Abstract 96 Table 1 Psychosocial and quality of life outcomes before and after the multi-disciplinary care pathway

	Hospital Anxiety and Depression Scale				Seattle Angina Questionnaire score							
Outcome	Anxiety		Depression		Total (quality of life)		Physical limitation		Frequency & perception		Treatment satisfaction	
No. of patients	85		85		84		83		83		83	
Time point	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Median score	9	8	7	7	44.5	62.5	46	57	29	53	58	83
Median difference	-1		-1		+19		+8		+18		+25	
Effect	Improvement		Improvement		Improvement		Improvement		Improvement		Improvement	
Significance	*p=0.0005*		*p-0.0469*		*p<0.0001*		*p<0.0001*		*p<0.0001*		*p<0.0001*	

Abstract 96 Table 2 Use of cardiovascular medications before and after the multi-disciplinary care pathway

n=72	ON		OFF		% CHANGE ON MEDICATION	SIGNIFICANCE
	BEFORE	AFTER	BEFORE	AFTER		
β-blocker	54 (75.0%)	47 (65.3%)	18 (25%)	25 (34.7%)	- 9.72	*p>0.05*
CCB	45 (62.5%)	40 (55.6%)	27 (37.5%)	32 (44.4%)	- 6.94	*p>0.05*
Long-acting nitrate	40 (55.6%)	36 (50.0%)	32 (44.4%)	36 (50.0%)	- 5.56	*p>0.05*
Nicorandil	37 (51.4%)	28 (38.9%)	35 (48.6%)	44 (61.1%)	- 12.5	***p<0.05***
Ivabradine	5 (6.94%)	14 (19.4%)	67 (93.1%)	58 (80.6%)	+ 12.5	***p<0.0001***
Ranolazine	7 (9.72%)	19 (26.4%)	65 (90.3%)	53 (73.6%)	+ 16.7	***p<0.0001***
ACEI/ARB	57 (79.2%)	60 (83.3%)	15 (20.8%)	12 (16.7%)	+ 4.17	*p>0.05*
Statin	64 (88.9%)	60 (83.3%)	8 (11.1%)	12 (16.7%)	- 5.56	*p>0.05*
Antiplatelet	68 (94.4%)	68 (94.4%)	4 (5.56%)	4 (5.56%)	0.00	*p>0.05*
Abbreviations - CCB: calcium channel blocker; ACEI: angiotensin-converting enzyme inhibitor; ARB: angiotensin receptor blocker						

outcomes, QoL and changes in cardiovascular medications. We performed a retrospective search of Electronic Patient Records and databases at the Royal Brompton Hospital for all patients with RA seen between 23/01/2003 and 06/06/2016. Data collected included pre- and post-intervention Hospital Anxiety and Depression Scale and Seattle Angina Questionnaire scores, use of the Angina Plan, referral for specialist pain management and alterations in cardiovascular medications. Median scores and differences for anxiety, depression and QoL were analysed using Wilcoxon matched-pairs signed rank tests. Chi-squared tests were used to assess medication changes. Statistical significance was $p<0.05$.

Results A total of 190 patients with RA were included. The Angina Plan was used in 80.5% (n=153) and 38.9% (n=74) patients were referred to pain clinic. Comparison of pre- and post-intervention scores (Table 1) showed significant improvements in anxiety ($p=0.0005$), depression ($p=0.0469$), and QoL including physical limitation, frequency and perception of angina symptoms and treatment satisfaction (all $p<0.0001$) (Figure 2). Nicorandil use was reduced ($p<0.05$) and ivabradine and ranolazine increased ($p<0.0001$). Other anti-anginal (ÃƒÅ¸-blockers, calcium channel blockers, long-acting nitrates) and disease modifying drugs (angiotensin-converting enzyme inhibitors/angiotensin receptor blockers, statins, antiplatelets) were unchanged ($p>0.05$) (Table 2).

