

Methods We ran a retrospective cohort study that included 210 consecutive STEMI patients who presented to a single PPCI centre. We excluded post-fibrinolysis patients, patients with old stents, and those who presented more than 24 hours after the onset of pain. We divided the studied cohort into two subgroups based on the presence of AHF on presentation to the emergency department, the AHF and the no-HF groups. We obtained Informed consent from all patients, and all procedures were done in compliance with the Helsinki declaration for research on human beings. Two blinded interventional cardiology consultants assessed the number of diseased coronaries in the angiograms of the patients before the PPCI was done. A diseased vessel was defined as one that showed 70% stenosis in the left anterior descending, left circumflex, and right coronary artery, or 50% stenosis in the case of the left main coronary artery.

Results The baseline characteristics of the studied groups are presented in table 1. The HF group represented 9.5% of the studied patients. The modal of the number of diseased coronaries was significantly higher in the AHF group compared to the no-HF group (3 vs one vessel, respectively, $p=0.036$). (figure 1) A point biserial correlation analysis illustrated a positive correlation between the presence of AHF and the number of diseased coronary arteries ($r_{pb}=0.16$, $p=0.02$). A multivariate logistic regression analysis confirmed that admission AHF was an independent predictor of having three-vessel coronary artery disease in STEMI patients (OR= 3.79, 95% CI 1.38-10.37, $p=0.01$).

Conclusion AHF in STEMI patients is associated with a higher risk of multivessel disease (MVD) on angiography. This information is crucial in managing those patients, as studies showed higher morbidity and mortality in MVD patients.

Abstract 67 Table 1 The baseline characteristics of the studied groups

Parameter	No-HF group	AHF group	p
Number of patients (%)	190 (90.5%)	20(9.5%)	-
Age (years; mean±SD)	54.99 ±11.3	59.95± 7.62	-
Sex (n;%)			
Males	170 (89%)	17(85%)	0.24
Females	20 (11%)	3 (15%)	
Hypertension (n;%)	73 (38%)	8 (40%)	0.98
IDDM (n;%)	6 (3%)	0 (0%)	0.41
NIDDM (n;%)	70 (37%)	10 (50%)	0.33
Smoking (n;%)	113 (59%)	13 (65%)	0.83
Dyslipidemia (n;%)	112 (59%)	14 (70%)	0.49
Previous MI (n;%)	7(3.7%)	1 (5%)	0.81
Previous CVA (n;%)	1 (0.5%)	0 (0%)	0.74

