contrast data were collected by 2 clinicians. Measurements were internally validated by 2 consultant cardiologists. Data was analysed and reported.

Results 52 CTPA were performed during the study period and included for evaluation. A protocol using a low voltage (e.g., 80 kilovolt) with 800 mg/kg of contrast and a scan time delay of 70 seconds yields a mean intravascular attenuation of >250 Hounsfield units (HU) in the Fontan conduit and pulmonary arteries in patients with TCPC.

Conclusion Consistent and accurate diagnosis of Fontan thrombosis in both paediatric and adult patients must involve an adaptive approach by radiology departments to ensure CT protocols yield quality diagnostic data for this unique group of patients. Our institutional approach meets the international standards of mean intravascular attenuation of >250HU within the target vasculature of interest. This data presents a significant sample size to contribute toward developing an evidence base for CTPA imaging in Fontan patients.

P24 LVEF MEASURED WITH SAME DAY ECHOCARDIOGRAPHY AND CMR IN PATIENTS WITH SUSPECTED CARDIOTOXICITY

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Objective Left ventricular ejection fraction (LVEF) is widely used for assessment of cardiotoxicity in cancer patients. Cardiovascular Magnetic Resonance (CMR) is the reference standard for LVEF assessment, but echocardiography is most widely used. This study sought to compare LVEF measured by echocardiography and CMR in cancer patients with suspected cardiotoxicity.

Methods 745 patients underwent same day imaging with echocardiography and CMR. Cases with suboptimal image quality and those in whom 2D Biplanal Simpson’s method could not be performed were excluded. A sub-set (n=74) also had 3D echocardiography derived LVEF. Agreement was determined by Bland-Altman analysis.

Results Mean age of patients was 60±5 years, of whom 62% were female. 2D echocardiography LVEF was significantly lower compared to CMR, (median 60% [interquartile range 54–65%] vs 63% [interquartile range 56–69%], p<0.001). Using Bland-Altman analysis, mean bias was -3.7±7.6% (95% limits of agreement [LOA] -18.5 to 11.1%) of 2D echocardiography versus CMR derived LVEF. In 74 patients in whom CMR, 3D echocardiography and 2D echocardiography were performed, LVEF was 60.0±10.4%, 58.4±9.4% and 57.2±8.9%, respectively (p=0.0006). There was better agreement with 3D echocardiography and CMR derived LVEF (mean bias of -1.6±6.3 [95% LOA -13.9 to 10.7%] compared to 2D echocardiography and CMR derived LVEF (mean bias of -2.8±6.3 [95% LOA -15.2 to 9.6%], p=0.02).

Conclusion 2D echocardiography and CMR derived LVEF are not interchangeable. 2D echocardiography has variations of ±15% compared to CMR. 3D echocardiography has better agreement with CMR derived LVEF and should be used for assessment of cardiotoxicity.

P25 PREDICTIVE VALUE OF CT CALCIUM SCORE IN RISK STRATIFICATION OF CORONARY REvascularization, acute coronary syndrome or death in high-risk patients: a single centre registry experience

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Objective Atheroma based assessments provide better prognostic information than ischaemia testing. This retrospective registry aims to determine the utility of calcium score for risk-stratification in a high-risk sub-population.

Methods Consecutive patients presenting with chest pain, who had sequential CT-based coronary calcium scan and clinically indicated invasive coronary angiogram were included. Baseline risk-score strata were related to a composite-outcome of time to coronary revascularization, acute coronary syndrome or death.

Results 51 of 356 patients (mean age 65 SD+/-1.59 years, 25% women) had an invasive angiogram (SYNTAX score 4 [IQR 0–11]), following CT-coronary calcium scan (calcium score 292 [IQR 69–743]). Median follow-up time was 2.3 years (IQR 0.31–4.7). The composite-outcome was observed in 26 patients (event-rate 17.9/100 person-years). End-point distributions differed for calcium and SYNTAX scores (Log-Rank p=0.03 and p<0.001, respectively). Calcium score strata was a significant predictor even after adjustment for SYNTAX score tertiles (adjusted hazard ratio 1.76 [95% CI:1.08–2.85]). While calcium score compared less favourably in discriminating risk (Harrell’s C-statistic 0.67 [95% CI:0.56–0.77] versus 0.80 [95% CI:0.71–0.89] for SYNTAX score), calcium scores of zero had good negative-precipitive-value (100% [95% CI:87%-100%]), while scores ≥1000 had good positive-precipitive-value (88% [95% CI:47%-99%]).

Conclusion In a high-risk population, the presence of any calcium in the coronary tree, i.e., calcium score ≥1, is predictive. Calcium score has predictive value in indicating risk at extreme ends of the spectrum (calcium score of zero and ≥1000). Exact scores ranging from 1–1000 offer limited additional value in terms of risk-stratification.

P26 FEASIBILITY OF RADIOGRAPHER LED CARDIAC CT LISTS TO REDUCE WAITING TIMES

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Objective In our tertiary cardiac centre, computed tomography coronary angiography (CTCA) lists are supervised by Consultants to ensure optimal heart rate control. However, waiting times of 16 weeks led to an initiative of