in 2.6%. At least 41% of the patients had been treated with PPIs for more than a year; for the rest of the patients, no prescription data were available prior to joining the pharmacy service. The mean number of drugs prescribed per patient was 8.3±5, 1.2% were being treated with an NSAID, 42.3% were taking acetylsalicylic acid concomitantly at antiplatelet doses and 3.8% were given bisphosphonates. The prevalence of patients being treated with a PPI and with a history of fracture was 48.7%.

Conclusion and relevance There was a high prevalence of patients without a clear indication for the prescription of PPIs in the GHC. This makes it necessary to review the treatments to assess possible deprescription of these drugs. In addition, their administration could be related to an increased risk of fractures due to its high prevalence.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-121 FIDAXOMICIN RELATED METABOLIC ACIDOSIS: A CASE REPORT

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Background and importance Fidaxomicin is a macrolide antibiotic used to treat intestinal *Clostridium difficile* (CD) infection in the absence of metronidazole or vancomycin treatments. Pharmacovigilance collects information, and analyses and notifies cases of suspected adverse drug reactions (ADRs) to prevent them occurring in the future.

Aim and objectives To describe a case of metabolic acidosis in a patient treated with fidaxomicin and establish its possible association.

Material and methods We describe the case of an 82-year-old man diagnosed with multiple myeloma and treated with two full cycles of bortezomib–dexamethasone. He was referred to the emergency department after presenting with melenic diarrhoea for 1 week. As a result, he was hospitalised and diagnosed with upper gastrointestinal bleeding, acute prerenal renal failure, mild thrombopenia, hypokalaemia and hyponatraemia. After fluid and electrolyte stabilisation, it was decided to start fidaxomicin 200 mg/12 hours due to fever, confusional syndrome, persistence of diarrhoea and positive CD toxin test. The following constants were measured to confirm metabolic acidosis: gas level of bicarbonate (HCO_3^-), partial pressure of carbon dioxide (pCO_2), hydrogen ion potential (pH) and anion GAP. The degree of drug adverse reaction causality was evaluated using the Naranjo algorithm.

Results Two blood gas tests on consecutive days confirmed very low HCO_3^- (9 mmol/L) and pCO_2 (16 mm Hg) with normal pH (7.4), after which the patient was diagnosed with compensated metabolic acidosis with normal GAP anion. Finally, it was decided to suspend fidaxomicin and in the following days the patient experienced a progressive clinical improvement. Naranjo's algorithm established the causality relationship as 'probable' (score of 6). The regional pharmacovigilance centre (RPC) was notified.

Conclusion and relevance The European Medicines Agency's technical sheet for fidaxomicin does not describe metabolic acidosis as an ADR. However, UpToDate Clinical Library reports <2% of cases of metabolic acidosis in adults treated with fidaxomicin. The RPC reported this case as the only fidaxomicin ADR notified in our country.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-122 HEALTH RESULTS AFTER INFLIXIMAB PHARMACOKINETIC MONITORING IN INFLAMMATORY BOWEL DISEASE

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Background and importance Infliximab (IFX) is a monoclonal antibody (inhibitor of alpha tumour necrosis factor (anti-TNFα)) which is used in the management of inflammatory bowel disease (IBD). However, some patients do not show clinical benefit for this therapy or they show loss of response over time. For this reason, it is advisable to individualise and optimise the therapy through therapeutic drug monitoring (TDM).

Aim and objectives To analyse the clinical situation of patients according to proactive monitoring of serum levels of IFX in IBD and pharmacokinetic recommendations in their management.

Material and methods A prospective study was carried out in a 350 bed general hospital. Patients with IBD and IFX determinations with pharmaceutical interventions performed between January 2019 and July 2020 were selected. Data collected were: sex, median age (range), analytical parameters before intervention (mean (SD) albumin, C reactive protein (CRP), α1-acid glycoprotein (AGP), faecal calprotectin (FC)) and clinical status before intervention (good general condition (GGC), regular general condition (RGC) and bad general condition (BGC)). Mean (SD) IFX levels and anti-IFX antibodies (ATI) were measured and patients with concomitant immunomodulatory treatment were registered. According to population studies, new interventions were recommended by the pharmacy service (intensification, swap, deintensification, non-valuable). Analytical parameters (CRP, AGP, FC) and clinical status of the patient 3 months after the intervention were analysed. Data were obtained from the assisted electronic prescription programme and digital medical records.

Results 55 patients with interventions were monitored, 38 men (69.1%), mean age 39 (20–70) years. Analytical parameters before the intervention were: albumin 4.04 (0.3) g/dL, CRP 0.78 (0.75) mg/dL, AGP 87.35 (29) mg/dL and FC 190.25 (148.61) µg/g. Clinical status before the intervention was GGC 9 (19.36%), RGC 30 (54.55%) and BGC 16 (29.11%). IFX levels were 3.04 (4.22) µg/mL and ATI 1.48 (2.61) µg/mL. Patients with concomitant immunomodulatory treatment 32 (58.18%). All recommended interventions were accepted: intensification 41 (74.55%), swap 10 (18.18%), deintensification 3 (5.45%) and non-evaluable 1 (1.82%). Analytical parameters 3 months after the intervention were: CRP

0.62 (0.64) mg/dL, AGP 85.21 (22.00) mg/dL and FC 174.75 (220.25) µg/g. Clinical status after the intervention was GGC 43 (78.18%), RGC 11 (20%) and BGC 1 (1.82%).