Conclusions In this study, we showed that a multi-disciplinary care pathway for patients with RA can significantly improve psychosocial outcomes, QoL and medication use. Furthermore, the rate of use of the Angina Plan was high, emphasising the benefits of this specialist nurse-delivered cognitive behavioural therapy-based rehabilitation program in the management of RA. Conventional anti-anginal medication use was largely unchanged or reduced (52.8% of patients), in keeping with a non-cardiac aetiology for a proportion of patients symptoms. Ivabradine and ranolazine increased, associated with their introduction to the market. Few data demonstrate the potential impact of specialist services for patients with RA in improving QoL and psychosocial wellbeing, which are the management priorities in this challenging patient group. Our findings suggest that further work in this area is warranted.

97 CAN PRE-OPERATIVE TROPONIN LEVELS PREDICT POST-OPERATIVE MORTALITY FOLLOWING NON-CARDIAC SURGERY?

Matthew Jackson*, Mark Hammonds, Nicola Cunningham, Sehrish Khan, Neil Swanson, David Austin, Mark de Belder, Michael Stewart. *James Cook University Hospital*

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Introduction Despite advances in surgical and anaesthetic techniques, non-cardiac surgery still has a significant mortality. We hypothesised that pre-operative troponin levels might predict post-operative mortality.

Methods Patients undergoing elective and urgent/emergency non-cardiac surgery excluding minor procedures were retrospectively assessed for known vascular disease (defined by diagnostic imaging or previous intervention rather than clinical assessment) and vascular risk factors including hypertension, treatment with lipid-modifying agents (irrespective of agent or dose) and chronic lung disease.

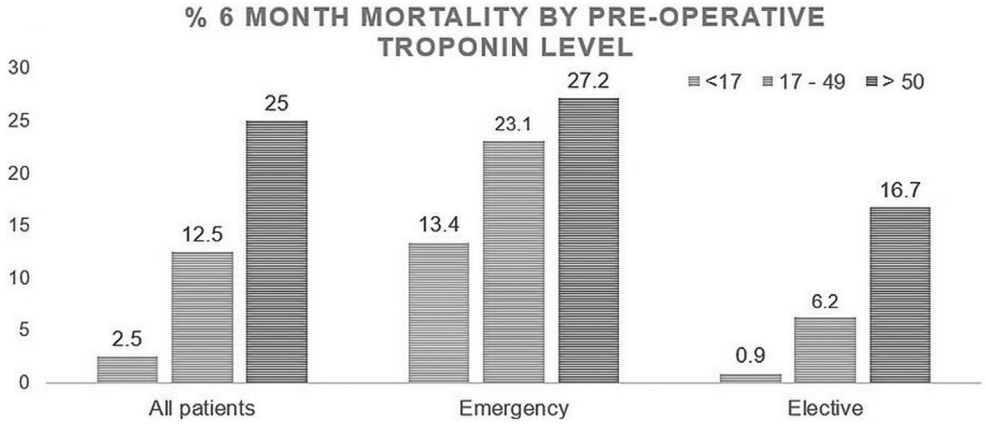
Pre-operative high-sensitivity troponins and routine pre-operative bloods were recorded. Six- and twelve-month mortality data were collected; independent predictors of mortality and associations between pre-operative patient characteristics and pre-operative troponin were determined.

Results 993 patients were assessed; 13% had an elevated pre-operative troponin with 3%>50 ng/L. 825 (83%) were elective patients; 8.6% had an elevated pre-operative troponin.

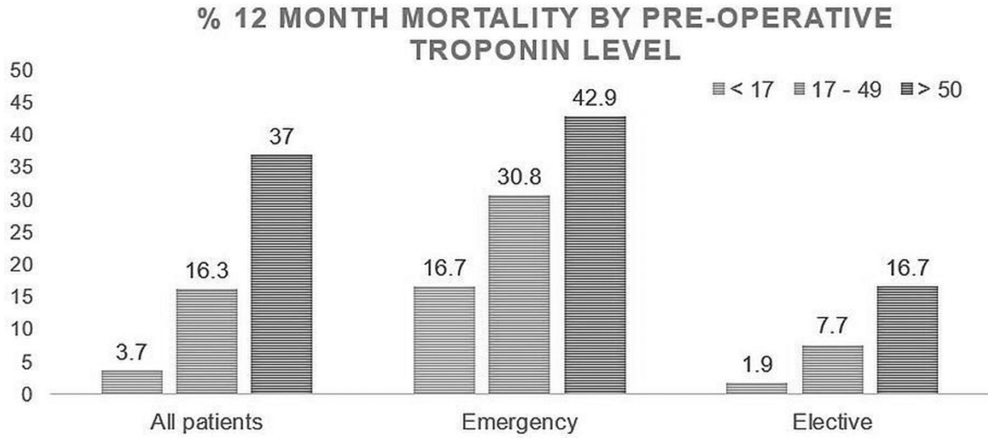
Six-month mortality was 4.2% and 5.9% at twelve months. Elevated pre-operative troponin was associated with higher post-operative mortality; 2.5%, 12.5% and 25% for a troponin <17 ng/L, 17 – 49 ng/L and >50 ng/L respectively

