is that at least 9 questionnaires will be returned in order to compare the time pre and post PGD. It is apparent that interruptions to healthcare professionals on the ward by patients from pre-assessment clinic have stopped, resulting in a safer clinical environment. Further work needs to be undertaken in order to demonstrate this.

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P031 USE OF DISODIUM ETIDRONATE AND SODIUM THIOSULFATE IN A PREMATURE NEONATE WITH GENERALISED ARTERIAL CALCIFICATION OF INFANCY

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10.1136/archdischild-2019-nppc.41

Situation A 30 week gestation male weighing 1.66kg presented with metabolic acidosis and high lactate and subsequently developed heart failure and hypertension. He initially started enteral feeds but these were later not tolerated and TPN commenced. On day 8 calcification of the aorta was identified on echocardiogram. CT scans showed extensive arterial calcification including the thoracic and abdominal aorta, subclavian and common carotid arteries, coeliac axis, SMA, renal arteries and iliac vessels. Generalised arterial calcification of infancy (GACI) due to ENPP1 mutation was suspected.

Background GACI, a rare autosomal recessive condition can be caused by ENPP1 mutation leading to low levels of inorganic pyrophosphate (PPi), a negative regulator of calcification. GACI has a high mortality rate, up to 55% at 6 months. Mortality has been shown to improve in those who survive the first few months of life.[1]

Treatment Intravenous sodium thiosulfate, licensed for cyanide poisoning and used off-label for calciphylaxis in adults,[2] was commenced to try and reduce existing calcification. Dosing that has been known to be used in three other babies from two different centres,[3] was used - 12.5g/m^2 over 30minutes on alternate days for 2 weeks followed by 12.5g/m^2 five days a week. This is in the same scale as adult calciphylaxis dosing and up to 400mg/kg can be used in paediatric cyanide poisoning. Bisphosphonates were commenced to prevent further calcification. Etidronate, a non-nitrogen containing bisphosphonate, was preferred due to its closer structural similarity to PPi than second generation bisphosphonates. Etidronate has been discontinued in the UK so was not initially available and a dose of pamidronate was given. A Canadian import of etidronate was sourced and commenced a week later. Due to SMA and coeliac axis calcification there were concerns regarding bowel perfusion and he was TPN fed except for 20ml/kg/day EBM. Etidronate 20mg/kg/day was commenced in three divided doses to improve gastrointestinal tolerance.

Outcome Initially his heart failure stabilised and hypertension managed with carvedilol. By day 35 full enteral feeds were reached and he was breathing unassisted in air. CT after one month's treatment showed no worsening of vascular calcification, though unfortunately calcification did not appear to have improved. At 7 weeks he became tachypnoeic due to worsening heart failure and required respiratory support. Despite ongoing medical therapies he passed away at 8 weeks of age.

Challenges and lessons learnt Due to the rarity of the condition information on treatment options, dosing and monitoring are limited and the need to use an imported product lead to a short delay in treatment. Etidronate is only available in tablet form but Didronel brand can be crushed and suspended in water,[4] Information about the suspension's uniformity is unavailable but due to a lack of alternatives this was the option taken. A two hour break either side of etidronate while recommended, was compromised to ninety minutes as he required three hourly feeds. Combination treatment was used to try to reduce the calcification; however the extent of calcification had already caused significant cardiac compromise which ultimately led to his demise.

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P032 THE BURDEN ASSOCIATED WITH MEDICINES RECONCILIATION IN HOSPITALISED CHILDREN

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10.1136/archdischild-2019-nppc.42

Aim Medicines reconciliation in children is an important intervention which prevents unintended medication discrepancies and medication errors from occurring when a child moves from one setting to another, e.g. from home to hospital admission. A national study in England across multiple sites has shown that 1/3 of medication discrepancies are prevented from occurring,[1] What has not been evaluated however, is the potential burden that medicines reconciliation would have on the resources, in particular on the pharmacy workforce. The overall aim of this project was to investigate the burden that is associated with admissions medicines reconciliation (AMR) in children.

Methods Over a 10 day period spanning over 4 weeks, rotational pharmacists carrying out hospital admission medicines reconciliation at a paediatric hospital in Birmingham, West Midlands were directly observed by a researcher (pharmacy student). This process was timed, and the student recorded the following observations: -

The number of AMRs that were initiated within 24 hours of admission

The number of AMRs that there completed within 24 hours of admission

The number of completed and incomplete medicines reconciliations

The reasons for incompletion of medicines reconciliation during the observation period.