

**Abstract 33 Figure 2** Breakdown of mWHO classification of patients seen in the combined obstetrics-cardiology clinic by diagnosis

**Results** 14 cases were diagnosed as tuberculous pericarditis by pericardial biopsy. There were no complications during and after operation. The thoracic drainage tube was pulled out 24 ~ 85 hours after operation (average 33.5 hours). During the follow-up, there was no recurrence of pericardial effusion and no constrictive pericarditis.

**Conclusion** Thoracoscopic pericardial fenestration is a safe and effective method, which can be used as a diagnosis and treatment method for a large number of pericardial effusion of unknown cause.

**Conflict of Interest** NO

### 34 UTILISATION OF A COMBINED OBSTETRIC-CARDIOLOGY CLINIC IN A UK TERTIARY CARDIOLOGY CENTRE

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**Introduction** Cardiac disease remains the leading cause of indirect maternal death in the UK, of which mortality rates from cardiac disease has remained unchanged at approximately 2 per 100,00 maternities over the last two decades. Cardiac disease also accounts for 12% of all-cause mortality in the post-partum period. The 2018 ESC Taskforce guidelines has since introduced the concept of the pregnancy heart team to further optimize and tailor the management of women at moderate to high cardiovascular risk based on their modified WHO (mWHO) risk classification (Table 1). We evaluated how this service was utilised in a tertiary hospital in its first year of inception.

**Methods** All patients that were referred to the combined obstetric-cardiology clinic between November 2020 and November 2021 were included. Data including demographics, underlying cardiac diagnosis, mWHO risk classification, cardiac investigation findings (if performed) and whether pre-conception counselling or delivery recommendations were made during these consultations were collected from clinic letters and from the local electronic database. Results 73 patients were referred to the combined obstetrics and cardiology clinic, of which 66 were seen, 4 did not attend and 3 did not have a documented clinic letter. Of the 66 seen, the mean gestational age at first presentation was 22.6 weeks. 15 (22.7%) had an

underlying inherited cardiac condition, 13 (19.7%) had arrhythmia, 7 (10.6%) had valve disease, 8 (12.1%) had cardiomyopathy and 23 (34.8%) had other cardiac diagnosis (aortic disease, simple shunts and palpitations/ syncope with no documented arrhythmia) (Figure 1). Among these patients, 22 (33.3%) had mWHO I, 35 (53%) had mWHO II, 7 (10.6%) had mWHO III and 2 (3%) had mWHO IV (Figure 2). Only 6 of the 66 patients had pre-counselling advice documented, all had delivery recommendations made following the consultation.

**Conclusion** A combined obstetric cardiology clinic was an unmet need at this tertiary hospital and uptake has been good in the first year since its inception. Future work will however be required to promote preconception counselling as well as to develop formal guidelines and referral pathways to further optimize utilisation of this pregnancy heart team clinic.

**Conflict of Interest** None

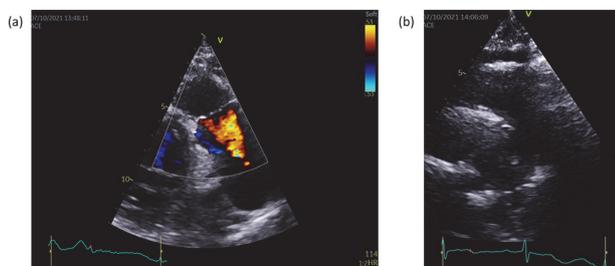
### 35 RAISING THE SUSPICION OF ADULT CONGENITAL HEART DISEASE (ACHD) IN SYMPTOMATIC PATIENTS WITHOUT ABNORMAL INITIAL ECHOCARDIOGRAPHIC FINDINGS; A CASE REPORT

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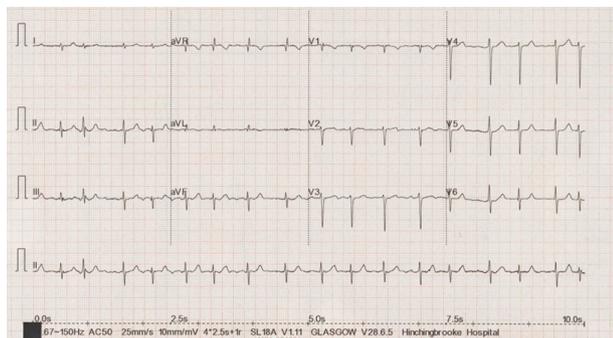
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**Introduction** Patients with adult congenital heart disease (ACHD) often initially present to their local hospital with cardiovascular symptoms such as dyspnoea and palpitations. Most patients undergo an echocardiogram as part of their initial investigations for more common aetiologies such as valvular heart disease, arrhythmias, and cardiomyopathies. The possibility of ACHD is often to the causes above therefore despite a systematic segmental approach, it is often not thoroughly considered when performing the initial echocardiogram. This can delay diagnosis and management. We report a case of a missed PDA in a 71-year-old female presenting with shortness of breath and palpitations for 10 years. Method A 71-year-old female with no significant medical history presented with shortness of breath and palpitations. She had had these symptoms for over 10 years with the initial presentation at the age of 61. She had previously been investigated with an echocardiogram which was unremarkable (see results) as well as no evidence of arrhythmia on Holter monitoring. Her thyroid function and electrolytes were all unremarkable. On re-review, we subsequently repeated the echocardiogram and Holter monitor in view of worsening palpitations. We compared the images obtained on the echocardiograms to identify any discrepancies.