Abstract 97 Table 1

Predictors of six-month mortality		
	P value	Hazard Ratio
All patients		
Abnormal renal function	< 0.001	0.973 (0.967 – 0.990)
Emergency presentation	< 0.001	7.499 (3.556 – 15.814)
Pre-operative troponin > 50ng/l	0.043	2.556 (1.031 – 6.340)
Emergency presentation		
Abnormal renal function	0.039	0.986 (0.972 – 0.999)
Elective presentation		
Abnormal renal function	< 0.001	0.949 (0.925 – 0.974)
Pre-operative leucocytosis	0.001	1.243 (1.105 – 1.398)
Predictors of twelve-month mortality		
	P value	Hazard Ratio
All patients		
Emergency presentation	< 0.001	5.622 (3.087 – 10.237)
Abnormal renal function	0.001	0.981 (0.971 – 0.992)
Pre-operative troponin > 50ng/l	0.021	2.502 (1.150 – 5.444)
Age > 75 years	0.005	2.712 (1.341 – 5.483)
Elective patients		
Abnormal renal function	< 0.001	0.954 (0.934 – 0.974)
Age > 75 years	0.052	2.561 (0.991 – 8.199)
Pre-operative leucocytosis	0.006	1.161 (1.045 – 1.290)
Past history of stroke / TIA	0.034	4.104 (1.166 – 15.996)



Abstract 97 Figure 1



Abstract 97 Figure 2

(figure 1). This trend was also evident at twelve months; 3.7%, 16.3% and 37% for the same troponin bands (figure 2). Lipid-modifying agents were independently associated with a lower rate of pre-operative troponin release (HR 0.446 (0.232 – 0.857) p=0.015).

Impaired renal function (assessed as a continuous variable), emergency presentation and pre-operative troponin levels were independent predictors of six- and twelve-month mortality with emergency presentation the strongest predictor by hazard ratio (table 1). Age over 75 independently predicted twelve-month mortality only.

Conclusion The role of pre-operative troponin monitoring and the prevalence of pre-operative troponin has not previously been established on an all-comer population. Pre-operative

troponin level greater than 50 ng/L is an independent predictor of six and twelve-month mortality following non-cardiac surgery in an all-comers cohort although the mechanism of troponin release is not clear.

The lower rate of troponin release associated with lipid-modifying medication has been seen in other studies (1). We hypothesise the known anti-inflammatory effects of statins may indicate a systemic inflammatory process responsible for the troponin release rather than unstable coronary disease. Further studies to assess this in the elective population may be useful to target pre-operative interventions.

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98 LONGER TERM OUTCOMES OF PATIENTS DISCHARGED FROM RAPID ACCESS CHEST PAIN CLINIC AFTER FIRST CONSULTATION

Helen Gaunt*, Amerjeet Banning, Elved Roberts, Jan Kovac, Anthony Gershlick. *Glenfield Hospital, University Hospitals of Leicester NHS Trust*

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Introduction The Rapid Access Chest Pain Clinics (RACPC) system has become an important way of assessing patients who present with chest pain to their primary care physician. Based on standard protocols up to 50% are discharged with a diagnosis of non-cardiac pain and re-assured. This abstract reviews the longer term outcomes of such patients.

Aims and Objectives We sought to determine the proportion of patients discharged from the University Hospital of Leicester (UHL) RACPC with non-cardiac chest pain, and retrospectively determine the outcomes of these patients specifically with regards to mortality, re-admission with acute coronary syndromes or re-attendance at a cardiology outpatient clinic.

