Conclusions Our small study shows that IABP support does not result in reduced in-hospital mortality in patients presenting with cardiogenic shock. Morality remains high despite advance in medical treatment.

Conflict of Interest Cardiology

75 NICE CHALLENGE THAT IS DIFFICULT TO MEET?

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Introduction Current NICE guidelines recommend early invasive strategy with coronary angiography within 72 hours of first presentation of NSTEMI to those who have an intermediate or higher risk of adverse cardiovascular events, defined as a GRACE 2.0 risk greater than 3.0%. The aim of this audit is to explore NICE guideline adherence, patient characteristics and clinical outcomes.

Methods Retrospective data from patients with a final diagnosis of NSTEMI in the months of October 2018 and January 2019 was gathered from clinical coding. Patients were stratified by their GRACE 2.0 score, which was retrospectively calculated using their clinical notes and investigations on the Integrated Clinical Environment.

Results There were 116 patients of which 90 (77.6%) had an intermediate to high risk. Data was analysed for all the 90 patients (table 1) with further analysis for those who underwent early or late inpatient coronary angiography with fisher's exact test (table 2).

From the 90 patients 44 (48.9%) underwent coronary angiography, while 46 patients (51.1%) were not suitable for invasive intervention hence treated with standard medical therapy. 18 patients (40.9%) had coronary angiography within 72 hours and 26 waited more than 72 hours. 13 (72.2%) of those who had early coronary angiography went on to have

Abstract 75 Table 1 Summary table of patients with intermediate to high risk of cardiovascular event

Clinical characteristic (N=90)	Coronary angiography >72hrs (N=18)	Coronary angiography >72hrs (N=26)	Medical management (N=46)
Demographic			
Age (mean)	70.9	74.7	82.1
Female	8 (44.4%)	10 (38.5%)	27 (58.7%)
Secondary prevention			
DAPT or antiplatelet +anticoagulation	17 (94.4%)	24 (92.3%)	37 (80.4%)
ACEi	17 (94.4%)	23 (88.5%)	27 (58.7%)
Statin	18 (100%)	25 (96.2%)	33 (71.7%)
Intervention			
PCI	13 (72.2%)	10 (38.5%)	0 (0%)
CABG	0 (0%)	3 (11.5%)	0 (0%)
Outcome			
Dead at 6 months	0 (0%)	1 (3.8%)	13 (21.7%)
Re-admitted with adverse cardiac event at 1 year	5 (27.8%)	7 (26.9%)	10 (21.7%)

Abstract 75 Table 2 Comparison of adverse cardiovascular events when coronary angiography is delayed

	Coronary angiography >72hrs (N=18)	Coronary angiography >72hrs (N=26)	p value
Death at 6 months	0 (0%)	1 (3.8%)	1.0000
Re-admitted with adverse cardiac event at 1 year	5 (27.8%)	7 (26.9%)	1.0000

percutaneous coronary intervention compared to the 10 (38.5%) patients who had delayed coronary angiography (p=0.0018).

Conclusion Despite expectations there was only 40.9% adherence to NICE guideline. In contrast to expectations intermediate to high-risk patients are less likely to have early invasive strategy. However, there is no difference in outcome between an early versus late invasive strategy for inpatients. Standard medical treatment is still practiced at higher number of patients with multiple comorbidities, higher age and intermediate to high risk. This shows that meeting NICE recommendations can be challenging for numerous factors beyond a clinician's control. Further data from medium sized district general hospitals with catheterization laboratory facility is needed to assess the overall ability of these centres to meet NICE recommendations.

Conflict of Interest None

76 EVOLUTION OF THE CORONARY ARTERY STENT - 35 YEARS ON (POSTER)

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Coronary artery stents have created the revolutionary field of interventional cardiology. Since their conception in 1964, to the first coronary angioplasty performed in 1977, multidisciplinary work has made what seemed like incredible and outlandish minimally invasive reopening of coronary occlusion into a commonplace mainstay of treatment, reducing mortality from cardiovascular disease globally.

Since the first stent implantation in 1986 the past 35 years of research have seen iterative progress. We have witnessed ever-evolving stent design. Drug-eluting stents resulted in a reduction in post-implantation restenosis and thrombosis previously seen with bare metal stents. Stent platforms have offered improved deliverability, circumferential strength and thinner stent struts, such that we are now able to offer tailored stent delivery to the most tortuous and bifurcated of vessels, in territories that were once seen as insurmountable. Bioresorbable stents also promised a further revolution, with hopes of complete elution of drug, resorption of the delivery mechanism, and reduced inflammatory response, but ultimately underwhelming and inferior results. As drug eluting balloons offer an alternative goal of restoring lumen patency through dilatation and targeted drug delivery, in the absence of the physical scaffold, we review the progress of percutaneous coronary intervention over the lifetime of our speciality and look

towards future developments and alternatives that may supersede the drug eluting stent hegemony.

