eligible for ASCT. These preliminary analyses indicate that patients experienced a significant improvement in disease symptoms and future perspective and a significant worsening in dyspnoea within the first months, with lower impact on direct health costs over time. The efficacy and safety profile remained favourable at the time of analysis.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-151 THE IMPACT OF AN INTEGRATED ELECTRONIC MEDICAL RECORD ON THERAPEUTIC DRUG MONITORING

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Background and importance Healthcare is currently undergoing a transformation to a digital platform and implementing an integrated electronic medical record (ieMR). The ieMR delivers an integrated suite of digital services that improve safety, efficiency and quality in clinical workflow processes. This is changing the future of healthcare and the roles of healthcare professionals. The changing face of the healthcare system is an opportune time to review current processes. Therapeutic drug monitoring (TDM) is currently planned and ordered by medical officers at an outer metropolitan hospital. The role of the pharmacist is sporadic. There is currently minimal data about the impact of a digital hospital system on traditional roles and current processes within the healthcare system.

Aim and objectives To review the impact of ieMR on the TDM process within an outer metropolitan hospital.

Material and methods A retrospective audit was conducted on TDM over two 12 month periods. The periods were 2016 (a paper based hospital system) and 2018 (a digital hospital system). Patients were identified using the electronic pathology database. Patients were excluded if <18 years of age, it was an outpatient setting or within the emergency department. Progress notes, medication charts, ieMR and other relevant pathology were reviewed. They were assessed for appropriateness of the timing of collection, compliance to recommended TDM guidelines and the documented involvement of the pharmacist.

Results There were 10 medications included in the study, which covered 1686 and 1251 tests in 2016 and 2018, respectively. Of these, 40.6% at cost of \$AUD15 999.43 were collected at an inappropriate time in 2016 and 41.9% at a cost of \$AUD11 545.27 in 2018, making interpretation difficult. There was documented pharmacist advice in 8.6% in 2016 and in 13% in 2018 of all TDM results. The TDM function in ieMR was only used in 3% of all tests.

Conclusion and relevance TDM has a large impact on the therapy and outcome of patients. This review demonstrated

that ieMR did not have a significant impact on TDM and demonstrated a minimal role for the pharmacist. These preliminary results showed that a review of the current TDM process is required and with their drug and pharmacokinetic knowledge, a greater impact and role of the pharmacist is required.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-152 ANALYSIS OF PHARMACEUTICAL INTERVENTIONS IN THE EXCHANGE OF THERAPEUTIC EQUIVALENTS

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Background and importance Therapeutic equivalents are drugs with a different chemical structure but with similar therapeutic and adverse effect profiles when equivalent doses are administered.

Aim and objectives To analyse the pharmacotherapeutic interventions of proposing therapeutic equivalents (PIPTes) for prescribed not included in the pharmacotherapeutic guide medications (NIGM), as well as their degree of acceptance.

Material and methods A retrospective observational study was carried out over a period of 2 months. The PIPTes were realised during pharmaceutical validation. The following items were collected: age, sex, prescribed NIGM, acceptance of the PIPTe (it was considered accepted when changes were generated in the prescription), measure adopted by the doctor (change to the proposed equivalent, change to another equivalent, patient contribution or suspension of treatment) and the medical service.

Results A total of 211 patients (122 men) with a median of 76 years (20–98 years) were reviewed. A total of 2197 interventions were performed: 1294 (58.9%) were about NIGM. Of these, 228 (17.62%) were PIPTes, with the following distribution according to pharmacotherapeutic group: 78 (34.21%) ARA-II, 65 (28.5%) ACEIs, 34 (14.91%) statins, 32 (14.05%) calcium antagonists, 5 (2.19%) PPIs, 1 (0.44%) anti-H2 and 13 (5.7%) of other groups.

Most of the PIPTes were accepted (79.82% (182)). The degree of acceptance of each pharmacotherapeutic group was: 79.49% (62) for ARA-II, 89.23% (58) for ACEIs, 73.53% (25) for statins, 75.0% (24) for calcium antagonists, 40.0% (2) for PPIs, 100% (1) for anti-H2 and 69.23% (9) for other groups.

In 52.19% (95) of cases, the proposed therapeutic equivalent was changed (25 ARA-II, 41 ACEIs, 13 calcium antagonists, 10 statins, 2 PPIs, 1 anti-H2 and 3 other groups). In 25.82% (47) of patients the drug was contributed by the patient, 14.84% (27) were suspended and 7.14% (13) were changed to a drug different from the one proposed.

Conclusion and relevance The majority of the interventions performed by pharmacists were in relation to NIGM. ARA-II and ACEIs were the groups with the highest number of PIPTes. More than 75% of the PIPTes caused a change in the prescription, which resulted in more than 50% of cases substituting the NIGM for the equivalent proposed by the pharmacy service. This reflects the great contribution of the hospital pharmacist to therapeutic exchange programmes.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-153 INTENSIFICATION IN BIOLOGICAL TREATMENT IN ULCERATIVE COLITIS

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Background and importance Biological drugs have improved the therapeutic possibilities for ulcerative colitis (UC), showing good clinical efficacy. However, a considerable percentage of patient do not initially respond to treatment or lose the response achieved over time. To resolve treatment failure, several strategies have been used, including intensification of treatment.

