

current practice. Main themes from the MDT focus group were that Paravit-CF liquid is colourless, taste free, odour free and can be mixed into food, all of which may aid compliance. Paravit-CF preparations also vegetarian friendly and comply with halal and kosher regulations. Unlike current practice, Paravit-CF does not offer flexibility in dosing of individual vitamins.

Conclusion Fat soluble vitamin supplementation using Paravit-CF offers several advantages over supplementation of individual vitamins. Paravit-CF offers vitamin supplementation at doses in line with the recommendations made by the CF Trust, is cheaper and reduces the medication burden for patients. Locally, the decision has been made to switch to Paravit-CF as first line vitamin supplementation in children with CF. Future work is planned to assess clinical efficacy and financial impact of the switch.

REFERENCE

1. Cystic Fibrosis Trust. Nutritional Management of Cystic Fibrosis. Second Edition. September 2016. Available from: <https://www.cysticfibrosis.org.uk/the-work-we-do/clinical-care/consensus-documents> (Accessed 10 July 2018)

P046

EVALUATING THE SAFETY OF DOSE BANDING PREMEDICATION (ATROPINE, SUXAMETHONIUM AND FENTANYL) FOR NEONATAL INTUBATION (PROJECT NIK)

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10.1136/archdischild-2019-nppc.55

Background The process of prescribing and preparing premedication for intubation needs to be completed carefully to ensure the correct dose is prescribed and administered. Doses of atropine, suxamethonium and fentanyl were banded according to weight. The dose banding was implemented alongside pharmacy prepared neonatal intubation drug kits and a prescribing bundle on the neonatal electronic prescribing system, which automatically populates the doses according to the patient's weight.

Aim To evaluate the safety of dose banding neonatal premedication for intubation.

Methods A tool was developed to collect data including the patient's weight, gestation, if dose banding had been used and whether any adverse effects were experienced with emphasis on hypotension, bradycardia, chest wall rigidity and prolonged paralysis. Data was collected from January 2018 to July 2018.

Results Outcomes from 89 intubations using dose banding were reviewed. The corrected gestation of patients ($n = 63$) were 24+3 to 42+1 and the weight from 500 g to 4 kg. In 97.75% all three pre-medication drugs were given, the 2 cases that did not were due to rapid desaturations and the decision was made to intubate before all the medicines had been administered. All cases used the correct dose-banding for the medication. In all cases the fentanyl was administered over at least 1 minute with 7.87% receiving the fentanyl over more than 2 minutes. 95.5% of patients were normotensive within 30 minutes of intubation. Hypotension was observed in 2 cases >90 minutes post intubation. In two patients, a low mean blood pressure (BP) was observed prior to the decision to intubate and the premedication did not cause a further decrease in BP. No patients experienced bradycardia, chest wall rigidity or prolonged paralysis.

Conclusion This work has illustrated that dose-banding of intubation premedication is safe in this cohort of neonates and allows for successful intubation, whether the patient is 24 weeks or 42 weeks corrected gestational age. Chest wall rigidity may occur if fentanyl is administered too quickly. All patients received fentanyl over at least 1 minute, with the majority receiving over 1–2 minutes. The fentanyl dose is a very small volume, to ensure the dose was administered slowly, a flush was used to ensure that any remaining in the cannula was not bolused to the patient. Hypotension was seen in 2 patients >90 minutes after intubation which is unlikely to have been related to the use of neonatal intubation drugs. However this highlighted that not all patients are having BP monitoring 30 minutes post-intubation. An outcome has been to emphasise the need for this monitoring. Bradycardia and prolonged paralysis, two potentially prominent adverse effects, were not seen indicating that the atropine and suxamethonium doses were appropriate. A limitation of this study was that patients concurrent medication was not recorded. Data will continue to be collected to assess safety as this data set did not include babies in the <500 g banding. The next step will be to compare outcomes with patients that were intubated prior to the implementation of dose banding.

P047

EVALUATING THE IMPACT OF PRE-PREPARED NEONATAL INTUBATION PREMEDICATION KITS ON A LEVEL 3 NEONATAL UNIT (PROJECT NIK)

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10.1136/archdischild-2019-nppc.56

Background In January 2018, neonatal intubation premedication kits containing atropine, suxamethonium and fentanyl were introduced alongside the implementation of dose-banding for these medicines according to patient's weight and regardless of the patient's gestation. A prescribing bundle on the electronic prescribing system was also created to automatically populate the doses based on the patient's weight. Seven kits are produced each week by the Pharmacy Technical Services Unit.

Aim To assess the staff perceived impact of pre-prepared intubation drug kits with associated dose-banding of the medication.

Methods Three months after the kits were implemented, a survey was sent to all nursing and medical staff to establish their thoughts on the intubation process before and after the introduction of pre-made intubation drug kits.

Results 78 staff responded, 45.5% were doctors and 54.5% were nursing staff. The response rate was 53.8%. 78% of respondents reported being part of a difficult intubation over the last 5 years. The main problems identified, prior to the implementation of the neonatal intubation drug kits, included the intubation process (51.5%), preparation and communication prior to intubation, (13.6%), time drawing up intubation drugs (10.6%) and the patient having a difficult airway (9%). 87.2% found the premade intubation kits very useful, none of the respondents thought the kits were not useful. Four themes were found irrespective of whether the respondent was a doctor or member of nursing staff. The themes were: they made the process easier; quicker; reduced risk of error and helped provide better patient care. When asked if any complications