86 THE IMPORTANCE OF LIPID PROFILE IN SECONDARY PREVENTION IN NSTEMI AND TROPININ NEGATIVE ACS

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Brief Introduction The importance of conducting lipid profiles on admission is highlighted by NICE (National Institute of Clinical Excellence). There is specific guidance on the handling of lipid profiles of NSTEMI (non S-T elevation Myocardial infarction) and Tropinin negative ACS (acute coronary syndrome) patients (CG181). Within a busy East London district general hospital, we examined how effectively this was being undertaken.

Explanation of basic Methods We conducted a retrospective study of 90 patients; NSTEMI/ Tropinin negative ACS admitted between July 2014 and May 2015. (Age: 44–97 mean: 70.5). 77% of patients had commodities which included diabetes, hypertension or a previous history of hypercholesterolemia. We extracted key data from individual patient notes, contacted General Practices and searched the database of patients available at Newham university hospital. This included lipid profiles; whether they were done on admission, the cholesterol level and whether a 3 month lipid profile was done before or after admission. We also recorded the statin type patients were commenced on or changed to. Each individual case was compared to the NICE guidelines on lipid handling in secondary prevention in NSTEMI and tropinin negative ACS patients.

Results Overall 67% of patients (age: 44–97 mean: 70.5) who, according to the guidelines, should have had a lipid profile check on admission had not. 80% did not have their lipid profile checked after 3 months. Of those that did have a lipid profile on admission, 40% had a cholesterol level >4.68% patients already on a statin were switched to atorvastatin 80 mg as in accordance to the NICE guidelines. Of those known, 72% were started on a statin. Of those 72%, 85% were commenced on artorvastatin 80mg.

Conclusions/Implications This shows that although we are good at putting patients admitted with NSTEMI/Tropinin negative ACS on atorvastatin 80mg (as in accordance to the NICE guidelines), we do not take into consideration their current lipid level on admission nor do we consider their 3 month post admission lipid profile. This situation makes it impossible to calculate whether the target of a fall of 40% in non-HDL cholesterol is reached after 3 months on statin therapy and significantly limits our knowledge on the patients condition. Moreover, 77% of the examined patients had comorbidities such as diabetes or hypertension and of these only 45% had a 3 month follow up lipid profile. This collectively demonstrates a lack of understanding of the importance of conducting a lipid profile on admission or 3 months after admission although clearly stated in the NICE guidelines.

87 RESIDUAL ISCHAEMIA POST ACUTE CORONARY SYNDROME (ACS) –– DOES REVASCULARISATION IMPROVE PROGNOSIS?

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Background Residual myocardial ischaemia early after acute coronary syndromes (ACS) is commonly regarded as an adverse prognostic sign and an indication for revascularisation.

However, the benefits of revascularisation for improving prognosis are not known.

Methods Analysis of 597 consecutive patients with ACS treated with coronary stenting, all of whom underwent adenosine stress cardiac magnetic resonance (CMR) perfusion imaging to guide revascularisation decisions. Follow-up data were obtained from hospital electronic health records.

Results The 597 patients (age 59 ± 12 years, 20% female) underwent stress CMR scan, at median of 93 days (IQR: 41, 224 days) after coronary stenting with follow-up for 1.4 years (IQR: 0.6-2.7). Inducible perfusion defects were identified in 293 (49%) patients of whom 18 (6%) died during follow-up compared with 6 (2.0%) patients with no perfusion defects (p=0.01).

Of the 293 patients with perfusion defects (Table 1), 70 (24%) were revascularised (PCI 54, CABG 26) of whom 5 (7%) died during follow-up compared with 13 (6%) who were not evascularised (p=0.66). K-M survival analysis confirmed that revascularisation was unassociated with survival benefit, regardless of the severity of ischaemia (Figure 1).

Conclusion In our patients with ACS and coronary stenting, inducible ischaemia was associated with increased risk of death during follow-up. Revascularisation did not appear to reduce the risk and should be reserved for improving symptoms in patients on optimal medical therapy.

88 ROUTINE POST-OPERATIVE TROPONIN SCREENING FOR MYOCARDIAL INJURY AFTER NONCARDIAC SURGERY (MINS) EVENTS – A SINGLE CENTRE EXPERIENCE

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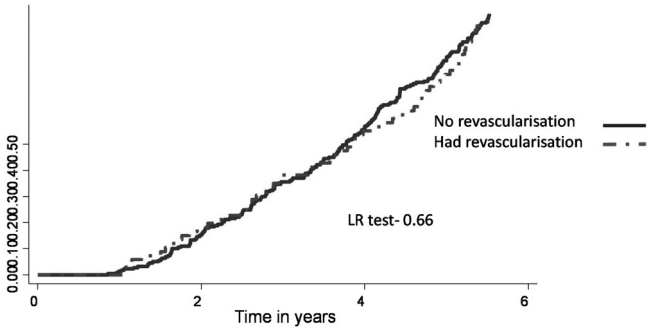
Introduction The VISION study demonstrated an association between 30-day mortality after surgery and raised post-operative troponin levels.[1] Subsequently, diagnostic criteria for 'ischaemic' MINS were established excluding non-ischaemic aetiology.[2] We evaluated our initial experiences with post-operative troponin monitoring, to look in-depth at patients who suffer MINS events.

