are likely to require respiratory support in the neonatal period. Despite the complex nature of their congenital heart disease, their surgical outcomes are good in our cohort of babies. The following information can be used when counseling parents antenatally and managing their expectations.

G24(P) ANXIETY AND CHEST PAIN: A CHICKEN AND EGG SITUATION?

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Introduction Chest pain is a common paediatric presentation and can cause anxiety in patients, parents and healthcare professionals. Media coverage can heighten anxiety, but underlying cardiac pathology is rare in children. It is important to rule out serious underlying pathology and reassure appropriately.

Case History A 16 year old boy with Type 1 Diabetes Mellitus was referred by his diabetes nurse non-specifically unwell with hyperglycaemia and pallor. He had a two day history of anxiety associated with improving dyspnoea and chest pain, and was taking his GCSEs. He was fully immunised but had been given a recent telephone diagnosis of measles, and is needle phobic.

On presentation, he was tachycardic with otherwise normal observations, and felt to be anxious. He became febrile and tachypnoeic with capillary blood gases showed a worsening non-ketotic metabolic acidosis, and a CRP of 80. He eventually agreed to a cannula under midazolam sedation 10 hours post attendance.

He developed worsening central chest pain and dyspnoea which prevented him lying flat. An ECG and CXR were requested, however there was no ECG machine on the ward. Furthermore, nursing staff are not trained to record ECGs. On examination, he was pale, sweaty with a soft systolic murmur. His venous bloods showed a haemoglobin of 70, MCV 49 and platelets of 673.

The ECG showed inferior ST elevation and inferolateral T wave inversion. A troponin was 1595 and an echocardiogram showed an akinetic inferior wall, dilated right heart, bright pericardium and no pericardial fluid. He was transferred to a tertiary adult cardiac centre, but due to the challenges with his diabetes and needle phobia, was moved to PICU under the paediatric cardiologists. A diagnosis of viral myocarditis was made causing left coronary inflammation, possibly exacerbated by microvascular disease secondary to diabetes, and anaemia.

Conclusion Always rule out serious pathology with a background of chest pain first, and be aware that anxiety may be a cause but also an effect of chest pain. Be aware of becoming task focused, and the risk of not seeing the bigger picture.

G25(P) DRUG INDUCED SHORT QT INTERVAL WITH USE OF ANTI-EPILEPTIC MEDICATIONS

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Introduction Although drug induced long QT intervals is known to have proarrhythmic effect, the same is not known about drug induced short QT intervals. Drug induced short QT syndrome is a rare occurrence and have mainly been reported with the use of anti epileptic medications. Proarrhythmic effects of drug induced QT shortening has only been shown with digitalis. The clinical relevance of drug induced QT shortening is currently unclear.

Case Report We report a case of drug induced QT shortening in a 15 year old boy being treated for Juvenile Myoclonic epilepsy. He was initially being treated with Sodium Valproate with later addition of levetiracetam. He started having complaints of intermittent palpitations and occasional dizziness. He was otherwise well with no family history of sudden deaths etc. His examination and echocardiography were normal. His ECG showed sinus rhythm with a QT interval of 340 milliseconds. His previous ECG 6 months ago had shown a QT interval of 330 milliseconds. An ECG done 3 years ago at diagnosis had shown a normal QT interval of 400 ms. He had subsequent multiple ambulatory monitoring and exercise stress tests which were also normal. He is under ongoing follow up with the cardiac team and his anti-epileptic medications have been continued.

Discussion Drug induced short QT interval is a rare phenomenon and have been mainly seen with use of some anti-epileptics, digitalis & promethazine. Although there have been case reports of QT prolongation with use of levetiracetam, we could not find any reports of QT shortening. There were few reports of QT shortening when sodium valproate was used as a co-medication. In this case we are not sure if it is the valproate on its own or the addition of levetiracetam which caused the QT shortening. However based on no evidence of proarrhythmic effect with drug induced QT shortening, we agreed to continue his anti epileptic medications while closely monitoring him. More evidence base and research is needed to throw light on management of patients with drug induced short QT-intervals.

G26(P) SCREENING FOR CONGENITAL HEART DISEASE AMONG PRIMARY SCHOOL CHILDREN IN KHARTOUM STATE

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Background Congenital heart defects are the most common type of birth defects and remain the leading cause of death from congenital malformations.

Aims To determine the prevalence of latent congenital heart disease (CHD) among Governmental primary school children in Khartoum state.

Methods This is Descriptive cross sectional school based study which was conducted in the three localities in Khartoum state (the capital of Sudan) which are Sharq Alneel, Khartoum and Omdurman locality using a multistage clustered sampling technique recruited 2400 pupils aged between 6 and 14. Team of doctors worked the history and clinical examination to be related to Echocardiography (Echo) findings which had been done by consultant

cardiologist. The study period was 6 months (19th of September 2016 – 15th of February 2017) confidence interval 99% and confidence width, 01.

