

(15%) moderate stenosis. Discussion The 2019 ESC PTPRS classifies significantly more females than males (86% vs 31%) as low risk (PTPRS <15%), in whom routine investigation is not recommended. This approach would not have identified 65% of females and 16% of males with significant CAD who happen to have a PTPRS of <15% (Table 2). The use of a calcium score, a low-cost simple test, in patients with PTPRS <15% identified the vast majority with significant CAD who would benefit from primary prevention and further investigation.

Conflict of Interest None

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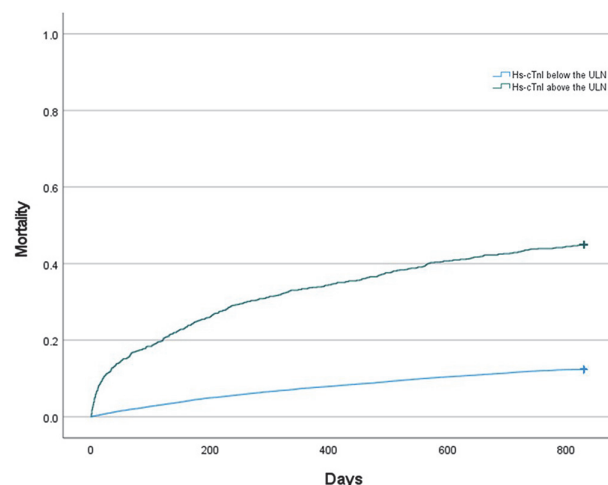
HIGH-SENSITIVITY TROPONIN IS A BIOMARKER OF MEDIUM TERM MORTALITY IN 20,000 CONSECUTIVE HOSPITAL PATIENTS UNDERGOING A BLOOD TEST FOR ANY REASON

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10.1136/heartjnl-2022-BCS.169

Introduction High sensitivity troponin (hs-cTn) concentrations above the manufacturer recommended upper limit of normal (ULN) are frequently seen in patients without a clinical presentation consistent with type 1 myocardial infarction. There is increasing evidence that these concentrations may act as a marker of prognosis in a range of conditions. However, previous studies have been limited because they have only included patients in whom the clinician has requested the test. The aim of this study was to assess the relationship between medium term mortality and hs-cTn concentration in a large consecutive hospital population undergoing a blood test, regardless of whether there was a clinical indication for performing the hs-cTn. **Method:** This single centre study included 20,000 consecutive patients undergoing a blood test for any reason, in whom hs-cTnI was added, regardless of the clinical indication (CHARIOT population). Mortality data up to 2.25 years was obtained via NHS Digital. The association between hs-cTnI concentration and one year mortality was evaluated using Kaplan-Meier plots (with log-rank test) and Cox proportional hazards analyses. After the cohort was considered as a whole, each of the clinical areas (inpatient (IPD), outpatient (OPD), emergency department (ED)) were considered separately. Furthermore, in the IPD and ED populations, a landmark analysis was performed excluding those patients who died within 30 days to assess whether any longer term relationship was driven by short term mortality.

Results Overall, 2825 (14.1%) patients had died at 2.25 years. The mortality at 2.25 years was significantly higher if the hs-cTnI concentration was above the ULN (45.3% versus 12.3% $p < 0.001$ (log rank) in the entire cohort (figure 1). Multivariable Cox regression analysis demonstrated that the log(10)hs-cTnI concentration was independently associated with 2.25 year mortality (hazard ratio (HR) 1.69 (95% confidence interval (CI) 1.59 – 180)). This relationship was demonstrated for patients in each of the clinical areas (IPD HR 1.46 (95%CI



Abstract 169 Figure 1 Kaplan-Meier curve of 2.25 year mortality based on whether the hs-cTnI concentration was above or below the ULN (log rank test $p < 0.001$)

1.33 – 1.60), OPD HR 2.19 (95%CI 1.84 – 2.60), ED HR 1.87 (95%CI 1.68 – 2.07)). Further analysis by excluding those patients that died within 30 days demonstrated that the relationship between hs-cTnI concentration and mortality persisted and it was not driven by short term mortality.

