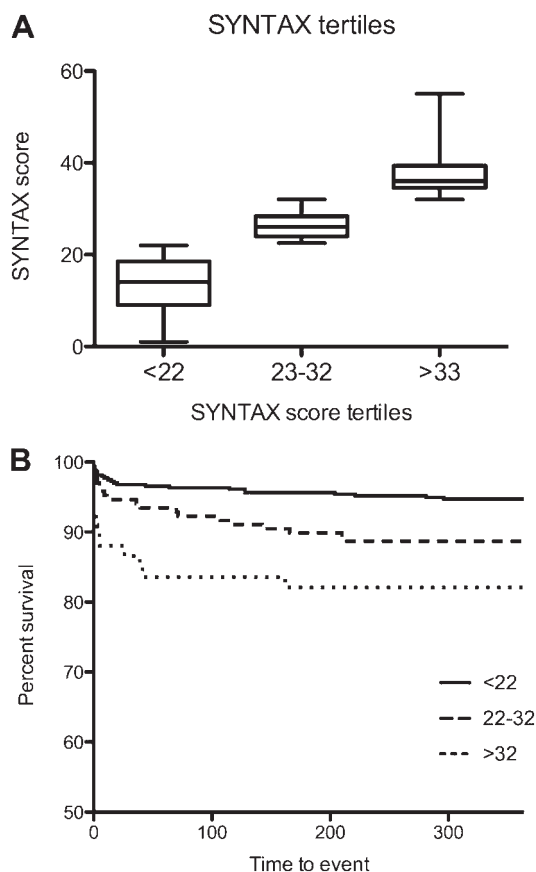


unavailable). The ability to allocate a SYNTAX tertile was reproducible between observers ($r=0.94$). Median scores in the 3 groups were: L 14, IM 26, H 36 (Abstract 43 figure 1A). Although there was no correlation between SYNTAX score and patient sex or diabetic status, there was a linear relationship with patient age ($r^2=0.03$; $p<0.0001$). 1-year absolute survival (Abstract 43 figure 1B) followed SYNTAX score groups: L 94.7%, IM 88.7%, H 82.1% ($p=0.0002$). Similar results were obtained for freedom from death or unplanned revascularisation ($p<0.0001$) and death or any revascularisation ($p<0.0001$).



Abstract 43 Figure 1

Conclusions The SYNTAX score, when applied to an unselected population of patients undergoing PPCI for STEMI, provides important prognostic information regarding 1-year survival from death and revascularisation. These findings may provide supporting evidence towards routine complete revascularisation of obstructive coronary artery disease after PPCI.

44 PRIMARY PERCUTANEOUS INTERVENTION: HAVE WE TAKEN OUR EYE OFF THE MEDICINE BALL?

doi:10.1136/heartjnl-2011-300198.44

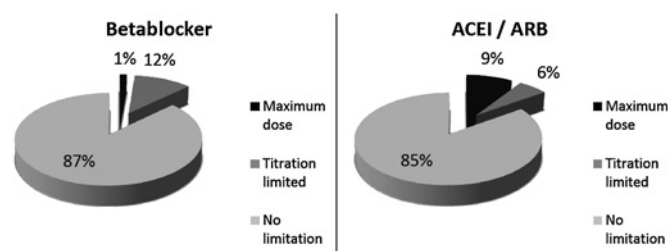
¹J D Jones, ²E Damm, ²M Nijjar, ²S Pettit, ²N M Hawkins, ²R Perry. ¹University Hospital Aintree NHS Foundation Trust, Liverpool, UK; ²Liverpool Heart and Chest Hospital, Liverpool, UK

Introduction Primary percutaneous intervention (PPCI) improves survival in patients with ST elevation myocardial infarction (STEMI). Significant resources have been directed to achieving timely reperfusion throughout the UK. However, intensive medical therapy is of equal importance, with landmark clinical trials demonstrating unequivocal morbidity and mortality benefits from β -blockers, angiotensin-converting enzyme inhibitors (ACEI), and angiotensin II receptor blockers (ARB). All trials employed rigorous titration to

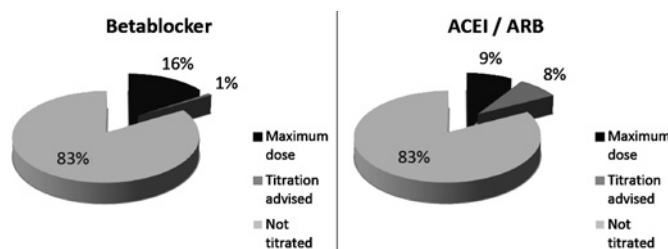
maximum clinically tolerated doses. We examined whether medical therapy is being applied appropriately in patients referred for PPCI.