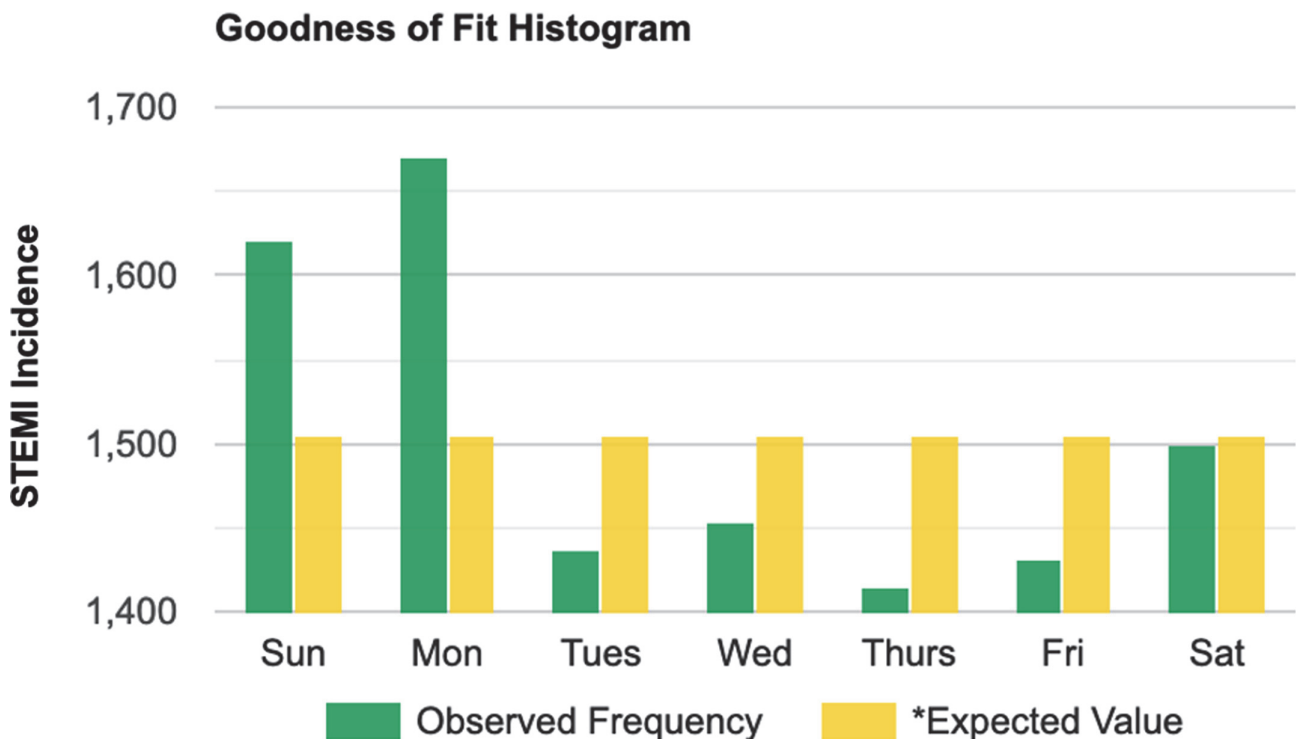
Conflict of Interest None

68 BLUE MONDAY - ASSOCIATION BETWEEN INCIDENCE OF STEMI AND DAY OF THE WEEK

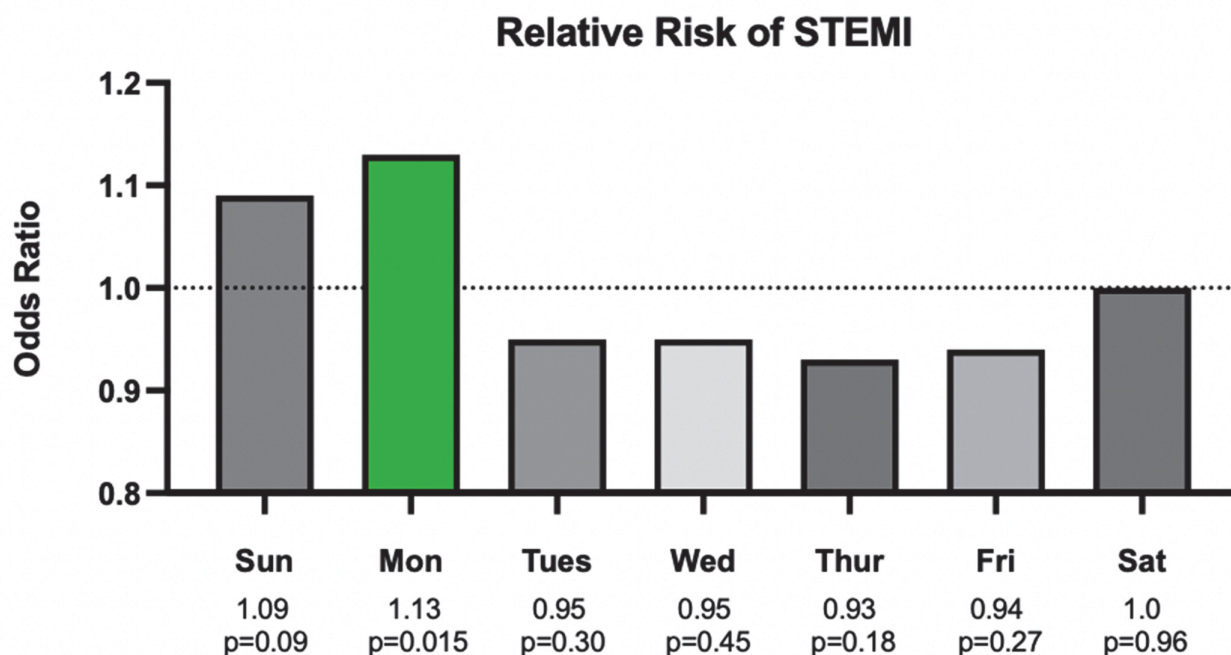
¹Jack Laffan, ²Simon Walsh, ³Robert Byrne, ⁴Jaimie Coburn, ⁵Conor McCann, ⁶Jim Crowley, ⁷Mark McKane, ⁸Peter Kearney, ⁹Mark Kennedy, ¹⁰Charles McCreery, ¹¹Tom Kiernan, ¹²Gavin Blake, ¹³Andrew Maree, ¹⁴Aaron Peace. ¹Belfast Trust; ²Belfast Trust; ³Mater Private Hospital; ⁴Belfast Trust; ⁵Belfast Trust; ⁶University Hospital Galway; ⁷Western Trust; ⁸Cork University Hospital; ⁹Beaumont Hospital; ¹⁰St Vincent's Hospital; ¹¹University Hospital Limerick; ¹²Mater Misericordiae Univeristy Hospital; ¹³St James' Hospital; ¹⁴Western Trust

