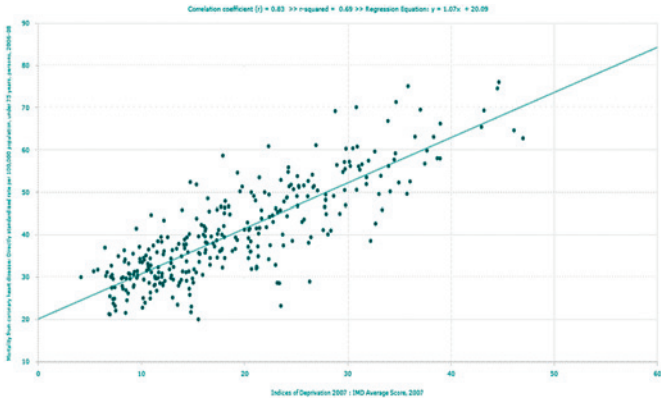
slowing dramatically from 2006 to 2008. JoinPoint regression analysis of different age groups demonstrates that the slower rate of decline from 2006 may be due to stubbornly high numbers of deaths in the 35–44 age group. Lastly the National figures on mortality from CHD are shown to be misleading as many people are still dying from CHD just when they have crossed the 75-year old exclusion criteria; as a result a delay in mortality is presented as prevention of mortality from CHD.

Discussion There is a danger that previous successes are being offset by high rates in the younger cohorts, and that the overall trend may be eventually be reversed. There is still work to be done in reducing risk factors and also applying treatments that have had a proven positive impact (such as revascularisation) more effectively. Statistically significant changes in declining CHD mortality rates.

Future work This 10 000 word report formed the basis of a funding application to the British Heart Foundation for a follow-up to the United Kingdom Heart Attack Study.



Abstract 17 Figure 2

18 PATIENTS PRESENTING WITH ANAEMIA UNDERGOING PRIMARY PCI APPEAR AT SIGNIFICANTLY HIGHER RISK OF AN ADVERSE OUTCOME

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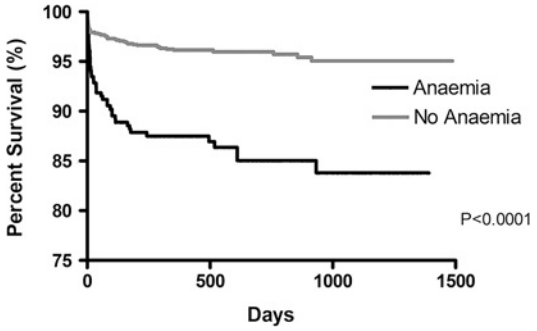
Background Previous studies have demonstrated a relationship between pre-existing anaemia and inpatient mortality after percutaneous coronary intervention (PCI). There is limited data looking at the impact of baseline Haemoglobin and long term outcome after primary PCI.

Methods Clinical information was analysed from a prospective database on 2357 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. Anaemia was defined according to WHO definition of Hb greater than or equal to 12 g/dl for females and 13 g/dl for males.

Results 471 (20%) patients were anaemic at presentation. The anaemic cohort, were older (72.2 vs 62.4, p<0.0001), had higher incidence of diabetes (27% vs 15%, p<0.0001), hypertension (42 vs 35%, p=0.01), hypercholesterolaemia (40 vs 30%, p=0.007), previous PCI (13 vs 7%, p=0.01), and previous MI (23% vs 12%, p<0.0001). There were similar incidences of three-vessel disease and cardiogenic shock. Over a 3-year follow-up period there was significantly higher all cause mortality in the anaemic group compared to the normal Hb group (20.4% vs 13.5%, p<0.0001). See Abstract 18 figure 1. After adjusting for comorbidities, anaemia remained an independent predictor of long-term adverse outcome (OR=2.4, 95% CI=1.1 to 3.7, p<0.001). Patients with baseline anaemia who received a blood transfusion were significantly more likely to suffer an adverse outcome than those that did not receive a transfusion (21% vs 6%, p<0.0001).



Abstract 18 Figure 1 All cause mortality after PCI for STEMI.

Conclusion Patients presenting with anaemia undergoing primary PCI appear at significantly higher risk of an adverse outcome. This risk increases further in population receiving RBC transfusions during index hospitalisation.

19 TREATMENT OF MULTIVESSEL CORONARY ARTERY DISEASE IN PRIMARY PCI FOR ST ELEVATION MYOCARDIAL INFARCTION: CULPRIT ONLY REVASCULARISATION IS ASSOCIATED WITH HIGHER MACE RATES

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Background Multi-vessel disease occurs in 40%–65% of patients undergoing Primary PCI for STEMI and is associated with adverse prognosis. Contemporary guidelines recommend treating the infarct related artery alone (culprit) during the urgent procedure. There is limited data comparing outcomes of complete with infarct-related artery (IRA)-only revascularisation in primary PCI for STEMI with few studies including the option of later date elective procedures for the other lesions (staged revascularisation). We therefore sought to clarify the outcome of patients with multi-vessel disease undergoing primary PCI dependent on management strategy.

Methods Clinical information was analysed from a prospective data base on 2131 STEMI patients who underwent Primary PCI between January 2004 and May 2010 at a London centre. Patients with previous CABG were excluded. 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. Patients were split into three different treatment groups: culprit vessel angioplasty-only (COR group); staged revascularisation (SR group) and simultaneous treatment of non-IRA (CR group). The primary end point used was major adverse cardiac events (MACE), defined as death, myocardial infarction (MI), stroke and target vessel revascularisation (TVR).

Results There were 963 (45%) consecutive patients with STEMI and multivessel CAD undergoing primary angioplasty. There were similar baseline characteristics between the 3 groups, aside from cardiogenic shock, which was significantly higher in the complete revascularisation group. See Abstract 19 table 1. At 30-days of follow-up, 23/263 (9%) patients in the CR group experienced at least one major adverse cardiac event (MACE), 1 (1%) in the SR group and 35 (5%) in the COR group, p=0.01. This trend continued