

against nonpolio enteroviruses. The consultant was keen to exhaust every option, so reached out to the company in the US. The company (Virodefense) offered to provide the drug on a compassionate use/open label trial basis, asking that regular pharmacokinetics tests be carried out as part of the agreement to supply.

Pharmacy contribution Following the initial contact with Virodefense, there were several challenges for the specialist pharmacist and pharmacy procurement team. Working with IDIS and Virodefense, arrangements were made for shipment of the medication to the pharmacy department. This was complicated by the urgency of the situation and the time differences involved. Pocopavir is in phase 2 clinical trial which required the MHRA to be notified to approve the importing of the drug into the country. The MHRA were quick to give a positive decision which allowed the product to be delivered direct to the hospital while IDIS handled the importing documentation. The advised dose was 25mg/kg daily, the drug came as 500 mg capsules containing 200mg of pocapavir (with 300 mg excipients).

The patient (2.7 kg) required 67.5 mg daily. The pharmacy manufacturing unit packed down 170 mg capsule contents (68 mg active ingredient) into individual pots for the neonatal unit to administer. Doses were mixed with EBM and given daily for 14 days.

Outcome The patient recovered from the acute sepsis episode. The patient was also treated with immunoglobulin and standard supportive care so it is impossible to know how much can be attributed to the pocapavir. Pharmacokinetic samples were taken as agreed. After recovering from the initial acute sepsis the patient developed hypoglycaemia between feeds. These were investigated and metabolic causes were excluded. The working diagnosis was a response to the large hit to the liver during the septic episode, although an adverse effect of pocapavir cannot be excluded. Hypoglycaemic episodes continued and the patient was still fed 3 hourly on discharge. The patient is growing and developing well, tolerating longer fasts of 6 hours without hypoglycaemia and reducing risk in the provision of parenteral nutrition for effects that could occur due to opioid toxicity. The patient has been discharged from neonatal follow up.

Lessons to be learned Where there's a will there's a way! There were many barriers to overcome including regulatory, logistical and practical complications but thanks to a concerted effort from a wide variety of teams, co-ordinated by pharmacy, the patient received this treatment. Although the contribution of this experimental drug is unclear the positive outcome for a very unwell infant should be celebrated.

REFERENCES

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P012

PRELIMINARY EXPERIENCE OF THE USE OF ORAL POSACONAZOLE AND TERBINAFFINE TO TREAT LOMENTOSPOA PROLIFICANS AND SCEDOSPORIUM APIOSPERMUM IN CHILDREN WITH CYSTIC FIBROSIS

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Background Itraconazole and voriconazole are the drugs of choice for *Lomentospora prolificans* and *Scedosporium apiospermum*. Posaconazole, is often substituted when there is intolerance or lack of efficacy to first line agents. Terbinafine, an allylamine antifungal, is recommended with an azole for the treatment of *L.prolificans*, though there is no published use of this combination in children with cystic fibrosis (CF).

Aim To evaluate the safety, tolerability and efficacy of this regimen in CF children.

Methods Retrospective case note review of CF children receiving terbinafine and posaconazole, from Nov 2015 to Nov 2016. Children were identified from pharmacy records and clinical data collected from case notes and laboratory records.

Results There were 4 children (all girls), median age 15 years (range 10–16), with a median FEV1% predicted of 70.5% (range 55–88%). 2 children chronically isolated *L.prolificans*, 2 isolated *S.apiospermum*. 3 also had CF related diabetes and chronic *Pseudomonas aeruginosa* infection. 1 child received treatment for 6 weeks. 3 children are taking long-term treatment (median 50 weeks; range 35–59). 2 children improved FEV1% predicted with treatment by 14% and 15%; one was stable. Importantly the trend graphs for lung function in these 3 children appear to stabilise post initiation of treatment. One child did not improve her lung function but also had recurrent MRSA infections and significant nutritional complications. No adverse effects from the combination were reported. Posaconazole levels were therapeutic (>1 mg/l) in all children (range 1.22–3.85 mg/l). Terbinafine levels were not measured.

Conclusion In this small case series, combination treatment with posaconazole and terbinafine was well tolerated and a positive clinical effect on lung function was evident. This is the first report on the use of this regimen for this indication in CF children and we will continue to use it, whilst gathering safety and efficacy data.

P013

DEVELOPING STANDARDISED NEONATAL PARENTERAL NUTRITION ACROSS A NETWORK

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Background and aim Parenteral Nutrition (PN) forms the mainstay of nutritional support for extremely low birth weight (ELBW) infants immediately after birth to promote optimal growth and neurodevelopmental outcomes. The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) published in 2010 indicated that only 24% of neonates received parenteral nutrition that was considered good practice. NCEPOD, alongside the Paediatric Chief Pharmacists Group Report, highlighted issues with prescribing and administration of PN linked to unnecessary variation in practice between hospitals.^{1 2} This encourages use of standardised PN with associated guidelines for use and administration. The aim was to be able to provide nutritionally complete PN for pre-term and sick term babies in a ready to use formulation, 24 hours a day, 7 days a week without access to an onsite aseptic service and for the nutrition a baby receives to be consistent across the network regardless of which hospital they are in.

Methods There is a robust network neonatal nutrition group, comprising neonatologists, pharmacists, dietitians and nutrition nurses. The remit of the group was initially to audit their