Conclusion and relevance The coefficient was >0, which suggests a positive correlation, but it was also very close to 0, which indicates that the correlation was very week. Usually, asthmatic patients know the TAI as many pneumologists use it as a tool to calculate adherence, and therefore they know they are expected to get 50/50 in the test. However, the dispensing records are an objective method to measure adherence of patients and although it is not a substitute for the TAI, it should be complementary. When a patient with poor adherence is detected, pharmacists can play an important role with motivational interviews.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-186 MAIN POTENTIAL INTERACTIONS DETECTED IN THE OUTPATIENT CONSULTATION

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Background and importance In recent years, new oral treatments for cancer and hepatitis C have been authorised. These treatments have in common that they present a high risk of clinically relevant drug–drug interactions (DDIs). Polypharmacy and the use of complementary and alternative medicines (CAM) are increasingly common.
Aim and objectives To determine the prevalence and type of DDIs between selected drugs dispensed in the outpatient pharmacy service and drugs or CAM that patients takes on a regular basis.
Material and methods A retrospective observational study was conducted. Inclusion criteria were patients treated with drugs with a high risk of clinically relevant DDIs for hepatitis C and oncohaematological malignancies between April 2018 and December 2019. Exclusion criteria were patients with other pathologies or treatments not considered 'high risk'. Variables studied were: demographics (age, sex), reconciled drugs, type of DDI and pharmaceutical recommendations (PR). Data were obtained from the medical history, prescription chart and patient interview at the time of the first dispensing act. For the analysis of DDIs, the Lexi-comp interaction database and About Herbs, Botanicals and Other Products were used.
Results 130 patients (59% men), median age 62 years (range 25–87), were included. Diagnosis was oncohaematologic malignancy in 84% of patients and hepatitis C in 16%. Median number of drugs and CAM reconciled per patient was 6 (range 0–17). Drugs dispensed in the outpatient clinic were: 17% capecitabine, 14% temozolomide, 14% dabrafenib/trametinib, 11% glecaprevir/pibrentasvir, 8% imatinib and 32% others. DDIs were detected in 45% of patients: 29% type X (avoid combination), 29% type D (consider treatment modification) and 42% type C (monitor). The therapeutic groups that patients took on a regular basis involved the following: 25% antipyretic analgesics (metamizole), 22% proton pump inhibitors, 10% HMG-CoA reductase inhibitors, 8% oral antidiabetics and 34% others. DDIs with CAM were detected in 6% of patients. PRs were accepted, implemented in all cases and recorded in the patient's medical history: discontinuation of treatment (26%), switch to therapeutic equivalent (24%), analytical monitoring (27%) and clinical follow-up (23%). In all CAM cases with DDIs, it was recommended to stop the medicinal plant.
Conclusion and relevance A high prevalence of moderate/severe interactions was observed in patients treated with oral antineoplastic and antiviral agents. This highlights the importance of continued pharmaceutical care and patient interview.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-187 ALTERNATIVE TREATMENT TO ORAL IVERMECTIN IN *STRONGYLOIDES STERCORALIS* HYPERINFECTION IN THE SETTING OF SMALL BOWEL OBSTRUCTION AND PARALYTIC ILEUS

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Background and importance Gastrointestinal complications, including small bowel obstruction and paralytic ileus, are associated with *Strongyloides stercoralis* hyperinfection syndrome, decreasing oral bioavailability. Ivermectin is the firstline agent for the treatment of strongyloidiasis as well as *S stercoralis* hyperinfection. In Europe, ivermectin is available in oral and parenteral formulations but the European Medicines Agency (EMA) has approved only the oral formulation for human use.
Aim and objectives The aim of the study was to describe alternatives to oral ivermectin when enteral absorption is compromised, regarding a recent case in our hospital.
Material and methods A bibliographic search was made using databases such as MEDLINE (Pubmed) and Micromedex. A specific search for official regulatory documents concerning human and veterinary medical products, from the websites of the EMA, was carried out. Therapeutic options found were assessed by the multidisciplinary infectious diseases team, including a clinical pharmacist.
Results Rectal and parenteral administration of ivermectin were the two therapeutic alternatives found to the oral route. Subcutaneous ivermectin is approved in Europe for veterinary use; its use in humans may be a therapeutic option but this requires an investigational new drug exemption from the EMA. After approval, subcutaneous ivermectin was started at a dose of 200 µg/kg/day. The rectal route was also assessed. Compounding pharmacists prepared enemas of ivermectin (12 mg/30 mL) from the tablets marketed for human use, which were administered every 12 hours. A progressive decrease in the parasite load was observed. *S stercoralis* was no longer detected in stools after 14 days of treatment, and on sputum gram stain after 25 days. The patient continued on therapy until a second negative sputum on day 33. Despite the resolution of the *S stercoralis* infection, the patient died due to multiple complications, including sepsis caused by translocation through the intestinal mucosa of gram negative bacteria into the bloodstream together with the larvae.
Conclusion and relevance The lack of treatment alternatives to oral ivermectin implies the use of off-label therapies. Subcutaneous ivermectin, available for veterinary use, and rectal ivermectin, compounded from marketed tablets, could be valid

options when oral bioavailability is decreased. Further research is needed to fill the gap of ivermectin administration in patients with compromised enteral absorption.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-188 AN AUDIT OF PRESCRIBING, ADMINISTRATION AND STORAGE OF CONCENTRATED ELECTROLYTES

