

analysed separately. Analysis was conducted immediately after mixing and 4 hours' later. Emulsion stability was determined by calculating the percentage of fat residing in globules larger than 5 µm (PFAT5), measuring pH and mean droplet diameter.

Results None of the propofol formulations resulted in increased PFAT5 immediately after mixing with remifentanyl in mixing ratios of 1:1 and 10:1. However, all formulations resulted in PFAT5 levels over what is acceptable 4 hours' after mixing with remifentanyl except for Propolipid and Diprivan in mixing ratio 1:1. No difference in mean droplet diameter was noticed and we did not see an association between the decreased pH that occurred and the stability of the emulsions. **Conclusion** Remifentanyl administered with propofol formulations in the same intravenous catheter may lead to emulsion instability. If the infusion rate is slow, separate intravenous administration of these drugs should be considered.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-152 DO WE KNOW THE CONTENT OF HARMFUL EXCIPIENTS IN MEDICINES THAT NEONATES RECEIVE?

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Background Excipients in drug formulations have been historically considered harmless to the patient. However, this may not be true when they are used in specific populations, for example paediatric or neonatal patients. Because of the immaturity of newborns' metabolism, the continuous exposure can produce an accumulation of some excipients. In these cases, exceeding the acceptable daily intake (ADI) could induce some harmful effects.

Purpose Analyse the content of harmful excipients (HE) of the medications included in the hospital's neonatal intensive care unit (NICU) treatment guide.

Elaborate educational material about different toxicities of HE in neonates, addressed to physicians and nurses of NICU. **Material and methods** We conducted a bibliographic revision concerning HE, their potential toxicity and if ADI was established in neonatology. With this information, we reviewed the summary of product characteristics (SmPC) of the pharmaceutical products (PP) and compounded preparations (CP) used in our NICU, to determine the qualitative and quantitative composition in HE.

Total daily excipient exposures, for each drug, were established by calculating the average amount of HE administered secondary to the recommended maximum daily drug doses for newborns that appears in Neofax (R).

Results Nine HE and their toxicities were considered and reviewed: benzoates, benzyl alcohol, aspartame, benzalkonium chloride, ethanol, polysorbate 80, propylene glycol, parahydroxybenzoates and sorbitol. Two-hundred and twenty-seven medicines (182 PP and 45 CP) were analysed. Of the PP, 52 contained at least one HE (28.6%) and in 13 of them (7%) the amount was greater than their ADI defined. The quantitative analysis was not possible with the SmPC in 28 of them. Of the CP, 17 (40%) had one or more HE but none exceeded the ADI recommended. Based on this information, we

arranged a training session for prescribers and nurses, and leaflets with the reviewed medications, their toxicities and the qualitative and quantitative content in HE.

Conclusion Harmful excipients are frequently present in medications available in the NICU. Raising the awareness of healthcare professionals is important in order to choose, if it is possible, safer alternatives.

The quantitative composition in HE was lacking in some SmPC despite it being a requirement from the EMA. The development of paediatric medicines with appropriate excipients is necessary.

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5PSQ-153 DETECTION OF POTENTIALLY INAPPROPRIATE PRESCRIBING IN AN INSTITUTIONALISED POPULATION

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Background Different tools aimed for the detection of potentially inappropriate prescribing (PIPs) have been developed in the past years.

Purpose To describe and compare the prevalence of PIPs detected in institutionalised patients according to Beers, STOPP-START and PRISCUS criteria, and to identify the most involved therapeutic groups.

Material and methods Cross-sectional descriptive analysis which included a random sample of institutionalised patients, 65 years' old or older and with active drugs in electronic prescribing (EP) at the time of data collection (May 2018).

Variables were: age, sex, Charlson comorbidity index (ChI), number of PIPs detected with each tool applied and drug involved in the PIP.

To obtain the data, medical records and EP were reviewed. **Results** A total of 76 patients were analysed. Mean age was 88.39 years (± 5.6), with 94.5% of patients over 80 years: 80.3% were females. Median number of drugs/patient was 9 (2–18) with 56.6% of patients between 5–10 drugs and 28.9% over 10. Mean ChI was 6.92 (± 1.54), corresponding to a moderate-high comorbidity degree. At least one PIP was detected by one of the tools in 84% (n=64) of the patients. Three-hundred and six PIPs out of 655 analysed prescriptions were detected: 140 by STOPP criteria (1.8/patient), 119 by Beers (1.56/patient) and 35 by PRISCUS (0.46/patient). START criteria detected 12 drug omissions.

PIPs detected affected 176 drugs. 'Nervous system' (group N) with 70.4% was the most involved pharmacotherapeutic group, followed by 'Alimentary tract and metabolism' (group A) with 12%. Benzodiazepines and proton pump inhibitors were the most frequent drugs. Omission of drugs (START criteria) mainly affected anti-dementia drugs.

Conclusion The analysed population had a very advanced age and a considerably high degree of polypharmacy, as comorbidity is important. In our patients, the prevalence of detected PIPs was high. STOPP criteria had the highest quantitative detection capacity. Nervous system drugs were the most frequently involved.