Variables: demographic data, anaesthetic risk according to American Society of Anesthesiologists (ASA) visual analogue scale (VAS) pain score at rest on the intervention day (day 0), VAS on day 1 at rest and on movement, and VAS on day 2 (discharge day) at rest and on movement, and need for rescue medication.

Data were obtained from the paper nursing register and the patient's electronic medical records. The statistical analysis was carried out with SPSS v19 and χ^2 or Student's test were applied according to the type of variable. A p value <0.05 was considered statistically significant.

Results Ninety-three patients, 36 (38.7%) men; age 72 (7) years. Anaesthetic risk: 1 (1.1%) patient ASA I, 74 (80.4%) ASA II and 17 (18.5%) ASA III. PRE group, 39 (41.9%) and POST group 54 (58.1%). No statistically significant differences were observed among groups.

PRE vs POST group: VAS at rest on day 0, 3.7 (2.9) vs 1.9 (1.8) ($p<0.001$), VAS at rest on day 1, 3.3 (1.6) vs 2.3 (1.1) and 6.4 (1.4) and 3.8 (1.6) on movement ($p<0.001$) and VAS at rest on day 2, 2.7 (1.6) vs 2.0 (1.3) and 5.2 (1.3) vs 3.7 (1.5) on movement ($p<0.025$).

Use of rescue medication: day 0, 9 (23.1%) patients in PRE group and 9 (16.7%) in POST group; day 1, 7 (17.9%) in PRE and 6 (11.1%) in POST and day 2, 2 (5.13%) in PRE and 3 (5.56%) in POST ($p>0.05$).

Conclusion and relevance Better pain control can be appreciated with the introduction of levobupivacaine pumps; however, no statistically significant differences in the use of rescue analgesic medication between groups have been observed.

It is unknown whether the functional recovery of these patients would be affected, an interesting topic for future studies.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-040 PHARMACEUTICALS IN HOSPITAL WASTEWATER: A REVIEW

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Background and importance Concern about potential deleterious effects of pharmaceuticals in the environment is rapidly growing worldwide, particularly in Europe, which is considered as the front-runner in the field of 'eco-pharmacovigilance'. The recently approved European 'Green Deal' has turned attention on pharmaceuticals as environmental pollutants. The European Commission's '*Strategic Approach to Pharmaceuticals in the Environment*' reflects on the importance of effluents from potential hotspots like hospitals and potential additional treatment to this wastewater. In the same vein, the European Association of Hospital Pharmacists (EAHP) published a statement, highlighting the "*need for measures to better address pharmaceutical contamination*" and "*the development of interdisciplinary education, and training programs for healthcare professionals with urgency*". However, we believe that to date, this issue has not been sufficiently considered by healthcare professionals in general and hospital pharmacists in particular.

Aim and objectives We aimed to review published data about the presence of pharmaceuticals in hospital wastewater worldwide, in order to raise awareness among hospital pharmacists about the matter.

Material and methods To this end, we used the Pharmaceutical Database published by the German Environment Agency – Umweltbundesamt, which collects all published information about the presence of pharmaceuticals, including wastewater from hospitals. The database was downloaded on 13 September 2021. 'Sewage hospital (untreated)' & 'Sewage hospital (treated)' matrices were considered. Metabolites were excluded.

Results A total of 67 publications were found reporting positive detection of 221 different parent drugs in hospital wastewater. These studies were carried out in 27 different countries of which 15 were European, with Portugal, Italy, Switzerland and Norway being the ones with the most published data.

An additional treatment to hospital wastewater was reported in 11 different countries, six of which were European.

The three most frequently detected drugs were ciprofloxacin, sulfamethoxazole and ibuprofen.

Conclusion and relevance A considerable amount of research about the presence of pharmaceuticals in hospital wastewater has been performed, mainly in European countries. We hope our research helps in raising concern in hospital pharmacists about this issue.

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5PSQ-041 SAFETY AND EFFICACY OF HIGH DOSES OF IRINOTECAN IN PATIENTS WITH METASTATIC COLORECTAL CANCER TREATED WITH FOLFIRI SCHEME BASED ON UGT1A1 GENOTYPE: A SYSTEMATIC REVIEW

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Background and importance Irinotecan's antineoplastic activity, as well as its safety, depends on the action of its active metabolite, SN-38, which is inactivated by UDP-glucuronosyltransferase (UGT), an enzyme encoded by the *UGT1A1* gene. The presence of the **28* allele decreases the elimination of SN-38. Some studies have shown the possibility of using doses of irinotecan higher than 180 mg/m^2 in patients with the *UGT1A1*1/*1* and **1/*28* genotypes.

Aim and objectives To analyse published data about the use of a higher dose than 180 mg/m^2 of irinotecan and its relationship with the efficacy and safety in metastatic colorectal

cancer (mCRC) patients with the *UGT1A1*1/*1* and **1/*28* genotypes treated with the FOLFIRI scheme.