**Results** Echo in 2013: Non dilated LV with good systolic function, grade 2 diastolic dysfunction, mildly thicken aortic valve with mild AR. LVEDV 102 ml, poor image quality for LAVI measurements. Echo 2021 (Figure 1): Normal LV size, wall thickness and systolic function. Left atrium dilated, moderate AR and aortic root dilatation. Patent ductus arteriosus. LVEDV 117.05 ml, LAEDVInd 54.44 ml/m<sup>2</sup>ECG 2021: AF (Figure 2) Discussion Patent ductus arteriosus (PDA) represents a communication between the aorta and the pulmonary artery with a left-right shunt at onset. PDAs usually close spontaneously within 24–48 hours after birth and are rarely encountered in adulthood, often found incidentally.



**Abstract 35 Figure 1** Echocardiogram 2021: (a) Parasternal short axis; pulmonary artery, PDA shunt in color doppler on first image.



**Abstract 35 Figure 2** ECG in 2021 showing atrial fibrillation

Uncorrected PDAs can lead to left atrial and ventricular dilatation with symptoms of congestive cardiac failure such as in our patient above who also subsequently developed atrial fibrillation. It is therefore important that the initial scan in these patients comprehensively assess for ACHD. The views obtained in the initial scan were suboptimal. The subsequent diagnostic scan was performed by an experienced cardiac physiologist with better image quality on the same patient. It is reported that frequently the skill of the sonographer and the completeness of the study determines the accuracy of an echocardiographic diagnosis (1). Some authors have highlighted the importance of scan conditions such as the patient's size, compliance, associated co-morbidities as well as operator experience. Benavidez et al found that the presence of an experienced cardiac physiologist or imaging cardiologist during certain situations improved diagnostic accuracy, for example in our patient above where despite a normal echocardiographic study, a cardiac cause of symptoms was still a high possibility. (2)

**Conclusion** Diagnosing ACHD in symptomatic patients requires clinical suspicion and experience for an appropriate initial echocardiogram. ACHD suspicion therefore should prompt a referral to a specialist ACHD team with the appropriate level of experience.

**Conflict of Interest** none

### 36 EXPERIENCE OF BRONCHIAL ARTERY EMBOLIZATION IN THE TREATMENT OF TUBERCULOUS MASSIVE HEMOPTYSIS

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**Objective** To summarize the experience of bronchial artery embolization in the treatment of tuberculous massive hemoptysis in the elderly.

**Methods** Six patients with acute massive hemoptysis aged 67 ~ 92 who failed to stop bleeding with medical drugs had a history of hemoptysis for 3 ~ 6 days and a hemoptysis volume of 500 ~ 600 ml at the onset. Firstly, the bleeding bronchial endings were blocked with gelatin sponge. If the effect was not good, the branches of bronchial artery were blocked with spring coil.

**Results** The hemoptysis of 6 elderly patients stopped immediately after operation, and there was no recurrence after operation.

**Conclusion** The use of gelfoam and coil in bronchial artery occlusion is a effective treatment for tuberculous elderly patients with massive hemoptysis, with low recurrence rate and high safety.

**Conflict of Interest** NO

## Acute coronary syndromes & interventional cardiology

### 37 DEVELOPING INFORMATICS INFRASTRUCTURE TO CURATE DATASETS USING ELECTRONIC HEALTH RECORD DATA FROM FIVE NHS HOSPITALS FOR TRANSLATIONAL CARDIOVASCULAR RESEARCH

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**Introduction** It has been challenging for researchers to access granular electronic health record (EHR) data at scale. The NIHR Health Informatics Collaborative (HIC) enables the sharing of routine EHR data across NHS hospitals for research. One emerging prospect is to use big data to traverse the translational spectrum. As an early discovery phase study, we estimated the effect of invasive versus non-invasive management on the survival of patients with non-ST elevation myocardial infarction (NSTEMI) aged 80 years or older (SENIOR-NSTEMI Study). As a later implementation phase study, we determined the relationship between the full spectrum of troponin level and mortality in patients in whom troponin testing was performed for clinical purposes (TROP-RISK Study).

**Methods** Five NHS Trusts contributed data: Imperial, University College London, Oxford, King's and Guy's and St Thomas'. We used Microsoft SQL to develop a dataset of 257,948 consecutive patients who had a troponin measured between 2010 and 2017. We extracted phenotypically detailed data, including patient demographics, blood tests, procedural data, and survival status. For the SENIOR-NSTEMI Study,