angiography (CTCA) to exclude CAD in low risk patients. Here we report our experience of integrating this approach to our Rapid Access Chest Pain Clinic (RACPC) over a 32 month period.

Methods Data was retrospectively analysed from consecutive patients attending RACPC, referred for CT. Both CaS and CTCA were performed by default by our radiology department, regardless of CaS, using older 64-multislice and newer generation 128-multislice CT scanners (the latter capable of flash acquisition and prospective gating). The radiation dose (RD) in milli-Sieverts (mSv) received by each patient was calculated from the dose-length product. Patients with significant CAD on CTCA (at least 1 >50% lesion) were referred for invasive angiography (XA).

Results 156 patients were included (Males n=68, females n=88; mean age 52.2±8.7). The median RD received was 4.45 mSv (0.48–20.59); patients scanned in the newer generation CT scanner received significantly less RD than those in the older scanner (median 2.54 (0.48–8.75) vs 11.55(8.07–20.59) mSv respectively, p<0.001). Ninety-six patients had a CaS=0 (male=32, female=64, mean age 50±9 years); of these, 5 (5.5%; mean age 47.7 ±14.7 years) had significant CAD of which 3 underwent intervention on prognostic grounds. Those with a CaS >1 were significantly older (mean age 55±7 years, p<0.001; male=36, female=24) with a higher proportion of significant CAD (36.7%, n=22;). Of those who NICE would have recommended had XA as their first line investigation (ie, PL 60–90%; n=26), 50% (n=13) had no pathology. Of those with PL of >90%, who NICE would have recommended to treat as stable angina without investigation (n=8), 3 had prognostic disease requiring either percutaneous or surgical revascularisation.

Conclusions A CaS of 0 in symptomatic patients does not rule out significant and prognostic CAD, particularly in younger patients. Prospective gating with 128-multislice CT scanners in patients with optimum heart rate and rhythm significantly reduces the RD. Given that 50% of our patients recommended by the NICE guidelines to have XA as their first line investigation had no significant disease on CTCA, it is reasonable to consider CaS and CTCA as a first line investigation in selected higher risk patients. Our findings in the highest risk patients (PL CAD>90%), who NICE recommend treating medically as stable angina, suggest that this group may benefit from investigation with XA being the most appropriate choice.

111 INTERGRATION OF CT CALCIUM SCORING AND CT CORONARY ANGIOGRAMS INTO A TERTIARY HOSPITAL RAPID ACCESS CHEST PAIN CLINIC

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Introduction In March 2010 NICE published guidelines for assessment of patients with chest pain of recent onset based on their pre-test likelihood (PL) for coronary artery disease (CAD). A novel aspect was the use of a CT calcium score (CaS) and CT coronary