mode, a Hazard Score (HS) was calculated by multiplying the probability of occurrence (Remote = 1, Uncommon = 2, Occasional = 3, Frequent = 4) and severity of effect (Minor = 1, Moderate = 2, Major = 3, Catastrophic = 4).If HS>=8, corrective actions were proposed. If HS < 8, failure mode was evaluated based on: lack of detection, criticality and absence of effective control measures. All data were collected in a validated worksheet.

Results A flow diagram was obtained. Twenty-seven failure modes were identified, and twenty had a HS>=8. Failure modes with the highest HS were: wrong dose calculation and wrong protocol (Prescribing); incorrect production protocol in the computer system and non-detection of wrong dose calculation (Pharmaceutical validation); wrong medicine is chosen, incorrect volume of drug added to diluent and labelling error (Compounding); Delivered to wrong nursing unit or patient (Dispensing). Corrective actions proposed were: policy of weighing patient for proper dose calculation, chemotherapy database updated, double checking, gravimetric control on prepared chemotherapy, procedures for proper patient identification (barcode identification system or radiofrequency dispensing system).

Conclusions FMEA contributes to the development of a very clear and shared vision of the chemotherapy process, taking into account different perspectives: oncologist, pharmacist, technician and nurse.

FMEA is a useful tool for identifying critical parts of the chemotherapy process, prioritising corrective actions, minimising potential risks and improving the quality and safety of patient care.

No conflict of interest.

GRP-074 FREQUENCY OF VALPROIC ACID-INDUCED HYPERAMMONEMIA IN ADULT PSYCHIATRIC SETTINGS

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[1]B HUE, [2]N Chaumartin, [1]P Beauverie. *[1]EPS Paul Guiraud, Pharmacy, Villejuif, France; [2]EPS Paul Guiraud, General Practitioner, Villejuif, France*

Background Valproic acid (VPA) is widely prescribed by paediatric neurologists as an antiepileptic drug. VPA-induced hyperammonaemia can lead to encephalopathy and coma; it is well documented among the paediatric population. Severe urea cycle enzyme deficiencies are often revealed in early youth when VPA is administered. Such mild genetic deficiencies can remain unnoticed until adulthood and be discovered if VPA is taken for bipolar disorder.

Purpose To evaluate the frequency of VPA-induced hyperammonaemia in adult psychiatric settings and to sensitise the medical community to a potentially severe adverse effect of a widely-prescribed drug.

Materials and Methods The study was carried out a two-week period in a psychiatric hospital. It included every full-time hospitalised patient treated with VPA for at least 4 days (corresponding to 5 drug half-lives). Ammonia and VPA blood measurements were performed once and an electroencephalogram when ammonia exceeded 70 μM (normal range: 10 to 35 μM). Ethics committee approval was obtained before starting the study.

Results 122 patients were included in this study. 68 patients (55.8%) presented ammonia blood levels exceeding 35 μM and 4 of them (3.3%) exceeded 70 μM. One patient reached 118 μM one week after VPA initiation. No encephalographic abnormalities were observed. No correlation was found between ammonia and total VPA levels. Different oral forms of VPA were used and this study showed that they affected VPA blood levels.

Conclusions VPA-induced hyperammonaemia is a frequent, generally well-tolerated, adverse effect. Ammonia blood level monitoring combined with clinical monitoring are essential to avoid hyperammaonemic encephalopathy. Communication within the hospital led to the medical community becoming aware of the problem and new monitoring recommendations were defined including initial ammonia level measurement after VPA initiation and biannual monitoring of this biological parameter. Total VPA level determination doesn't seem to be useful for predicting hyperammonaemia whereas the importance of measuring the free VPA has recently been highlighted.

No conflict of interest.

GRP-075 GASTROPROTECTION WITH NON-STEROIDAL ANTI-INFLAMMATORY DRUGS AT HOSPITAL DISCHARGE: DO WE FOLLOW LOCAL GUIDELINES?

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J Sotoca, M Rovira, C Codina, J Ribas. *Hospital Clínic, Pharmacy Service, Barcelona, Spain*

Background Studies have shown overuse of proton pump inhibitors (PPIs) that does not meet accepted criteria.

Purpose The aim of this study was to determine the prevalence and appropriateness of gastroprotection with PPIs in patients who were prescribed non-steroidal anti-inflammatory drugs (NSAIDs) at tertiary level hospital discharge.

Materials and Methods Data for this retrospective study were obtained from the pharmacy claims database 1–31 January 2012.

We identified patients under 65 years with a concomitant PPI and NSAID and who were not taking antiplatelet drugs, anticoagulants or steroids and revised the discharge report; we considered gastroprotection appropriate if it contained a history of ulcer disease, bleeding or gastroduodenal perforation or comorbidity or treatment indicated at the time of admission.

Results During January 2012 a total of 1776 patients were dispensed at least one prescription medicine at discharge.

388 patients were dispensed an NSAID and PPI, of whom 144 also received antiplatelet treatment, anticoagulants or steroids and for whom therefore gastroprotection was recommended. We analysed the age of the 244 remaining patients. 76 of them were ≥65 years and then we also considered PPI gastroprotection appropriate. We reviewed the discharge report of the remaining 168 patients who were under 65. The result of this analysis showed that 133 patients did not fit criteria for PPI use (34.3% of patients receiving NSAIDs and PPIs); gastroprotection was correct in 27 patients and the discharge report was not recovered in 8 patients (2.1%).

Conclusions In this retrospective study, 63.6% of patients who were dispensed NSAIDs at discharge received appropriate PPI gastroprotection and 34.3% of patients received an unnecessary PPI prescription (79.2% of patients under 65).

Patient prescription at hospital discharge should be reviewed to prevent overuse of proton pump inhibitors, especially in patients under 65 years of age.

No conflict of interest.

GRP-076 GASTROPROTECTIVE AGENTS IN THE EMERGENCY ROOM OF A TERTIARY-LEVEL HOSPITAL

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H Mateo, J Fernandez Ávila, P Nieto Guindo, FD Fernández Ginés, M Giménez Ramos. *Torrecárdenas Hospital, Pharmacy, Almería, Spain*

Background Gastroprotective agents are widely used in both hospital and community settings, and they are generally perceived as safe drugs.

Purpose To find out whether the prescription of anti-ulcer drugs in the Emergency Room (ER) accords with their approved indications, and the financial impact of their inappropriate use.

Materials and Methods Indications for use of proton pump inhibitors (PPIs) and H2 antagonists (via the Spanish Medicines