Methods Consecutive patients with STEMI referred for PPCI to a large tertiary centre between 1st March and 1st August 2009 were included ($n=167$). The case records of all patients were reviewed. Myocardial infarction was diagnosed according to standard criteria. Medications and doses on admission, discharge and follow-up were recorded. Contraindications and limits to dose escalation were noted (symptoms, systolic blood pressure <90 mm Hg, heart rate <50 bpm, serum creatinine and potassium).

Results Mean age was 62.0 ± 11.9 years, 72% were male. On discharge, 100% of patients were prescribed clopidogrel, 95.8% aspirin, 98.8% statin, 88.6% β -blockers, and 91.0% ACEI/ARB. However, the inpatient dose of β -blocker or ACEI/ARB was maximum or clinically limited in only 13% and 15% of patients respectively (Abstract 44 figure 1). Outpatient follow-up at a mean of 5.0 months was equally concerning. The majority of patients (83%) were neither receiving maximum tolerated doses of β -blocker or ACEI/ARB, nor received instructions to escalate the dose (Abstract 44 figure 2).



Abstract 44 Figure 1 Inpatient titration of β -blocker and ACEI/ARB.



Abstract 44 Figure 2 Outpatient titration of β -blocker and ACEI/ARB.

Conclusion The national service framework and target driven initiatives such as advancing quality promote "tick box" medicine. Quantitative prescribing of secondary prevention is excellent. Qualitative follow-up and titration is not. Whether suboptimal doses convey the mortality benefits observed in landmark clinical trials is unknown. Frameworks to deliver titration of medical therapy must be explored. Options include nurse or pharmacy led services and expansion of cardiac rehabilitation. Reorientation is needed to focus on both quantity and quality.

45 SHOULD PRIMARY PERCUTANEOUS CORONARY INTERVENTION BE THE ROUTINE REPERFUSION STRATEGY IN OCTOGENARIANS AND NON-AGENARIANS PRESENTING WITH ST ELEVATION MYOCARDIAL INFARCTION?

doi:10.1136/heartjnl-2011-300198.45

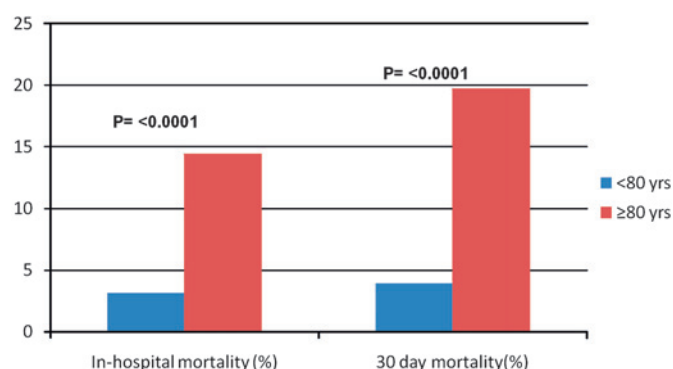
R Showkathali, E Boston-Griffiths, J Davies, G Clesham, J Sayer, P Kelly, R Aggarwal. The Essex Cardiothoracic Centre, Basildon, UK

Introduction Primary percutaneous coronary intervention (PPCI) has been established as standard therapy for ST elevation myocardial infarction (STEMI). Very few trials have looked at the outcome of PPCI in elderly patients. Even in trials which claimed to have looked

at PPCI in elderly patients such as SENIOR PAMI (Grines, 2005) and TRIANA (Bueno, 2009) the minimum age for inclusion was 70 yrs and 75 yrs respectively. With an ageing population in the western world, about 20% of patients admitted for suspected STEMI are ≥ 80 yrs. We evaluated the outcome of PPCI in patients ≥ 80 yrs who were admitted to our unit with STEMI.

Methods Our PPCI service was started in September 2009 and we analysed all the patients who were ≥ 80 yrs presenting to the PPCI service between September 2009 and September 2010 (13 months). Prospectively entered data were obtained from our dedicated cardiac service database system (Philips CVIS). Mortality data were obtained from the summary care record (SCR) database. Follow-up data were obtained from patients' respective district general hospitals and general practitioners medical records.

Results Of the 998 patients who were admitted to our unit for primary PCI for suspected STEMI during the study period, 183 (18.3%) were ≥ 80 yrs of age. After excluding 51 patients (27.9%) who did not undergo PPCI, we included 132 (70.1%) patients for analysis. Of those who were included in the study ($n=132$, 63 female), the mean age was 85 ± 3.95 yrs (range 80–99 yrs, median 85 yrs). There were 20 diabetics (15.2%) and 39 (29.5%) had previous myocardial infarction. Ten patients (7.6%) were in cardiogenic shock on arrival of which 9 (90%) had an Intra aortic balloon pump (IABP). The infarct related vessel was the right coronary in 42.4% and left anterior descending in 37.1%. Drug eluting stents were used in 40.2% of patients. In-hospital and 30-day mortality was 14.4% and 19.7% respectively. There was a significant difference in the mortality between patients age <80 yrs and those ≥ 80 yrs (Abstract 45 figure 1). In patients ≥ 80 yrs, mortality and bleeding risk increased markedly with advancing age (Abstract 45 table 1).