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Background and importance Concentrated electrolytes can be fatal if administered inappropriately. Local hospital policies and protocols exist to ensure appropriate concentrated electrolyte treatment for patients, while reducing the risk of inappropriate or incorrect administration. Patient safety is optimised by using ready mixed bags where possible and ensuring correct storage of intravenous (IV) electrolytes, both concentrated electrolyte ampoules and non-concentrated ready mixed bags, at ward level to reduce the risk of mis-selection and drug error. Local incident reports indicated poor compliance with hospital concentrated electrolyte policies and protocols and so an audit was undertaken to assess this.
Aim and objectives This study aimed to audit the prescribing, administration and storage of concentrated electrolytes in a large teaching hospital.
Material and methods Adherence to hospital concentrated electrolyte protocols and guidelines was determined by a point prevalence audit undertaken in February 2019. Data were collected by clinical pharmacists on a single day and included review of prescriptions from the preceding 7 days.
Results

- There were 133 prescriptions for IV electrolytes on 14 wards.
- Prescribing and administration was appropriate in 32% (n=43) of cases.
- Appropriate storage of concentrated electrolyte ampoules was noted on 95% of the wards. Segregated storage of ready mixed electrolyte bags was found on 30% of the wards.
- Of the 94 potassium chloride prescriptions, ampoules were administered in 78% (n=73) of cases and ready mixed bags were administered in 21% (n=20) of cases. No inappropriate use was identified; however, in 43% (n=31) of cases, no diluent or volume was specified and therefore it was unclear if use of ampoules was clinically indicated. These instances were due to 'as required' prescribing of concentrated electrolytes in the cardiothoracic patient cohort, which requires follow–up.

The Drug Safety Service analysed and circulated the audit results to pharmacy, nursing and medical staff to highlight the main findings and recommendations.
Conclusion and relevance A number of improvement areas were identified:

- Complete concentrated electrolyte prescriptions in accordance with hospital protocols, avoiding 'as required' incomplete prescriptions.
- Define parameters for IV electrolyte replacement postoperatively in cardiothoracic patients.
- More clearly define 'segregated storage' of ready mixed potassium chloride bags.
- Re–audit; undertaken in July 2020, the results of which are currently being analysed.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-189 NEAR MISS LOOKALIKE AND SOUNDALIKE INTRAVENOUS MEDICATION ERROR: A 12 MONTH RETROSPECTIVE STUDY

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Background and importance There is little quantitative evidence in the current literature on the incidence of incorrect medication administration of intravenous medications by clinicians. Analysis of infusion pump medication library alert-logs for user initiated corrections of erroneous medication selections adds quantitative data to the investigation of the incidence of lookalike–soundalike intravenous medication administration errors.
Aim and objectives To establish baseline data from infusion pump medication library alert-logs on near miss and user correction lookalike–soundalike medication selection errors during intravenous medication administration.
Material and methods A 12 month facility wide retrospective review of infusion pump medication library alert-logs was conducted to obtain metrics on the set-up phase of intravenous medication administration. Cancelled infusions and user initiated resolutions of incorrect medication selections were analysed. Decision times of clinicians were calculated from the time–date stamps of the pumps' alert-logs.
Results Incorrect medication selection represented 3.45% (10 017/290 807) of all medication library alerts and 22.40% (10 017/44 721) of all cancelled infusions. Average selection error recognition to cancellation and correction time was 27.00 s (SD 22.25). Medications with longer names were more prevalent among the initial selection errors. Users were more likely to make selection errors with the first part of the medication names (6991/10 017, 69.79%) while the middle part of the medication names were the next most likely to be misidentified (2144/10 017, 21.40%), with name ending confusion being responsible for 8.80% of errors (882/10 017).
Conclusion and relevance The study provides a quantitative appraisal of an area that has been resistant to measurement, and identified a high number of near miss lookalike–soundalike errors. This phenomenon, while largely centred on initial misreading of the beginning of the medication name, also ran through the middle and end portions of medication nomenclature. The value of an infusion pump showing the entire medication name complete with TALLman lettering on the user interface, so that the selection fully matches that of the medication's pharmacy label, is supported by these findings. FMEA type infusion pump strategies that use multiple distinct user confirmation steps (eg, medication selection followed by therapy selection, and user confirmation of clinical advisories) may reduce the risk of incorrect medication selection, as