)			
- Hypercholesterolaemia	66 (61.1)	15 (57.7)	0.75
- Hypertension	54 (50.0)	14 (53.8)	0.73
- Diabetes Mellitus	19 (17.6)	2 (7.7)	0.36
Co-morbidities- n (%)			
- Stroke	4 (3.7)	0 (0.0)	1.0
- PVD	9 (8.3)	0 (0.0)	0.21
- COPD	13 (12.0)	3 (11.5)	1.0
- Previous MI	16 (14.8)	1 (3.8)	0.19
- Previous PCI	20 (18.5)	1 (3.8)	0.08
- Previous cardiac surgery	0 (0.0)	0 (0.0)	1.0
- CKD	19 (17.6)	0 (0.0)	0.02

Abstract 62 Table 2 Presentation and Disease Severity

Variable	PCI (n=108)	CABG (n=26)	p value
LV function- n (%)			0.40
- Normal	91 (84.3)	21 (80.8)	
- Mild	12 (11.1)	2 (14.3)	
- Moderate	4 (3.7)	3 (11.5)	
- Severe	1 (0.9)	0 (0.0)	
Presentation- n (%)			0.65
- ACS	51 (47.2)	12 (46.2)	
- Stable Angina	57 (52.8)	14 (53.8)	
Syntax Score- mean$\pm$SD			
- SS1	22.6 $\pm$ 6.7	24.4 $\pm$ 7.1	0.35
- SS2 PCI	29.0 $\pm$ 8.2	27.5 $\pm$ 6.4	0.61
- SS2 CABG	29.5 $\pm$ 10.3	26.9 $\pm$ 6.5	0.23
Syntax Tertile- n (%)			0.45
- 1	57 (52.8)	11 (42.3)	
- 2	42 (38.9)	11 (42.3)	
- 3	9 (8.3)	4 (15.4)	
LMS disease- n (%)	56 (51.9)	12 (46.2)	0.60
Disease pattern- n (%)			
- 1 vessel	8 (7.4)	0 (0.0)	0.35
- 2 vessel	49 (45.4)	8 (30.8)	0.18
- 3 vessel	51 (47.2)	18 (69.2)	0.04

Abstract 62 Figure 1 Kaplan-Meier curve demonstrating a comparison of 3-Year MACCE rate between revascularisation modalities

97.0 ± 47.5 mm. The 3-year MACCE rate was 14.3% in the PCI cohort and 11.5% in the CABG cohort ($p=0.76$) (figure 1). 3-year cardiovascular death (PCI 2.8% vs CABG 0.0%, $p=0.39$) and unplanned revascularisation (PCI 11.5% vs CABG 7.9%, $p=0.62$) rates were numerically higher with PCI, whereas non-procedural MI (PCI 6.6% vs CABG 7.7%, $p=0.85$) and stroke (PCI 0.9% vs CABG 3.8%, $P=0.27$) rates were numerically higher with CABG. None of these differences met statistical significance. The incidence of stent thrombosis at 1-year was 1.9% in the PCI cohort. PCI resulted in a reduction in total length of stay (10.9 ± 4.9 days in the inpatient PCI vs 34.3 ± 15.5 days in the inpatient CABG cohorts, $p<0.001$).

Conclusions This study demonstrated no difference in MACCE between revascularisation modalities in patients with complex

Correction: 61 *The inconsistent choices of inotropic and vasopressors at the front door in patients with ischaemic cardiogenic shock and its impact on in-hospital mortality*

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This Abstract has been corrected since it was first published. The authors should have been listed in the following order: Amanda Shabana, Farzan Dholoo, Patrick Tran, Prithwish Banerjee.

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