10.1136/heartjnl-2023-BCS.68

Background Previous studies have shown a circadian association with the incidence of myocardial infarction, with a higher incidence on a Monday. We sought to establish whether there



Abstract 68 Figure 1 Incidence of STEMI by day of the week. (NB truncated y-axis)



Abstract 68 Figure 2 Relative odds ratio of STEMI by day of the week. P values from Chi-square vs other 6 days

was any association between rates of ST-segment elevation myocardial infarction (STEMI) and day of the week in an Irish population

Methods All STEMIs recorded in the Republic of Ireland national ACS database, and from both centres providing primary PCI in Northern Ireland, from January 2013 through March 2018 were included in the analysis. Dates of admission were grouped by day of the week. Chi-Square goodness-of-fit test was performed across the entire data set. Odds ratios and Chi-Square independence tests were calculated for each day versus the mean of the other 6 days of the week.

Results 10,528 patients were included in the analysis (7,112 in the Republic of Ireland, 3,416 in Northern Ireland). Chi-Square goodness-of-fit test showed a significant deviation from an even distribution across the week ($p < 0.000$). The total number of STEMI vs mean by day of week are reported in Figure 1 below. The incidence of STEMI was significantly higher on Mondays: OR 1.13 ($p = 0.015$). Relative odds ratios and p values are reported in Figure 2 below.

Summary We found an association between the incidence of STEMI and the start of the working week. There is a significantly higher incidence of STEMI on Mondays.

Conflict of Interest None

69

RAPID ACCESS CHEST PAIN CLINIC AND INTER-TRUST REFERRALS

Kirandeep Saini, Georgios Karagiannis, Kevin Cheng, Husein Rajabali. *The Hillingdon Hospitals NHS Foundation Trust*

10.1136/heartjnl-2023-BCS.69

Introduction In the UK, rapid access chest pain clinics (RACPCs) are used to meet demand for swift assessment of

patients with recent onset cardiac chest pain in the GP or Emergency department setting. As per NICE guidance (CG95) the first line investigation of patients with stable cardiac chest pain, without known CAD, should be CT Coronary Angiogram (CTCA). Our local RACP pathway includes an inter-trust CTCA referral with patient-arranged appointments to meet this guidance. In this study, we evaluated the effectiveness of our RACPC pathway in meeting the needs of the local population by promptly identifying and treating patients with coronary artery disease (CAD).

Methods Retrospective single-centre cohort study of 125 consecutive patients referred to RACPC (01/01/2019 – 01/03/2019). Patient records were analysed for demographics, requirement for translator, chest pain description, cardiovascular risk factors, medications, investigations, and follow-up. Exclusion criteria: pre-existing coronary artery disease (CAD), incomplete records. Primary outcome was: diagnostic yield (proportion of patients with moderate/severe CAD). Secondary outcomes included: wait time for clinic, wait time for investigation. One-way ANOVA, Post Hoc Tukey HSD, two-tailed t-test, descriptive statistics (Python, Excel).

Results N = 125 patients. 12 excluded for pre-existing CAD or incomplete records. 49.5% male, 50.5% female. Average age: 53.2 years old. 111 (98%) seen within 14-day target. 71% (80/113) of patients referred for CTCA: 11% (9/80) of patients did not attend (DNA), 30% (24/80) had mild, 10% (8/80) had moderate, and 6% (5/80) had severe CAD. 2 patients were directly referred for cardiac catheterisation. Thus, 13.2% (15/113) of patients had moderate/severe CAD. Mean wait time for CTCA was 54 days [IQR:39-64]. One patient required primary PCI prior to CTCA organisation. No risk factors predicting which patients would have a delayed CTCA were identified. Type of chest pain (typical, atypical, non-specific: $f = 1.83$, $p = 0.169$), age ($f = 1.55$, $p = 0.27$),