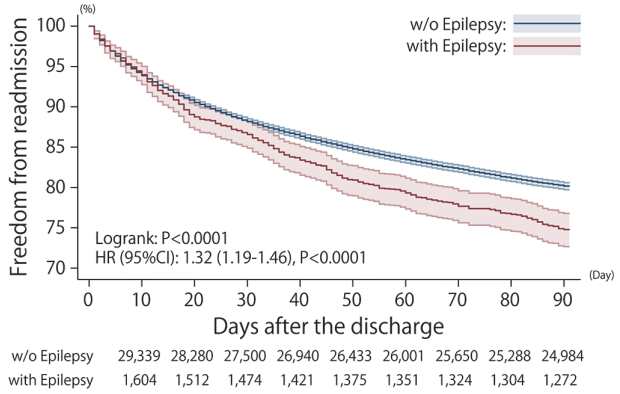

Abstract 15 Figure 2 Kaplan-Meier Carve for 90-day readmission

Conclusions Concomitant atrial fibrillation in hypertrophic cardiomyopathy increases the risk of thromboembolic events including ischaemic stroke and transient ischaemic attack. The apical subgroup shows a similar risk of acute cerebrovascular events as the overall hypertrophic cardiomyopathy population.
Conflict of Interest None

16 THE EFFECTS OF SOCIAL DEPRIVATION ON CLINICAL OUTCOMES IN INFECTIVE ENDOCARDITIS

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Introduction Infective endocarditis (IE) is associated with significant mortality. Studies have highlighted differences in the epidemiological profile of the IE population between countries of differing socioeconomic status and associated outcomes. Social deprivation has a measurable impact on cardiovascular health, but a paucity of evidence exists regarding the influence of social deprivation in IE.
Aim We assessed the impact of social deprivation on the demographics, admission characteristics and clinical outcomes of patient's admitted with IE.
Methods 483 patient visits from December 2013 to February 2021 were included. Patient visits were allocated to either high, medium or low social deprivation tertile based on Index of Multiple Deprivation Decile (High n=163, Medium n=154, Low n=166).
Results High social deprivation was associated with significantly higher early (30 day) all-cause mortality (P=0.044). Patients in the high social deprivation tertile were more like to be female (P=0.043), younger (P<0.001), intravenous drug users (P=0.011), dialysis-dependent (P=0.001), have a history of depression (P<0.001) and of Black ethnicity (P<0.001). There were no differences in inflammatory response or responsible organism. High social deprivation was associated with significantly less aortic (P=0.014) or prosthetic-valve (P=0.003) related infections but had higher cerebral microemboli (P=0.016), correlating with highest proportion of presentation with stroke (High 27.6%, Medium 20.8%, Low 23.5%). 38.9% of patients had a surgical indication and 75.0% of them went on to have inpatient surgery. High social deprivation had a significantly lower EuroSCORE II (P=0.022), but had the lowest rate of surgery when indicated (High 71.7%, Medium 76.9%, Low 76.3%). Multivariate analysis demonstrated white blood cell (WBC) count (P=0.039) and presentation with stroke (P=0.038) as predictors of mortality at 30 days, while WBC count (P=0.005), enterococcal infection (P<0.001) and EuroSCORE II (P<0.001) were predictors of mortality at 1 year. Inpatient surgery was a protective factor at both 30 days (P=0.038) and 1 year (P=0.013).
Conclusions High social deprivation was associated with significantly higher early all-cause mortality, likely associated with more frequent presentation with stroke and less frequent inpatient surgery when indicated.
Conflict of Interest None

17 ANALYSIS OF A HYPERTROPHIC CARDIOMYOPATHY COHORT IN A REGIONAL INHERITED CARDIAC CONDITIONS SERVICE, WITH A FOCUS ON ELIGIBILITY FOR NOVEL CARDIAC MYOSIN INHIBITOR THERAPIES

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Introduction 2285 patients currently attend our regional inherited cardiac conditions (ICC) service, 652 of whom are screened or managed for hypertrophic cardiomyopathy (HCM). With the anticipated arrival of novel myosin ATPase inhibitors (1) for those with symptomatic left-ventricular outflow tract obstruction (LVOTO), we analysed our HCM cohort to identify patients who may be eligible for such therapies.
Methods A database was populated with demographic, diagnostic, clinical and imaging data from electronic care records and imaging archives. Presence of significant LVOTO was defined as an outflow tract gradient ≥30 mmHg at rest or ≥50 mmHg on provocation as per European Heart Society guidelines (2). Symptomatic patients reported chest pain or New York Heart Association score ≥class II breathlessness.
Results A guideline based clinical HCM phenotype was seen in 259 of the 652 patients; of which 63 (24.3%) had pathogenic sarcomeric variants and 26 (10%) had variants of unknown significance (VUS). The average age was 56 years; 71.4% were male. Mean presenting septal wall thickness was 18.4 mm. 53 (20.4%) had an implantable cardioverter defibrillator. 23 (8.8%) had prior septal reduction therapy. 25 (9.6%) had an ejection fraction <55%. 61 (23.6%) had significant LVOTO at presentation (mean gradient 64.4 mmHg). Emergence of significant LVOTO was seen in 9 patients who initially had no presenting gradient. LVOTO frequency was similar (~19%) across genotype categories (positive, negative, VUS or unknown) (Figure 1), not fully aligning with recent reports (3) although our sample size was small, with a number of pending genetic tests due to pandemic impacts. On either single, or combination, regimens of beta blocker, verapamil or disopyramide 20 patients now have no obstruction, and 10 have residual gradients that are no longer classified as significant (Figure 2). Therefore 40 patients would meet LVOT gradient based eligibility for enrolment into the EXPLORER trial (4), the first phase III trial to investigate a specific myosin ATPase inhibitor (Mavacamten) in HCM patients with symptomatic obstruction. However only 22 (8.5% of total or 36%

of the HoCM cohort) also meet the symptomatic inclusion criteria. Initiation of myosin ATPase inhibitors paralleling EXPLORER-like trial standards of 4-weekly follow-ups, including imaging and blood tests, will effectively require an additional weekly clinic session to on-board all eligible patients at our site over a 16-week period.