Abstract 87 Table 1 Baseline characteristics in patients with perfusion defects (n = 293) stratified by revascularisation

Variables	No revascularisation (n =224)	Revascularisation (n = 69)	P value
Median age in years (IQR)	61 (53, 71)	56 (49, 67)	0.05
Female	53 (24%)	18 (26%)	0.68
Current smoker	62 (28%)	26 (38%)	0.11
Diabetes	69 (31%)	14 (20%)	0.09
Median days from ACS to CMR (IQR)	103 (42, 286)	54 (34, 171)	0.03
Mild perfusion defect	100 (45%)	19 (27%)	0.002
Moderate perfusion defect	80 (36%)	23 (33%)	
Severe perfusion defect	44 (20%)	27 (39%)	
Mortality	13 (6%)	5 (7%)	0.66



Abstract 87 Figure 1 Probability of all cause mortality in patients with perfusion defect stratified by revascularisation

Methods Pre- and post-operative high-sensitive troponins were checked on all elective and emergency surgical patients over 45 years of age with an inpatient stay of more than 2 days between August 2014 and June 2015. A MINS event was defined as in the VISION (1) study as any positive post-operative troponin.

Thirty-day mortality after surgery was determined via HES data. Notes, pathology reports and discharge letters were reviewed for evidence of sepsis, prolonged tachycardia, multi-organ failure or significant bleeding (Hb loss of >5 g/l and/or total Hb <8 g/dl). Events were classified as 'non MINS', 'unexplained MINS' or 'secondary MINS' due to one of these provoking factors.

Cox regression analysis was performed to assess association between variables.

Results 388 patients were studied. 196 were male with a mean age of 69 years (range 45–95). 132 (34%) were emergency admissions. 245 (63.1%) had normal post-operative troponins (i.e. non MINS), with 81 (20.9%), 49 (12.6%) and 13 (3.4%) recording troponin levels of 17–50, 51–1000 and more than 1000 respectively. 21 of the positive post-op values represented a downward trend from pre-op tests, with a further 17 positive pre-op values falling into the normal range post-operatively.

The 30 day mortality rate was 2.8% compared to 1.9% in VISION. Of the 11 deaths, 10 (90.9%) were emergency admissions. Two (18.2%) deaths occurred in patients exhibiting a downward trend in troponin and 3 (27.3%) had a normal post-operative troponin (i.e. did not suffer a MINS event).

Abstract 88 Table 1 Types of MINS and 30 day mortality

Pathophysiology	Emergency N = 132 (% of total MINS)	Elective N = 256 (% of total MINS)	All surgery N = 388 (% of total MINS)	30 day mortality N = 11 (% of total mortality)
All MINS events	82	60	142	8 (72.7%)
Unexplained MINS	31 (37.8%)	39 (65%)	70 (49.3%)	0 (0%)
Secondary to Sepsis	41 (50%)	15 (25%)	56 (39.4%)	8 (72.7%)
Secondary to Bleeding	9 (11%)	5 (8.3%)	14 (9.9%)	0 (0%)
Secondary to Tachycardia	1 (1.2%)	1 (1.7%)	2 (1.4%)	0 (0%)
No MINS event	50	196	246	3 (27.3%)
All patients	132	256	388	11

Discussion A raised post-operative troponin was associated with poor prognosis as suggested in the VISION study (p = 0.022 HR 0.213 [0.057–0.803]). Sepsis was also associated with a poor prognosis (p < 0.001 HR 0.08 [0.021–0.305]) as is emergency admission for surgery (p = 0.004 HR 0.05 [CI 0.006–0.392]). However, there was no mortality from 'ischaemic' MINS events (unexplained events and events secondary to tachycardia and bleeding).

Whether MINS events are a separate clinical entity related to unstable or significant coronary disease or a reflection of other poor prognostic factors remains unclear. Further studies assessing coronary anatomy may be useful in delineating this further.

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89 IMPLEMENTATION OF A MODIFIED VERSION OF NICE CLINICAL GUIDELINE 95 ON CHEST PAIN OF RECENT ONSET: EXPERIENCE IN A DISTRICT GENERAL HOSPITAL

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Introduction NICE Clinical Guidance 95 was introduced to Rapid Access Chest Pain Clinics (RACPC) to aid investigation of possible stable angina based on pre-test probability of coronary artery disease (CAD). Following a recent 6 month audit of its implementation in our centre, we introduced a modified version, such that all patients with low or moderate risk of CAD were referred for computated tomography coronary angiography (CTCA), whilst those at high or very high risk were referred for invasive angiography.

Methods The electronic patient records of 546 patients consecutively referred to our RACPC from primary care over a 6 month period were retrospectively analysed. Initial pre-test probability of CAD, referral for initial investigation, incidence of significant CAD and rates of revascularisation at a minimum follow-up time of 6 months were documented.

Results A large proportion of patients assessed had symptoms that were unlikely to be anginal in origin and were discharged directly from RACPC without further investigation. Rates of CAD generally correlated well with pre-test probability. Moderate risk patients showed low rates of CAD and revascularisation. CTCA had a shorter time to investigation than stresse cho, but a number of false positive results. High and very high risk patients had high rates of revascularisation and a large proportion of this was for prognostically significant disease.

Conclusions Low rates of CAD in low and moderate risk groups justifies the use of CTCA as a first line investigation in these patients, reducing waiting times to investigation. Routine investigation of very high risk patients allows a significant proportion to undergo revascularisation for prognostically significant disease. Strict adherence to NICE CG95 could possibly lead to these patients being missed.