hours of presentation. Some of the other difficulties encountered were nursing training in regards to administering noradrenaline, interpreting cardiac biomarkers, follow-up arrangements, and education.

Conclusion PIMS TS is still a new clinical entity and often these patients present to District general hospitals in varying circumstances of clinical instability. Some of these patients need PICU transfer which can be challenging at times. Around 25% of these patients need inotropes predominantly noradrenaline with no reported complications. There are still wide variations in the management of these patients, and further education and clear guidelines would be helpful to ensure the management of these complex children is done safely & effectively.

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Aims The incidence of AVRT in the UK is 16.3 per 100,00 live births. Anti-arrhythmic drugs are not arrhythmia suppressants. They work by changing the shape of the action potential, which alters the conductivity and refractoriness of cardiac tissue. This can cause re-entry to become both less, or more, likely to occur.

Methods Our patient (1500g) was delivered in poor condition at 29+1 by emergency C-section because of foetal bradycardia following a period of foetal tachycardia. He was intubated and then received five doses of adenosine (total 1000mcg/kg) and an amiodarone infusion because of haemodynamically-stable SVT. He was extubated on day eight post-delivery. Flecainide was added on day 14 (1mg/kg BD) because of recurrent episodes of AVRT. The trigger appeared to be tachycardia, and the episodes would terminate with vagal manoeuvres (deep suctioning or ice applied to the maxilla). Electrocardiography showed AVRT with no evidence of pre-excitation and echo beats (figure 1).

The episodes of AVRT became more intractable following the initiation of flecainide. On day 18, he received three doses of adenosine (total 960mcg). On day 19, he received three doses of adenosine (total 1600mcg), and the dose of flecainide was increased (2mg/kg BD). On day 22, he received 13 doses of adenosine (total 6240mcg), and the flecainide was stopped because of arrhythmogenic toxicity. Amiodarone was orally loaded (350mcg/m²) because the central line was 2F.

On day 34, the amiodarone was replaced by digoxin (5mcg/kg BD). Following this, the episodes of AVRT persisted, but the rate during episodes was well-controlled, and he was discharged home on day 46 post-delivery on dual-therapy (digoxin and propranolol).

Results The study of Anti-arrhythmic Medications in Infancy was a randomised controlled trial that found no significant difference in efficacy between propranolol (67%), and digoxin (77%), for SVT in infants.1 When propranolol monotherapy is ineffective management varies by institution, but there is a risk of paradoxical pro-arrhythmic effect with adjuncts, particularly with class 1c agents such as Flecainide.
(POTS). Here we explored the temporal progression of long-term symptoms following PIMS-TS using a parent-reported questionnaire.

Methods Children with a confirmed diagnosis of PIMS-TS on our unit at the time of diagnosis were identified. Case records and discharge summaries were reviewed to understand the severity of initial symptoms. A tele-questionnaire was developed focusing on questions related to POTS, general symptoms, and life activities. Parents were verbally consented and asked about symptoms 3 and 6 months after the illness. No children had pre-existing symptoms.

Results The study population \( n=20, \text{F:M}=11:9 \) had a mean age of 9 years \( (2 – 16 \text{ years}) \). 80% were >6 years of age. Need for intensive care was identified in 60% with 45% needing inotropic support. 80% were treated with steroids while 45% had intravenous immunoglobulin.

20% reported symptoms of POTS at 3 months after illness (figure 1). Common symptoms were brain fogging and dizziness followed by postural symptoms and blurred vision. 15% had ongoing brain fogging and dizziness at 6 months.

Myalgia (35%), headache (30%), mood changes (20%), sleep problems (20%) and peripheral vascular changes (10%) were reported at 3 months. All symptoms were improving but did not fully recover.

3 months after PIMS-TS parents reported difficulties with physical activities including walking and running (30%), sports (25%), school attendance and peer interaction (20%) and need for mental health support (10%). This also improved after 6 months.

Conclusion PIMS-TS is a serious condition and can make children and young people critically unwell needing intensive care. Short-term follow up and recovery of biochemical parameters has been discussed in studies from the UK and USA.\(^1,2\) Our study is the first of its kind using a tele-consultation model for data collection. This is a retrospective single-centre study from a busy university level hospital. Our study highlights that up to 35% of our patients have physical and life activity related symptoms at 3 months with improvement by 6 months after PIMS-TS.

We recommend that patients recovering from PIMS-TS should be followed up so that recovery back to baseline can be established. They may need ongoing support and rehabilitation.

Disclosure Authors acknowledge that their study population is small, but this also depicts the infrequent nature of PIMS-TS.

Abstract 1406 Figure 1

Conclusion ASSOCIATIONS BETWEEN LEFT ATRIAL SIZE AND BIRTH WEIGHT

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Aims Few, if any, research items have conducted studies into the relationship between birth weight and left atrium (LA) size. Participant information was evaluated from the longest running continuous study of development. Data was examined from the cohort which encompassed the participants’ left atrial volumes (LAV). Associations with exact recorded birth weights were assessed in order to arrive at a conclusion indicative of a statistically significant association between the two, independent of confounders.

Methods Weight recorded at birth was obtained directly from birth records and echocardiographic data provided the measurements used to calculate the LAV, as well as the ejection fraction (EF), left ventricular mass indexed for body surface area (LVmass) and left ventricular volume, also indexed for body surface area (LVVolume). Generalised linear models assessed the association between LAVs and individual characteristics including birth weight and echocardiographic outcomes. Multivariable analysis was carried out to identify independent associations between demographic characteristics, echocardiographic outcomes and LAV. Adjustment was made for confounding variables and health-related covariates.

Results 1424 participants were included. A unit increase in birth weight was associated with a statistically significant increase in LAV at 60–64 years old shown in all four multilevel models created, analysed and adjusted for confounders \( (p<0.05) \). A 0.4744 unit increase in LAV was seen for every kilogram of birth weight. Additionally, a unit increase in EF was also associated with a decrease in LAV \( (p=0.0001) \) and a unit increase in left ventricular volume resulted in an increase in LAV \( (p<0.0001) \).

Conclusion Findings show an independent association exists between birth weight and left atrial volume in older age independent of key clinical demographic confounding factors and echocardiographic factors. A high birth weight is associated with a significantly larger left atrial size in older aged individuals of 60–64 years, confirmed by statistical analysis.

Quality Improvement and Patient Safety

Aims As the diagnosis of a urinary tract infection (UTI) has potentially significant consequences it is important to ensure that the urine sample used is as free from contaminants as possible. Contaminated samples can lead to delays to diagnosis, repeated testing and inappropriate antibiotics, as well as unnecessary follow-up. NICE recommend using a clean catch sample as their preferred method of urine collection but also allows for the use of urine pads.\(^1\)

Abstracts

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