Conclusion In a large, unselected hospital population of both in- and out-patients, the majority of whom there was no clinical indication for testing, hs-cTnI concentration was independently associated with medium term mortality. These data suggest that hs-cTnI may have a role as a biomarker of future risk.

Conflict of Interest All of the assays used in our studies were provided free of charge by beckman coulter

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AUDIT ON THE MANAGEMENT OF DYSLIPIDAEMIA IN PATIENTS PRESENTING WITH ACUTE MYOCARDIAL INFARCTION AS PER ESC GUIDANCE IN A DISTRICT GENERAL HOSPITAL - ARE WE MEETING TARGETS?

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10.1136/heartjnl-2022-BCS.170

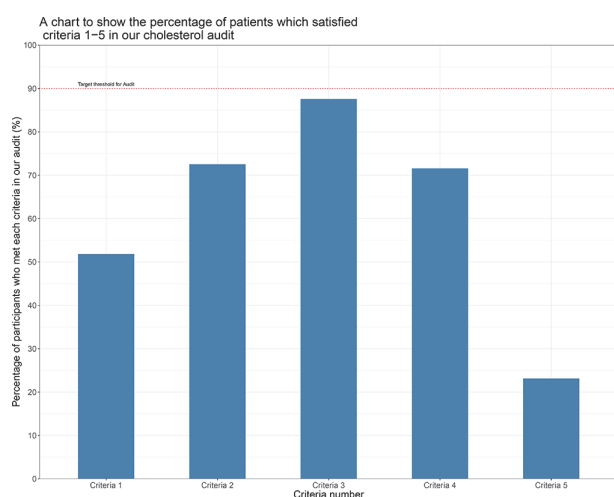
Introduction Lowering LDL-C has been long proven to reduce progression of atherosclerosis and prevent future cardiac events in high-risk patients. For patients diagnosed with an AMI (acute myocardial infarct - STEMI & NSTEMI), ESC guidelines have consistently recommended high-intensity statin therapy to achieve a 50% reduction in LDL-C, or LDL-C levels of <1.4 mmol/L. Failure to do so should warrant consideration for Ezetimibe. Whilst statins are routinely initiated after an AMI diagnosis, this audit has evidenced that post-event lipid monitoring is substandard, and unachieved lipid lowering targets have been insufficiently addressed to facilitate further treatment in those who are otherwise eligible.

Purpose This audit, based on the 2019 ESC dyslipidaemia guidelines, outlines five criteria that we aim to achieve in patients admitted with an AMI:

1. A full lipid profile is measured at first presentation
2. Patient education on lifestyle modifications for secondary prevention of cardiovascular disease are delivered
3. Patients are started on a high-intensity statin (Atorvastatin 80 mg) before discharge
4. Repeat lipid profile & liver function tests are obtained at their first outpatient clinic appointment

5. Ezetimibe should be considered in addition to high-intensity statin for patients who have not reached the lipid reduction target ($>50\%$ LDL-C reduction from baseline, or LDL-C <1.4 mmol/L) or as an alternative lipid-lowering therapy in patients intolerant to statins

Methods and Results After exclusion, a total of 203 inpatients at a district general hospital diagnosed with AMI from February 1st 2021 to September 31st 2021 were identified. Data was compiled from patient case records using clinical notes, a web-based laboratory reporting system, and healthcare summary records to assess relevant blood test results, ward round entries, and relevant correspondence including discharge and outpatient clinic letters. In the 8-month period, we have failed to achieve our $>90\%$ target threshold for any of the five criteria. 47% patients admitted with an AMI had lipid profiles taken on admission, and 72% had this retested at their follow-up outpatient review. 78% received lifestyle modification advice during admission, and high-intensity statin therapy was initiated for only 87%. For the 70 patients indicated for further lipid-lowering therapy with Ezetimibe, only 16% of them had received this recently licensed therapy.