Results Among 2400 pupils 10 new cases of CHD were founded giving the prevalence of 4,2:1000. Male:Female ratio 1:1.4, with ASD being the commonest representing 5 cases (.21%) giving the prevalence of 2:1000, Dextrocardia 2 cases (.083%) prevalence of, 8:1000, MVP 2 cases (.083%) with prevalence of, 83:1000 and Dilated Aortic roots 1 case (.045%) giving the prevalence of, 45:1000. The innocent murmurs were common representing 18%(431 children) of study group. And the statistical tests revealed associations between CHD and sex (p-value, .042) And also there is association between CHD and age (p-value, .003) and school absence (p-value, .035).

Conclusion CHD prevalence is almost as what mentioned in literature, innocent murmurs are not uncommon, as it is asymptomatic and not affecting pupils general health and no serious complications has been detected clinically or by ECHO, So early screening and involving of health system and governmental recruitment for this sake is doubtful and may not be cost effective in such a depleted 3rd world country like Sudan but clinical examination and oximetry screening may be of benefit as preschool assessment tool.

G27(P) 22Q11 DELETION SYNDROME – IMPROVING INITIAL INVESTIGATIONS AT A TERTIARY CARDIAC CENTRE

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Aims 22q11 Deletion Syndrome (22q11DS) or DiGeorge syndrome is commonly first considered and diagnosed at cardiac centres due to its association with several forms of congenital heart disease. Due its multi-system involvement, it is important to screen children with 22q11DS for common problems early and refer promptly. The aims of this project were to: 1. Audit our practice against any national standards of initial investigations. 2. Create a local pathway and checklist for initial management of suspected or confirmed DiGeorge syndrome.

Methods We used the MaxAppeal (www.maxappeal.org.uk) consensus document on 22q11DS to formulate a list of standards to retrospectively audit against. We then used our local electronic patient record system to search for all children who had been admitted under cardiology with a diagnosis of 22q11DS syndrome between 2014–2018. We searched our laboratory, radiology and other electronic patient record system to record if and when they had certain investigations. We excluded patients whose care was primarily under another hospital.

Results We found 46 patients diagnosed between 2014–2018 but 21 of these had their care under another hospital. 23 out of the remaining 25 had a period of inpatient care and 17 of the 25 were diagnosed with 22q11DS during their first admission to hospital. 4/25 were diagnosed antenatally. We performed well on ensuring all our children had a baseline full blood count with white cell differentials and plasma calcium. However, only 7/25 had a thyroid function test. Unsurprisingly all 25 patients had a full cardiac examination and ECHO. Renal ultrasound was

performed in 17/25 of our patients. The largest room for improvement was in baseline immunology investigations; only 7/25 had lymphocyte phenotyping and 6/25 had immunoglobulins tested.

Conclusion The data shows that 22q11DS is a not uncommon clinical diagnosis in the tertiary cardiac centre. There are multiple considerations in management and investigations and our retrospective audit shows that there is room for improvement, particularly in immunological investigation. We are developing a proforma for suspected and confirmed 22q11DS and will be presenting this locally for approval and dissemination.

G28(P) ABSTRACT WITHDRAWN

G29(P) IDIOPATHIC COMPLETE HEART BLOCK OF CHILDHOOD: CASE REPORT

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Introduction Paediatric complete heart blocks are predominantly congenital with cases often diagnosed in utero, at birth or usually within the first 1 month of life. This is secondary to immune mediated injury of the conduction system due to transplacental passage of maternal anti-SSA/Ro-SSB/La antibodies. Childhood AV (atrioventricular) block is one which is diagnosed between 1 month and 18 years of age, which could be due to maternal antibodies, congenital heart defect, iatrogenic or due to underlying genetic causes. Idiopathic complete heart block of childhood is a rare entity with scarce case reports.

Case Report We report a case of 13 month old previously fit boy diagnosed with idiopathic complete AV block. He was admitted at 13 months of age with an episode of febrile convulsion secondary to throat infection. He was noted to have a low heart rate of around 50 beats per minute. There was no family history of cardiac problems or need for pacemakers. An ECG (electrocardiogram) done showed evidence of complete heart block with QTc of 500 ms. He was otherwise hemodynamically stable with normal blood parameters. His echocardiography showed mild dilatation of both ventricles with overall good function & structurally normal arrangements. His blood tests showed normal thyroid function, kidney function, iron levels, vitamin D levels, creatine kinase levels and auto-antibody screen. The anti Ro-La antibodies were negative in both the child and his mother. The genetic screening for inherited causes of complete heart block was also negative. He remains stable with close monitoring by the cardiac team with no evidence of arrhythmia or current need for pacemaker at 2 years of age. He has a sibling who was also screened and investigations were normal.

Discussion This case currently falls in the idiopathic AV block of childhood of which there are only scarce case reports worldwide. We currently do not know about the etiology or clinical course of these cases. Future genetic studies might reveal an underlying genetic cause in these cases. Further