Aim and objectives To analyse the use of biological drugs in patients with UC and the strategies used in the intensification of these treatments in clinical practice.

Material and methods This was a retrospective observational study. Inclusion criteria were patients with UC who received biological treatment during the study period (in 2018). Variables collected were sex, age, number of years diagnosed, intestinal inflammation marker (calprotectin (CF)) before and after treatment, biological drug received during the study period, use of intensification and strategy used (dose increase or dosage interval shortening and determination of drug levels). Loss of response was defined as therapeutic levels not achieved in the case of infliximab (IFX) and adalimumab (ADA). Data were obtained from the outpatient dispensing programme (ATHOS) and the electronic medical records (Diraya).

Results During the study period, 48 patients were included: 61.54% women, median age 41 years (range 19–64) and median number of years diagnosed 7 years (range 1–29). Median CF before starting treatment was 513.95 (range 128–4257) and after biological treatment it was 97 (range 8–3963).

The prescribed biological drugs were IFX in 53.06% of patients (n=26), ADA in 22.44% (n=11), vedolizumab (VDZ) in 14.29% (n=7), tofacitinib in 4.08% (n=2) and ustekinumab in 4.08% (n=2). Treatment was intensified in 46.93% of patients (IFX n=16; ADA n=1; VDZ n=6) due to loss of response. In all patients the intensification strategy was to shorten the dosing interval except in two cases in whom the dose was increased (IFX n=2). Intensification strategies in patients receiving IFX and ADA were carried out according to the drug levels obtained, while for VDZ it was performed according to signs of clinical activity and intestinal inflammation markers, such as CF.

Conclusion and relevance Biological drugs represent an effective and safe option in patients with UC but in approximately half of the cases in the study period, treatment had to be intensified. Therefore, the introduction into clinical practice of monitoring serum levels of biological drug is essential for a correct intensification strategy.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-154 POTENTIALLY INAPPROPRIATE MEDICATION FOR ELDERLY HOSPITALISED PATIENTS IN A TRAUMA AND ORTHOPAEDIC SURGERY DEPARTMENT

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Background and importance Medication is potentially inappropriate when the risk of adverse effects is greater than the clinical benefit, especially when safer and/or more effective treatments are available.

Aim and objectives To analyse potentially inappropriate prescriptions (PIPs) and potential prescribing omissions (PPOs) in elderly patients hospitalised for trauma and/or orthopaedic surgery.

Material and methods A prospective observational study (15 August 2018–15 February 2019) was conducted in the trauma/orthopaedic surgery department of a general hospital. Inclusion criteria were age ≥ 65 years, ≥ 3 chronic medications and interview with a pharmacist for reconciliation of home medication at hospital admission. Study variables were sex, age, number of comorbidities, number and type of chronic medications, place of residence (home, or residential/health centre (R/HC)) and reason for admission and its type (elective/urgent). Medications were categorised using the anatomical therapeutic chemical classification system. STOPP-START criteria were used to detect PIPs and PPOs. Binary logistic regression analysis was conducted to identify factors related to PIPs and POPs.

Results The study included 114 patients (6.4% women, mean age 79.8 ± 7.9 years, 3.2 ± 2.2 comorbidities/patient, 7.9 ± 3.6 medications/patient; 6.1% in R/HC). The main reason for admission was hip fracture (45.6%); 57.9% of admissions were urgent and due to falls. Among the 898 chronic medications evaluated, 15.8% were a PIP or PPO. The most frequently implicated anatomic groups were: A—alimentary tract/metabolism (24.9%), C—cardiovascular (24.2%) and N—nervous system (24.1%). We detected 131 PIPs in 72 patients (63.2%), including: STOPP-A1, medication without indication (18.3%), mainly (75%) proton pump inhibitors (PPIs); STOPP-A2, treatment longer than recommended (17.6%); STOPP-A3, duplication (9.2%); STOPP-K1, benzodiazepine in falls (7.6%); and STOPP-D5, benzodiazepines >4 weeks (6.1%), among others. We detected 15 PPOs in 13 patients (11.4%), including: START-D1, gastroprotection with PPI (33.3%); START-E3, calcium/vitamin D in osteoporosis (26.7%); START-H2, laxative with opioid (20.0%); and START-E5, vitamin D in elderly after fall (6.7%), among others. The number of chronic medications per patient was the sole factor associated with PIPs and/or PPOs (OR=1.49 (95% CI 1.17–1.89), $p=0.001$).

Conclusion and relevance PIPs were highly prevalent among elderly trauma patients; they were more frequent than PPOs and mainly attributable to polymedication. The medications most frequently associated with PIPs were PPIs and benzodiazepines, which can increase the risk of falls and hip fractures.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Delgado-Silveira. *Rev Esp Geriatr Gerontol* 2015.

No conflict of interest.