Abstract 170 Figure 1 A chart to show the percentage of patients which satisfied criteria 1-5 in our cholesterol audit

Conclusion Dyslipidaemia is a leading reversible cause of cardiovascular morbidity and mortality, and opportunities to fully address this risk factor have not been consistently taken in secondary care. Ezetimibe has strong evidence on its efficacy in LDL reduction, hence strategies should be aimed at more effective identification of those who may benefit from this recently approved therapy. Cost-effective interventions such as educational presentations and poster information on relevant wards will be trialled with data collected to monitor the progress of each intervention as it is introduced.

Conflict of Interest None

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PREVALENCE OF A NICE-DEFINED INDICATION FOR INCLISIRAN IN A REAL-WORLD TRANS-PANDEMIC ACUTE CORONARY SYNDROME COHORT

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10.1136/heartjnl-2022-BCS.171

Introduction Hypercholesterolaemia is a major modifiable risk factor for acute coronary syndromes (ACS). In October 2021, the National Institute for Health and Care Excellence (NICE) recommended that the small interfering ribonucleic acid against proprotein convertase subtilisin/kexin type 9, inclisiran, be offered to certain patients, including those with a history of ACS and low-density lipoprotein cholesterol (LDL-C) level of ≥ 2.6 mmol/L despite maximum tolerated statin or other lipid-lowering therapy. We aimed to estimate the proportion of our recently treated ACS patients who are likely to have a NICE-defined indication for inclisiran. **Methods** A systematically selected sample of records from patients treated for ACS at our centre from 2019–2021 were reviewed ($n=370$). Data on demographics, diagnoses, treatments and biochemistry results were collected. Proportion of patients with a NICE-defined indication for inclisiran was determined and 95% confidence interval calculated. Where required and valid, LDL-C was calculated using the Friedewald equation.

Results Patients included had a median age of 67 (IQR 58–79) and 74.1% were male. The index diagnosis was ST-elevation myocardial infarction (STEMI) in 46.2% and non-STE-ACS in 53.8%. 97.3% were receiving a statin at time of follow-up, 4.1% ezetimibe and 0.3% a fibrate. Documented reasons for statin avoidance included previous adverse drug reactions and perceived frailty in extreme frailty. Post-discharge measurement of lipid profile was performed in 319 (86.2%) of the cohort. Lack of measurement appeared influenced by changes related to the COVID-19 pandemic (20.3% after March 2020 vs. 7.0% before, odds ratio [OR] 3.4, 95% CI 1.7 to 6.7, $p=0.0002$). There was evidence of significant improvement in lipid profile between admission and first post-discharge measurement (e.g. total cholesterol 4.8 ± 1.4 vs 3.5 ± 1.1 mmol/L, $p<0.0001$). Of those patients with a post-discharge measurement, 29 (9.1%) had LDL-C ≥ 2.6 mmol/L. Of these, 24 were receiving maximum intensity statin therapy whilst 2 were receiving statin but not at maximum dose. 3 were statin intolerant and receiving ezetimibe but with the potential to add another non-statin lipid-lowering drug. At least 24 (7.5%, 95% CI 4.6 to 10.4) would therefore have a clear indication for inclisiran based on current NICE guidance. A diagnosis of STEMI was associated with increased likelihood of LDL-C ≥ 2.6 mmol/L (OR 2.6, 1.1 to 6.1, $p=0.024$). No other significant relationships with other characteristics were seen.

Conclusions Based on these data, approximately 5 to 10% of patients with recent ACS treated in a typical UK centre can be expected to have an indication for inclisiran treatment. Having an accurate estimate in this population can help local resource planning and communication with primary care. We should ensure that monitoring of lipid profile after hospitalisation for ACS is not impacted long-term by the COVID-19 pandemic.

Conflict of Interest None