IMPACT OF RANDOMISED TRIAL EVIDENCE AND ESC GUIDELINE CHANGE ON PRACTICE OF PREVENTIVE PCI IN PATIENTS WITH ST-ELEVATION MYOCARDIAL INFARCTION

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Introduction In 2012, European Society of Cardiology (ESC) guidelines advised against performing PCI in non-infarct arteries (preventive PCI) in patients with ST-elevation myocardial infarction, STEMI (Level III recommendation). With the publication of several randomised trials showing a benefit of preventive PCI in such patients, ESC guidelines changed (to Level IIb in 2014 and IIa in 2017) and now advise that preventive PCI should be considered either immediately or during a second “staged” procedure. We sought to examine whether the changing evidence has led to a change in practice.

Methods We used electronic hospital records to identify all patients treated for STEMI at the Barts Heart centre, London between 2012 and 2018. Patients with cardiogenic shock were excluded. We examined procedure reports to identify those with multivessel disease (>50% stenosis in one or more non-infarct arteries) who had infarct-artery PCI only or infarct-artery plus preventive PCI, either immediately or as a staged procedure. We recorded the number and proportion of STEMI patients receiving preventive PCI over time and used regression analysis to determine any significant trends.

Results Among the 3355 patients with STEMI without cardiogenic shock who underwent PCI during the 5 years 2012–2018, 1786 (53%) had multivessel disease. Of these, 1245 (70%) received PCI to the infarct artery only and 541 (30%) also received preventive PCI. The Figure shows the number and proportions of patients receiving preventive PCI in each year, together with the publication date for randomised trials and ESC guideline publications. Use of preventive PCI increased by 5.6 percentage points (95% Confidence interval 1.7%–9.6%) per year (p for trend=0.017).

Conclusion The results show a steady increase in the use of preventive PCI in patients with STEMI, following the

publication of randomised trials showing the benefits of preventive PCI and ESC guidance recommending its use.

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Conflict of Interest None

PRIMARY PCI IN THE VERY ELDERLY: A RETROSPECTIVE STUDY OF OUTCOME IN PATIENTS AGED 85 YEARS AND OVER UNDERGOING EMERGENCY ANGIOGRAPHY IN A SCOTTISH REGIONAL CATHETERISATION LABORATORY CENTRE 2013–2018

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Introduction Primary PCI (PPCI) as management for acute STEMI is an established evidence based treatment offered across the UK. Evidence of benefit in the very elderly is sparse. With an aging population, the demand on primary PCI

Abstract 63 Figure 1 Proportion of patients with STEMI without cardiogenic shock receiving Preventive PCI by year 2012–2018 (Key randomised trials and ESC Recommendations marked).