Results Ten female and two male obese adolescents (age range 14–19 years) had a mean body weight of 140.8 kg (93.7–174 kg) and a mean BMI of 49.9 kg/m^2 (38.4–58 kg/m^2). Four patients received 40 mg enoxaparin, 8 patients were dosed with 60 mg enoxaparin. No VTE or major bleeding occurred. Peak plasma anti-FXa activity (C_{max}) ranged from 0.14–0.30 IU/mL (median C_{max} 0.205 IU/mL). Median T_{max} was 5.67 hours (range 3.78–7.52 hours). Median AUC_i was 1.00 h*IU/mL (range 0.42–1.67 h*IU/mL). 10 out of 12 patients (83%) reached the primary endpoint with anti-FXa activity in the range for VTE prevention (0.1–0.3 IU/mL).

Conclusions In this single center cohort study, the dosing scheme of 40 mg vs 60 mg enoxaparin stratified according to BMI proved to be effective in reaching prophylactic anti-FXa activity in 83% of adolescent patients. This dosing scheme is in accordance with current practice in adults.

Disclosure(s) J. Vaughns and J. van den Anker are supported by the Eunice Kennedy Shriver National Institute of Child Health and Development (5T32HD087969).

P117 DOSE EVALUATION OF INTRAVENOUS METAMIZOLE (DIPYRONE) IN INFANTS AND CHILDREN: A PROSPECTIVE POPULATION PHARMACOKINETIC STUDY

[1]V Ziesenitz*, [1,2]F Rodieux, [1,3]A Atkinson, [1]C Borter, [1,4]J Bielicki, [5,6]M Haschke, [5]U Duthaler, [5]F Bachmann, [7]T Erb, [8]N Gürtler, [9]S Holland-Cunz, [1,10]J van den Anker, [1]V Gotta, [1]M Pfister. *[1]Pediatric Pharmacology and Pharmacometrics, University Children's Hospital Basel (UKBB), Basel; [2]Division of Clinical Pharmacology and Toxicology, Department of Anesthesiology, Pharmacology, Intensive Care and Emergency Medicine, Geneva University Hospitals, Geneva; [3]Department of Infectious Diseases, University Hospital Bern, Bern; [4]Division of Pediatric Infectious Diseases, University Children's Hospital Basel (UKBB); [5]Clinical Pharmacology and Toxicology, Department of Biomedicine and Clinical Research, University and University Hospital of Basel, Basel; [6]Clinical Pharmacology and Toxicology, Department of General Internal Medicine, University Hospital Bern, Bern; [7]Pediatric Anesthesiology, University Children's Hospital Basel (UKBB); [8]Otolaryngology, Head and Neck Surgery, University and University Hospital of Basel; [9]Pediatric Surgery, University Children's Hospital Basel (UKBB), Basel, Switzerland; [10]Clinical Pharmacology, Children's National Health System, Washington, DC, USA*

10.1136/archdischild-2019-esdppp.155

Background The prodrug metamizole is frequently dosed intravenously (IV) for postoperative pain in children of all ages, despite its off-label use in infants < 1 year. We aimed to investigate the pharmacokinetics (PK) of the main metabolite of metamizole, 4-aminoantipyrine (MAA), in children aged 3–72 months following IV dosing.

Methods 10 mg/kg metamizole was administered IV for postoperative analgesia. PK samples were drawn at 5 predefined time points. PK of the main active metabolite MAA and three other metabolites was characterized by both non-compartmental (NCA) and population PK analysis (PPK). $AUC_{0\text{-}inf}$ of MAA was calculated by NCA for two age cohorts (3–23 months, 2–6 years) and compared to the 80–125% range of adult dose-adjusted reference exposure (AUC_{ref}). PPK investigated age and weight dependency of the kinetics, and dosing strategies to achieve equivalent adult exposure in children.

Results A total of 25 children aged 5 months - 5.8 years (7.8–24.8 kg) with at least one plasma concentration sample were included in PPK, 19 children who had 5 predefined samples up to 10 h post-dose were included in NCA. $AUC_{0\text{-}inf}$ of MAA in children of 2–6 years was 29.8 (95%CI 23.3–38.1) mg/L*h, significantly lower than AUC_{ref}(80%-125% range: 39.2–61.2 mg/L*h). $AUC_{0\text{-}inf}$ of MAA in infants of 3–23 months was 42.5 (95%CI 15.7–115.4) mg/L*h, overlapping with AUC_{ref}. The large variability observed in infants could be partially explained by covariates body weight and age.

Conclusions Kinetics of the main active metabolite MAA depends on age in infants and children. MAA exposure after a single IV dose of 10 mg/kg metamizole in infants < 1 year of age was higher compared to an equal dose in adults and older children. This suggests that the optimal dose for this age group to achieve equivalent exposure compared to adults is lower than currently recommended.

Disclosure(s) Nothing to disclose.

P118 'MEDICINES FOR CHILDREN' PROJECT: PUTTING FAMILIES AND CARERS IN THE CENTRE

[1]E Zolotas*, [2]H Sammons, [3]D Tuthill, [4]C Barker, [5]S Tomlin, [6]L Partridge, [7]A Rossiter, [7]V Osmond, [8]H Barham, [9]A Fox, Medicines For Children Project Board. *[1]Paediatrics, Royal Derby Hospital, Derby,; [2]University of Nottingham, Nottingham,; [3]University Hospital of Wales, Cardiff,; [4]Alder Hey Children's NHS Foundation Trust, Liverpool,; [5]Great Ormond Street Hospital, London,; [6]Wellchild, Cheltenham,; [7]Royal College of Paediatrics and Child Health, London,; [8]The Text Doctor, Oxford,; [9]University Hospital Southampton NHS Foundation Trust, Southampton, UK*

10.1136/archdischild-2019-esdppp.156

Background 'Medicines for Children' (MfC) is a joint initiative between the children´s charity WellChild, the Royal College of Paediatrics and Child Health and the Neonatal and Paediatric Pharmacists Group. The project aim is to provide parents and carers with reliable, accurate and accessible information about their child's medicines.

Methods In 2006, 600 parents and carers were surveyed in order to understand what information was needed. Paediatricians, pharmacists and a medical editor then liaised with WellChild to develop a leaflet template and wrote a set of pilot leaflets. The leaflet production was subsequently standardised. An eight-step process is followed including consultation with health professionals, families and carers. The leaflet library and a series of information videos has grown, with the assistance of a dedicated group of volunteer authors. Published leaflets are reviewed every three years. Access to information is free of charge. The project is funded by the 3 partner groups and not by pharmaceutical companies.

Results MfC hosts over 230 leaflets and videos. The MfC website[1] was launched in 2009. It was subsequently reviewed by parents and carers and re-developed in 2011 and 2015. MfC has users accessing the site from every country in the world. The information leaflets have been viewed over 3 million times in 2018, up from 7,200 in 2009. In 2014, an independent audit of MfC found that over 90% of the parents surveyed thought that the leaflets had an appropriate layout and conveyed the information in lay terminology. Since 2011, MfC information leaflets have been certified by National Health Service Information Standard as providing high quality health information for the public.

Conclusion MfC is a successful and acclaimed project which provides high quality, reliable and accurate medicines information worldwide for more than a decade.

REFERENCE

1. https://www.medicinesforchildren.org.uk/.

Disclosure(s) Nothing to disclose.