Material and methods A systematic review was carried out in Medline. The quest was done for articles published up to November 2020. MeSH terms used were: irinotecan and UGT1A1. Methods used were based on those recommended according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). We searched for randomised clinical trials (RCTs) and observational studies. Four reviewers independently assessed the eligibility of each study. To assess the methodological quality of the RCT and the observational studies included, the Jadad and the Newcastle-Ottawa (NOS) scales were used, respectively.

Results Search strategy reported 595 references, of which 13 were selected for analysis, 7 (53.8%) evaluating both efficacy and safety and 6 (46.2%) only safety. In relation to the studies that evaluated efficacy and safety, 6 (85.7%) were in favour of increasing the dose in terms of objective response rate (ORR) and progression-free survival (PFS), and even in one of them, in overall survival (OS). Studies evaluating safety suggested that doses of irinotecan greater than 180 mg/m^2 are tolerated by most *UGT1A1*1/*1 and *1/*28* patients. Of all the studies analysed, only one of them showed greater toxicity (grade ≥3) in the group with increased doses of irinotecan compared to the control group.

Conclusion and relevance The present systematic review shows the convenience of assessing the irinotecan dose adjustment within the FOLFIRI scheme based on U*GT1A1* polymorphisms, with a potential increase in the probabilities of an adequate clinical response.

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5PSQ-042 TOXICITY OF REMDESIVIR AS TREATMENT OF NON-CRITICALLY ILL COVID-19 PATIENTS

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Background and importance Remdesivir is currently included in clinical guidelines for COVID-19 treatment. Although safety data were published in ACTT-1, the toxicity of this drug in regular clinical practice is still unknown.

Aim and objectives In this study we aimedd to describe remdesivir's toxicity in patients only requiring supplemental low-flow oxygen (no high-flow oxygen requirements or other non-invasive ventilation at start of treatment).

Material and methods Retrospective cohort including patients treated with remdesivir following Spanish Medicines and Health Products Agency criteria (non-critical patients requiring low-flow oxygen) between August and October 2020 in a tertiary-level hospital. Exclusion criteria were being under 18 years of age and participation in clinical trials with remdesivir. The percentage of adverse reactions occurring in the 14 days following on from the beginning of treatment was the primary outcome. Secondly, the number of treatment discontinuations were assessed. Categorical variables were expressed as proportions while continuous values were formulated as median and interquartile range (IQR).

Results 264 patients were included (59.2% men, mean age 66 years; IQR 54–82). In the 14 days following on from the beginning of treatment, an adverse reaction (AR) was reported in 146 (55.3%) patients. In 91 (34.5%) of them it was grade ≥2 AR, in 31 (11.7%) grade ≥3 and in 8 (3.0%) of them grade ≥4. Median of days until toxicity began was 3.5 days (IQR 1.2–9.0). The most common AR was an increase in transaminases, which happened in 114 (43.2%) patients, 29.1% of them being grade ≥3 and 3.9% grade ≥4. Regarding renal toxicity, an increase in serum creatinine occurred in 51 (19.8%) patients, 27.5% of them being grade ≥3 and 9.8% grade ≥4. One patient suffered a grade 3 anaphylactic reaction during infusion and another one developed hepatitis during the follow-up period. Two more patients suffered gastrointestinal toxicity (grade 1–2 nausea and diarrhoea). During the study period, 31 (12.1%) patients discontinued remdesivir treatment,12.5% of them due to AR or toxicity related to the drug.

Conclusion and relevance Increased transaminases was the most common AR in this population, matching remdesivir's European Public Assessment Report (EPAR) specifications, followed by an increase in the serum creatinine levels (frequency not detailed on the EPAR). However, only 12.5% of treatment discontinuations were due to adverse reactions or toxicity linked to remdesivir. Further investigation is needed to unravel the degree of involvement of the drug in this toxicity.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-043 BENZODIAZEPINES AND HYPNOTIC ANTIPSYCHOTICS IN A PSYCHIATRIC HOSPITAL

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Background and importance Benzodiazepines are the most prescribed psychotropic drugs as anxiolytics (with excessive sedation as the main adverse effect), which leads to their possible abuse and dependence, and constitutes a major problem especially among patients who are under regular psychopharmacological treatment.

Aim and objectives To analyse the prevalence of prescription benzodiazepines (BZD) prescribed in a psychiatric hospital, as well as their association with other hypnotic drugs.

Material and methods Descriptive cross-sectional study of the prescriptions of admitted patients. A database was created with the information: history, sex, age, diagnosis, prescribed BZD and concomitant sedative antipsychotics. Statistical analysis was performed with the SPSS program and degree of significance p≤0.05.

Results 150 patients, 87 (58.0%) men and 63 (42.0%) women, with a mean age of 44.2±12.8 years.

Mean BZD/patient of 1.9±0.8. Total number of prescriptions with BZD was 138 (92.0%), of which 2 (2.3%) corresponded to BZD of short duration, 78 (56.5%) to BZD of intermediate duration and 102 (73.9%) at least one long-acting BZD.