Abstract 45 Figure 1

Abstract 45 Table 1

%	80–84 yrs (N = 62)	85–89 yrs (N = 51)	≥ 90 yrs (N = 19)
Inhospital mortality	9.7	15.7	26.3
30-day mortality	14.5	23.5	26.3
30-day MI	3.2	2.0	0
30-day CVA	1.6	0	0
Major bleeding requiring blood transfusion	1.6	3.9	10.5

Conclusion This study clearly demonstrates a significant mortality difference between patients aged <80 yrs and those ≥ 80 yrs treated with PPCI. Our 30-day mortality outcome in patients ≥ 80 yrs (19.7%) was similar to the subgroup analysis of the PPCI arm in similar SENIOR-PAMI patients (19%). In the same analysis, the thrombolytic group had a lower (16%) mortality. Further studies are required to determine whether PPCI should be routinely used in very elderly patients presenting with STEMI.

46

PROGNOSTIC VALUE OF BASELINE RENAL FUNCTION ON LONG TERM OUTCOME IN PATIENTS UNDERGOING PRIMARY PERCUTANEOUS CORONARY INTERVENTION FOR ST-ELEVATION MYOCARDIAL INFARCTION

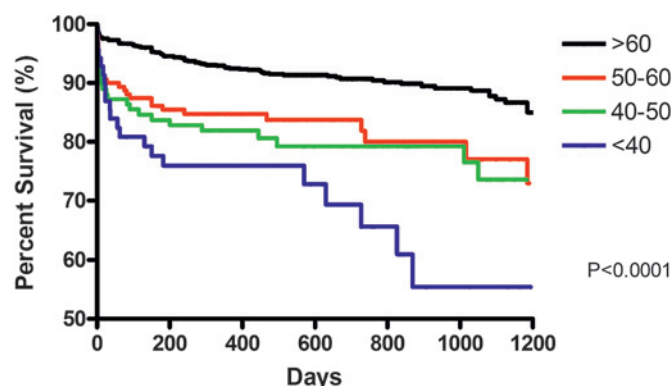
doi:10.1136/heartjnl-2011-300198.46

O P Guttman, K Rathod, B Rathod, E Wicks, S Gallagher, D A Jones, A Jain, C Knight, A Mathur, A Kapur, A Wragg. *Barts and the London NHS Trust, The London Chest Hospital, London, UK*

Background Renal impairment is associated with increased cardiovascular mortality following acute coronary syndromes (ACS), however there is limited data assessing this relationship in the context of primary PCI and whether it exists with other major adverse cardiovascular events.

Methods Clinical information was analysed from a prospective data base on 2310 STEMI patients who underwent primary PCI between January 2004 and May 2010 at a London centre. Information was entered at the time of procedure and outcome assessed by all-cause mortality information provided by the Office of National Statistics via the BCIS/CCAD national audit. Estimated glomerular filtration rate (eGFR) was calculated using the modified diet in renal disease equation and patients were divided into groups based on eGFR (<40 , 40–50, 50–60, >60 ml/min/1.73 m²). 3-year composite of MACE (death, reinfarction, stroke and target vessel revascularisation) were compared between groups.

Results The average eGFR in all patients was 73.40 ± 23.37 (95% CI 72.25 to 74.56) ml/min/1.73 m². The prevalence of coexisting risk factors (hypertension, diabetes mellitus, hypercholesterolaemia), previous MI, previous CABG and cardiogenic shock were higher among patients with reduced eGFR. There was a progressive increase in MACE with declining eGFR (OR=4.84, 95% CI 2.94 to 7.96, for comparison between the highest and lowest eGFR groups). See Abstract 46 figure 1. After adjustment for baseline characteristics including age, diabetes and cardiogenic shock renal function based on the GFR at admission remained a strong independent predictor of outcome.



Abstract 46 Figure 1 All MACE after PCI for STEMI.

Conclusion Baseline renal dysfunction in patients undergoing primary PCI is associated with an increased risk for combined death, re-infarction and recurrent angina. This risk increases linearly with declining eGFR.

47

CARDIOVASCULAR EVALUATION OF ENGLISH PREMIERSHIP RUGBY PLAYERS

doi:10.1136/heartjnl-2011-300198.47

¹S Ghani, ¹H Raju, ¹A Zaidi, ¹N Sheikh, ¹S Gati, ²J Somauroo, ³S Kemp, ¹S Sharma. ¹St Georges University London, London, UK; ²Countess of Chester Hospital; ³Rugby Football Union (RFU)

Introduction Recent experience of pre-participation cardiovascular evaluation (PPCE) in Italian athletes demonstrates a significant