unselected population and whether knowing this information helps guide preventive or therapeutic measures.

**P12 EXPLORING THE VALUE OF COMPUTED TOMOGRAPHY CORONARY ANGIOGRAPHY IN GUIDING MANAGEMENT OF ASYMPTOMATIC PATIENTS WITH FAMILIAL HYPERCHOLESTEROLAEMIA**

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Introduction Computed tomography coronary angiography (CTCA) is increasingly requested in asymptomatic patients with familial hypercholesterolaemia (FH) to risk stratify and determine cholesterol management strategies. Currently there is no consensus regarding the value of calcium scoring or CTCA for this purpose. We sought to evaluate how often CTCA leads to positive changes in management in this patient group.

Methods As part of a wider quality improvement project on CTCA use at a tertiary centre in London, we retrospectively identified patients referred for CTCA from the lipid clinic with confirmed FH between 2015 and 2019. Patient records were reviewed to determine clinical outcomes following CTCA. CTCA reports were scored as having coronary artery disease (CAD) if at least one mildly stenotic plaque (>25%) was identified.

Results We identified 42 patients with FH and a CTCA, of which 24 were asymptomatic. 14 had CAD, with most having plaque in the LAD (LMS=2; LAD =13; LCx = 6; RCA = 10). As a result, 10 patients (71.4%) had intensification of their cholesterol management and half (n=7) were initiated on novel PCKS9 inhibitors. The remaining 4 patients with CAD and those with no CAD (n=10) continued on the same treatment without de-escalation. 3 patients had downstream testing for ischaemia.

Conclusion In this small case series, we find supporting evidence that CTCA leads to a positive change of management in asymptomatic patients with FH once coronary anatomy is known. Further studies on cost effectiveness, safety and outcomes are needed before this practice can be widely recommended.

**P13 THE ANATOMICAL AND FUNCTIONAL CHARACTERISTICS OF MYOCARDIAL SCAR IN MINOCA PATIENTS**

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Introduction Previous research has identified the pattern of scarring associated with different aetiologies of myocardial infarction with non-obstructive coronary arteries (MINOCA). However, the association between the characteristics of scar and the impact these characteristics have on the strain of the myocardium has not been investigated. The purpose of this study is to investigate whether the left ventricular ejection fraction (LVEF) and global longitudinal strain (GLS) of the myocardium is affected by the amount and pattern of late gadolinium enhancement (LGE).

Methods 150 patients (mean age 59.0 ± 15.1 years) who were referred for cardiac MRI (CMR) were recruited retrospectively. Patients with known heart failure, previous myocarditis or not meeting the ESC working group definition of MINOCA were excluded. All patients were scanned at least 28 days after presentation. Their CMRIs were analysed for LVEF, GLS and amount of LGE. SPSS was used to run linear regression, T-test and Kolmogorov-Smirnov Test (K-S) for data analysis.

Results 57 of the 150 patients had LGE (mean LGE size 1.43g ± 2.89). There was no significant correlation between the amount of scarring and GLS (p=0.350) overall. However there was a significant association between the amount of ischaemic scar and worsening GLS (p=0.025). There was no significant difference in GLS between ischaemic and non-ischaemic patterns of LGE (t=0.914, p=0.188).

Conclusion The amount and pattern of scar do not independently have a direct impact on the GLS of the myocardium in MINOCA patients. Our data suggests that there is a significant correlation between the amount of ischaemic scar and the GLS.

**P14 DOWNSTREAM INVESTIGATION FOLLOWING CT CORONARY ANGIOGRAPHY: AN AUDIT OF PRACTICE IN A UK CENTRE**

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Introduction In the UK, national guidance on the assessment of cardiac sounding chest pain (NICE CG95 2016), advises that CT coronary angiography (CTCA) is the first line imaging modality. If this reveals coronary artery disease of uncertain functional significance or is non-diagnostic, non-invasive functional testing is advised as second line. Invasive coronary angiography is only advocated as third-line when functional imaging is inconclusive or if intervention is planned and should not be performed merely to ‘check’ CTCA. We present an audit to assess the adherence to this national guidance in our centre.

Methods Retrospective analysis of 281 consecutive CTCA performed between July 2017 to June 2018 and October 2018 to January 2019. Data collected include demographics, CAD-RADS score, and the presence/absence of any subsequent functional imaging, invasive angiography, PCI, or CABG up until the data collection time-point (September 2019).

Results 276 scans were suitable for analysis and, out of these, 231 (84%) were discharged without further investigation. A total of 24 patients underwent subsequent functional imaging and 25 underwent invasive coronary angiography; in 16 of these patients (64%) no revascularisation was performed.

Conclusion Overall adherence to the guidelines at our institution is good with the majority of patients (84%) discharged without further investigation. Importantly, in 64% of patients undergoing invasive angiography no intervention was performed, suggesting that some of these may be unnecessary.