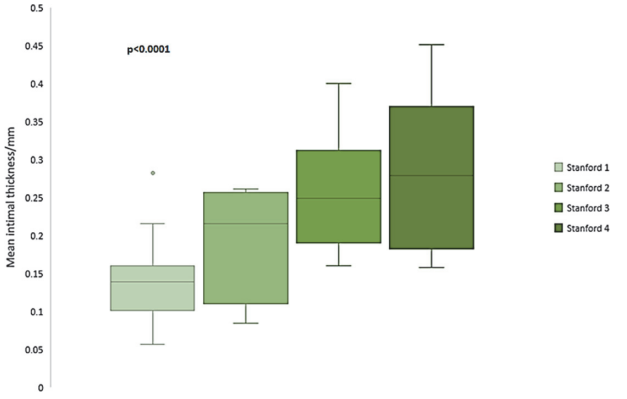
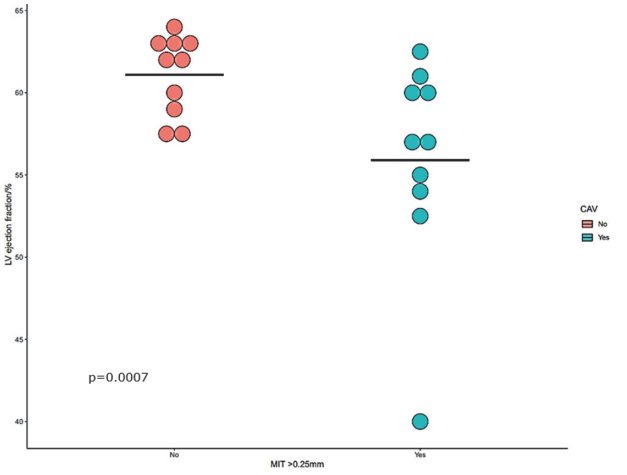


Abstract 123 Figure 1 Box plot showing optical coherence tomography-derived mean intimal thickness of each coronary vessel as a function of intravascular ultrasound-derived Stanford classification. P value relates to the significance of the concordance



Abstract 123 Figure 2 Dot plot showing left ventricular ejection fraction at time of angiography for patients with and without optical coherence tomography-defined coronary allograft vasculopathy (CAV), defined as mean intimai thickness (MIT) >0.25mm. Crossbar represents mean ejection fraction

significantly smaller on OCT: mean intimal thickness (IT) by OCT was 0.21±0.1mm vs 0.44±0.24 mm by IVUS, p <0.001. A mean ITOCT >0.25mm had a sensitivity of 86.7% and specificity of 74.3% at detecting Stanford grade 4 CAV. Those with CAV evident on ICA had significant reduction in graft ejection fraction (EF) over median follow up of 7.3 years (mean ΔEF -3.6% with CAV vs +3.8% without CAV, p=0.04). Patients with mean ITOCT >0.25mm in at least one vessel had a lower EF at time of surveillance (55.9% vs 61.1%, p=0.0007) (figure 2). Only two MACEs were noted.

Conclusion Coronary imaging with OCT correlates well with IVUS for detection of CAV. Mean IT of >0.25mm on OCT detects Stanford grade 4 CAV with reasonable accuracy and may be a useful cut-point for clinical use.Combined angiography and OCT to screen for CAV within 12-24 months of transplant predicts concurrent and future deterioration in left ventricular function, thus may trigger early alterations to clinical management to prevent clinical worsening.

Conflict of Interest none

124 COMPARING THE SAFETY AND FEASIBILITY OF IMPLANTING PULMONARY ARTERY PRESSURE MONITORS VIA THE INTERNAL JUGULAR VEIN COMPARED TO STANDARD FEMORAL VENOUS ACCESS IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION

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Aim To review feasibility and safety of implanting pulmonary artery pressure (PAP) monitors via the right femoral vein (RFV) versus the right internal jugular vein (RIJV) in a cohort of patients with pulmonary arterial hypertension (PAH) referred to the National PH centre in Sheffield.

Background The implantation of PAP monitors is currently licenced via the RFV during a standard right heart catheterisation (RHC). Although access via RFV and RIJV for RHC have been shown to be safe, procedures undertaken via the RIJV can be quicker, better tolerated and shown to have a significantly lower risk of complication than those via the RFV, and can reduce length of stay by facilitating same day discharge.

Methods From January 2020 to March 2021, 15 PAP monitors were implanted in patients with WHO-FC III PAH and a hospital admission within the past year as part of the FIT-PH study (Feasibility of novel clinical Trial infrastructure, design and technology for early phase studies in patients with Pulmonary Hypertension) (19/YH/0354). Catheter lab reports, radiology records and clinical records were reviewed to compare safety and screening/procedure time and radiation dose of RFV and RIJV access.. Implants were performed by an interventional-trained consultant cardiologist with experience in heart failure and PH.

Results 8 implants were undertaken via RFV access and 7 via RIJV. Demographics and background therapy were well matched between groups. No procedure or device-related complications were identified. Screening time for RFV procedures: 22mins 5secs ±13.2 compared to RIJV procedures: 8mins ±4 (p value 0.0155) and RFV radiation dose: 22.5 GYCM2 ±20.6 compared to RIJV: 18.5GYCM2 ±16 (p value NS).DiscussionPatients with PAP sensors implanted via the RIJV had a significantly reduced screening time and a reduced radiation dose although this was non-significant. RIJV procedures were well tolerated and quicker procedures. RIJV implantation also facilitated same day discharge potentially reducing costs.

Conclusion The implantation of PAP monitors via the RIJV in patients with patients was found to be a safe and feasible alternative to RFV access in patients with PAH. Significantly reduced procedure times with RIJV procedures facilitated early and safe discharge.

Conflict of Interest none

125 CARDIAC METABOLIC FLEXIBILITY AND MYOCARDIAL SUBSTRATE UTILISATION IN RESPONSE TO PHARMACOLOGICAL STRESS IN TYPE 2 DIABETES

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