Conclusion and relevance After the intervention, patients showed a tendency to decreased inflammatory parameters and clinical improvement, with a subjective reduction in symptoms. TDM in association with recommendations of the pharmacy service are valuable strategies in optimising IBD treatment to avoid loss of response and achieve better clinical outcomes.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-123 SGLT2 INHIBITORS IN TYPE 2 DIABETES PATIENTS WITH NON-ALCOHOLIC FATTY LIVER DISEASES: AN UMBRELLA REVIEW OF SYSTEMATIC REVIEWS

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Background and importance Sodium–glucose co-transporter 2 (SGLT2) inhibitors have been reported to benefit liver function in patients with type 2 diabetes (T2D) with non-alcoholic fatty liver disease (NAFLD). Although some systematic reviews and meta-analyses have demonstrated the hepatic benefits from SGLT2 inhibitors in T2D patients with NALFD, the overall findings and quality of these systematic reviews have not been evaluated.

Aim and objectives The aim of this study was to critically appraise existing systematic reviews to consolidate evidence associating the use of SGLT2 inhibitors with beneficial hepatic results for T2D patients with NAFLD.

Material and methods This umbrella review searched relevant published systematic reviews of clinical trials from PubMed and Embase between inception and 16 September 2020. The search strategy combined selected keywords (eg, SGLT2 inhibitors and NAFLD) with MeSH or Emtree terms and directed clinical queries for systematic reviews (eg, systematic (sb) in PUBMED). Articles eligible for inclusion were systematic reviews examining the effectiveness of SGLT2 inhibitors for T2D with NAFLD in clinical trials. Two independent investigators appraised study quality using AMSTAR 2, and extracted the hepatic effects from SGLT2 inhibitors (eg, liver enzymes, liver fat, liver histology, liver cirrhosis and liver cancer) in the included systematic reviews.

Results Of 25 screened potential systematic reviews, we ultimately included seven in this study. However, none could be rated as being of high methodological quality. Five systematic reviews indicated that SGLT2 inhibitors could effectively decrease liver fat and liver parameters of alanine aminotransferase and gamma-glutamyl transferase in patients with NAFLD. Two systematic review indicated that SGLT2 inhibitors could reduce hepatosteatosis, as supported by biopsy proven evidence of improvement from a small clinical trial, but no evidence of improvement of liver fibrosis was found.

Conclusion and relevance There was some association between SGLT2 inhibitor uses and observed benefits to liver function in T2D patients with NAFLD, although the quality of the current systematic reviews remains relatively low. Further evaluation of long term liver outcomes with SGLT2 inhibitors in liver cirrhosis and liver cancer is warranted.

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5PSQ-124 ANTICOAGULATION MANAGEMENT WITHIN A HOSPITAL SETTING: IDENTIFYING RISK FACTORS AFFECTING PATIENT SAFETY

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Background and importance Anticoagulants are used hospital wide throughout the patient trajectory involving many healthcare providers. Given their widespread use and risk profile, they are classified as high risk. Despite the many precautions and vast experience with these drugs, errors often occur in daily practice.

Aim and objectives To investigate which factors currently negatively affect patient safety in our hospital.

Material and methods We performed a retrospective data analysis based on incident reports and registered usage (2018–2019) as well as on pharmaceutical recommendations (3 months period in 2019) related to anticoagulants and antiaggregants. The data were obtained from the hospital information systems. Additionally, we surveyed doctors and trainees working in our hospital, via Google Forms, asking multiple choice questions inquiring into their experiences. They were asked to participate via email, and participation was voluntary and anonymous. All data were processed via Microsoft Excel and discussed within the anticoagulation stewardship committee.

Results *Retrospective data analysis:* 172 incidents and 132 pharmaceutical recommendations were included. Most incidents were related to low molecular weight heparin (45%) and took place in a surgery ward (37%). In 35% of cases, the incident could be linked to transfer to another ward or operating room. Problems in terms of administration (38%), communication (30%) and prescription (24%) were the main risk factors.

Survey: 74 doctors, representing 21 disciplines, answered the questionnaire. Non-prescribing of therapy was considered to be the main problem (49%), followed by incorrect dosing (42%). Lack of communication was a tricky issue: only 23% agreed that the patient receives sufficient information on paper. 51% thought that the policy was followed consistently hospital wide. Only 28% thought that new employees were sufficiently informed about the hospital wide agreements. Additional monitoring by a clinical pharmacist would be considered an added value by 88% of the doctors.

Conclusion and relevance A number of risk factors were identified, such as education of all healthcare professionals, communication, the IT systems used, the opening of temporary wards and transfer of patients within the hospital. It is our opinion that a multidisciplinary, centralised approach with a focus on monitoring is imperative. The use of a clinical pharmacist could play an important role.