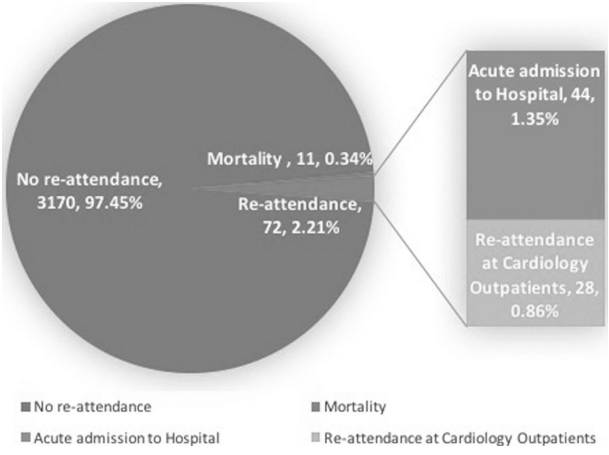
Methods All patients reviewed in the UHL RACPC and discharged with a diagnosis of non-cardiac chest pain between 2010 and 2013 were followed-up for 1 year. Data regarding hospital readmission was obtained from UHL Hospital Episode Statistics. The coded diagnosis for cardiac readmissions was confirmed with review of discharge summaries. Clinic letters and investigations were reviewed for patients who were subsequently referred to cardiology outpatients following discharge from RACPC.

Results Of 7066 patients seen in the RACPC clinic between 2010–2013. 3253 were discharged with a diagnosis of non-cardiac chest pain (46.0%), and consistent/year (2010-2011%–45.8%, 2011-2012%–47.0%, 2012-2013%–45.2%). Outcomes are summarised in fig 1. Follow-up was 12 monthsfor death and re-admission, and 6 months for re-attendance at cardiology OP clinic. **Readmission:** The 12 month acute readmission rate for patients discharged was 1.4% (44/3253) with most for non-cardiac causes (28 patients). Only 8 patients were readmitted for acute coronary syndromes (0.24% of discharged patients). Non-ACS cardiac admissions (8 patients) were predominantly for arrhythmias (table 1). None of the patients readmitted with ACS or non-ACS cardiac condition died within 1 year of discharge from RACPC. **Re-attendance at cardiology outpatients:** 28 patients (0.86%) were seen in the cardiology outpatient clinic 6 months following discharge from RACPC. 74% of these patients underwent further cardiac investigations (fig 2), however only 7 patients were diagnosed with ischaemic heart disease (0.2% of patients discharged from RACPC). **Mortality:** 11 patients (0.3%) died within one year of discharge from the RACPC. Median time from RACPC attendance to death: 210 days (IQR=128 – 285 days). The causes of death included metastatic cancer (4), Large PE secondary to pancreatic cancer (1), acute haemorrhagic pancreatitis (1), Sepsis (2). One recorded death from MI was in the context of sepsis, DKA and CVA.

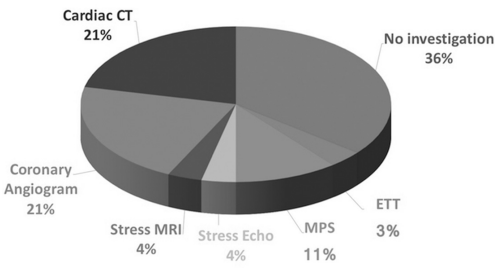
Conclusions These data show that thorough and accurate assessment of patients with chest pain in the RACPC leads to good outcomes with a subsequent very low hospital admission rate for ACS These are reassuring data.

Abstract 98 Table 1

Diagnosis following non-ACS readmission	Number of patient (%)
Arrhythmia (AVNRT, AVRT, AF or Atrial Flutter) – confirmed or suspected	5 (62.5%)
Chest pain–stable angina	1 (12.5%)
Chest pain – pericarditis	1 (12.5%)
Out of Hospital Arrest – normal coronaries	1 (12.5%)
Heart Failure	0
Total	**8 (100%)**



Abstract 98 Figure 1



Abstract 98 Figure 2