Conflict of Interest None

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A REVIEW OF LEFT MAIN STEM PERCUTANEOUS CORONARY INTERVENTION AT A TERTIARY CENTRE IN THE UNITED KINGDOM

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Introduction The role of percutaneous coronary intervention (PCI) in left main stem (LMS) disease continues to evolve with advances in stent technology, adjuncts such as intracoronary imaging, calcium modification techniques and left ventricular support devices. Moreover, with changes in the demographics of the UK population and of the patient population presenting with left main coronary artery disease, the applicability of findings from historic clinical trials is uncertain.

Aim We set out to review our routine clinical practice at our tertiary PCI centre. We aimed to compare our practice to contemporary best practice guidelines and to identify a process for on-going audit and improvement.

Methods We performed a retrospective review of all procedures coded for 'Percutaneous Coronary Intervention Left Main Stem' at our centre from 1st December 2018 to 1st June 2019. Coronary angiogram reports and electronic notes for each patient were reviewed. Angiographic images and intracoronary imaging were by two operators.

Results Thirty cases were identified, for twenty-nine individual patients. The average age of patient undergoing LMS PCI was 74 years old. 24 patients were male, 5 patients were female. 28 patients had greater than two co-morbidities, including chronic kidney disease (14 patients) and type 2 diabetes mellitus (11 patients). Nearly two thirds of patients had known left ventricular systolic dysfunction (n=17). The majority of cases (n=12) were for acute coronary syndrome, including 8 for ST-elevation myocardial infarction (STEMI) and/or out of hospital cardiac arrest. The remainder were elective cases for stable angina where optimal medical therapy had failed to relieve symptoms and surgery was not deemed appropriate. Intracoronary imaging was recorded in 24 cases, the majority of which (n=23) employed intravascular ultrasound (IVUS). However, only four cases had documented minimum luminal area (MLA) or minimum stent area (MSA). Thirteen cases required calcium modification, including by cutting balloon (n= 6), intravascular lithotripsy (n=7), and rotational atherectomy (n=1). Sixteen cases had distal left main bifurcation disease, and bifurcation PCI techniques included provisional 1-stent (n=6), provisional 2-stent (n=8), Culotte (n=7) and T and small protrusion (TAP) stenting. There were four in-hospital deaths, all in patients presenting with STEMI. One patient had a cardiac cause or procedural-related cause for re-presentation to our centre before 1st December 2019 (at least 6 months post-procedure). This presentation was related to heart failure and the patient did not require revascularisation.

Conclusions The case and coronary complexity of patients undergoing left main stem PCI is very high in our centre. We found that the use of intracoronary imaging was not always well documented and available for retrospective review. In

view of the high number of cases requiring calcium modification and the high number of cases that included distal left main bifurcation disease, we have taken steps to support the mandated use of intracoronary imaging in left main stem disease within the coronary catheter laboratory team, including educational training and technical support.

Conflict of Interest None

Allied health professionals/Nursing/Health scientists

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AUDIT OF ECHOCARDIOGRAPHIC PROBABILITY OF PULMONARY HYPERTENSION IN A REAL WORLD POPULATION REFERRED TO A SPECIALIST CENTRE

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Introduction Transthoracic echocardiography (TTE) is an established screening tool used in the assessment of suspected Pulmonary Hypertension (PH). There is evidence to suggest Doppler estimates of Pulmonary Artery Systolic Pressure (PASP) are inaccurate compared to Right Heart Catheter (RHC) measures. Therefore, the ESC and BSE recommend a multi parameter assessment of TTE probability of PH. This retrospective audit sought to evaluate the effectiveness of the BSE/ESC TTE probability algorithm in detecting PH in a real world cohort referred to a shared care PH centre.

Method Between 2010 and 2019, a total of 310 patients referred for initial assessment of PH underwent TTE followed by RHC (median interval 31±30 days). PH TTE probabilities were calculated following BSE/ESC guidance. Bland-Altman analysis was used to investigate the accuracy of Doppler estimates of PASP compared to RHC.

Results The mean sample age was 67±14years (62% female). Seventy-six percent (n=235) had PH (mPAP ≥25mmHg) (average mPAP 42.8±11.7mmHg), 26% (n=80) having CTEPH. Doppler estimates of PASP tended to underestimate true PASP (bias -3.7±15.2mmHg) with wide limits of

Abstract 78 Figure 1 Bland-Altman plot of echocardiographic estimates of PASP (n=239) compared to RHC measurements