Conclusion We find that although most HCM patients with LVOTO can be managed with existing therapies, a significant unmet need attributable to symptomatic obstruction remains. 8.5% of our HCM cohort would be the focus of initial myosin ATPase inhibitor roll out should these therapies become available. This would come with attendant resource implications that may only be practical to deliver in larger ICC centres.

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Conflict of Interest Dr Matthew J Daniels (last author) reports advisory board payments from Bristol Myers Squibb

18 A REVIEW OF THE ADULT FONTAN POPULATION IN YORKSHIRE AND THE HUMBER

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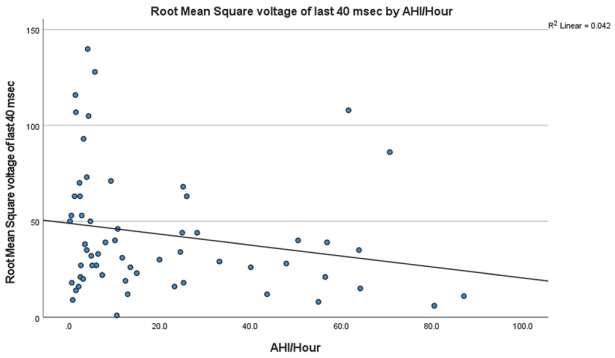
10.1136/heartjnl-2022-BCS.18

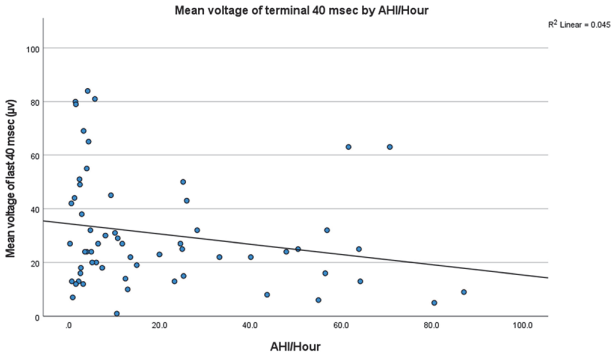
Background The Fontan circulation is associated with a number of long term complications including supraventricular arrhythmia, liver disease and circulatory failure. As the population of Fontan patients expands and becomes older we expect to see a rise in the number of these complications.Within Yorkshire and the Humber, we have generated a protocol of investigations for adult Fontan patients with the aim of identifying clinical decline or the development of complications in a timely manner to enable instigating treatment and/or intervention. Our aim was to review the compliance with this protocol and assess for any trends in our Fontan patients in order to develop more streamlined follow up of complications. MethodsWe retrospectively reviewed a cohort of 116 adult Fontan patients from September 2021 to February 2022. As well as collecting baseline demographic data (Table 1) on age, gender, type of Fontan and years since Fontan completion, we assessed compliance with our current clinical protocol, which includes annual echocardiography and liver assessment (serology and imaging), and three yearly cardiopulmonary exercise testing (CPEX), cardiac MRI and ambulatory ECG monitoring. As part of the liver assessment we also reviewed patients who had an Enhanced Liver Fibrosis score (ELF).

Results Of our cohort, 83 (72%) had undergone total cavopulmonary connection (TCPC), 16 (13%) lateral tunnel (LT) and 17 (15%) atrio-pulmonary connection (AP). Chart 1 shows the proportion of patients who have undergone investigations as per our protocol. The mean VO2 Max for this cohort was 21.7 mL/kg/min (range 10.5 - 34.6 mL/kg/min) which was similar across all Fontan groups with 31% (n=19) falling between the 50th and 75th Brompton centile (2). 15 (13%) patients had a cardiac device in situ, 7 (8%) of TCPC, 3 (19%) of LT and 5 (29%) of AP. Abnormal liver serology was present in 57 (52%) patients. The mean ELF score was 9.2 (range 7.3 - 11.6) which was again similar across all Fontan groups. Liver imaging was performed in 101 (87%) patients, 93 (92%) with ultrasound and 8 (7%) with MRI. In total 57 (56%) had abnormal liver imaging with a greater proportion seen within the AP Fontan group (82%) compared to both LT (69%) and TCPC (47%) groups.

Discussion and Conclusions A number of factors played a part in the compliance of investigations performed in this cohort of patients. This included factors such as poor mobility, negating the ability to undergo CPEX, MRI incompatible devices, non-attendance to follow up and geographical factors. One outcome of interest is the greater proportion of abnormal liver imaging seen in patients with AP Fontan, although time



Abstract 18 Figure 1 Association between Root Mean Square Voltage and AHI/Hour



Abstract 18 Figure 2 Association between Mean Voltage of Terminal 40msec of filtered QRS and AHI/Hour

Abstract 18 Table 1

	OSA Category		
	No Sleep Apnoea (n=22) Mean	Sleep Apnoea (n=38) Mean	Sleep Apnoea on Treatment (n=24) Mean
Filtered QRS, msec	122	131	132
Signal Duration, msec	30	38	37
Root Mean Square voltage of last 40 msec	56	36	30
Mean voltage of last 40 msec	39	26	22