Aim and objectives To analyse the profile of pharmacological interactions with RTV as an enhancer of PIs and their severity.
Material and methods A retrospective observational study was conducted where patients undergoing treatment for HIV-1 infection with PI boosted with RTV before 2018 were reviewed. Patients who had been treated with RTV as an enhancer for at least 6 months were selected. Those that presented some interaction with PI/enhancer were reviewed. Data were collected on age, sex, drug interactions and their severity, and medical action/decision. The data were obtained from the drug dispensing register of the outpatient pharmaceutical care unit and the electronic clinical record. Interactions and their severity were reviewed using www.hiv-druginteractions.org/checker.
Results 210 patients were reviewed, of whom 5 patients (2.38%) had interactions that motivated treatment modification, reflected in the clinical history, with a mean age of 52 years (SD 5).

- RTV–triazolam: avoid co–administration. RTV can increase triazolam concentrations resulting in prolonged sedation or respiratory depression. Decision: ART modification.
- RTV–sildenafil: potential interaction. Co–administration of darunavir/RTV (400/100 mg twice daily) and a single dose of sildenafil resulted in fourfold greater exposure. Decision: use sildenafil single dose at a maximum 25 mg every 48 hours.
- RTV–quetiapine: avoid co–administration. Concomitant administration of RTV and quetiapine is contraindicated because it can increase the toxicity related to quetiapine due to its metabolism mainly by CYP3A4, which RTV inhibits. Decision: reduce quetiapine dose to one–sixth if administered jointly.
- RTV–atorvastatin: very low evidence interaction. Co–administration may increase atorvastatin concentrations and increase the risk of myopathy. Decision: exchange for pravastatin.
- RTV–anti–VHC (ombitasvir+paritaprevir/RTV): avoid co–administration. Co–administration with additional ritonavir is not recommended. Optional decision: modification of ART until the end of anti–HCV treatment.

Conclusion and relevance Interactions related to ART based on PI/enhancer can be easily managed to avoid causing harm to the patient. It is necessary to review the complete treatment in ART patients whenever they start a new drug.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-258 EVALUATION OF MEDICINES ADHERENCE AND ASSOCIATED FACTORS IN PATIENTS WITH CHRONIC HEPATITIS B

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Background and importance Chronic hepatitis B virus (HBV) infection is a major public health problem worldwide. Patients' knowledge about their disease and/or the use of new technologies are factors that may influence patient adherence to medicines.
Aim and objectives The aim of this study was to evaluate treatment adherence for HBV patients and identify the factors involved.
Material and methods This was a descriptive study carried out in a regional hospital for 8 months. Patients diagnosed with HBV by the gastroenterology unit who collected their treatments from the outpatient pharmacy service (OPS) during the study period were included. Patients who refused were excluded from the study. To evaluate adherence to the treatment and the factors involved, we developed a questionnaire with seven questions to be completed by the patient anonymously when collecting their medicines in the OPS. In addition, to evaluate treatment adherence, we checked the medicines dispensation record database. All patients enrolled signed informed consent to take part in the study.
Results 66 patients were included, 55 were men (83.3%), 33 (50%) were Spanish. Median age was 47 years (range 82–25). Four patients (6%) had attended university, 18 (27.3%) had a high school degree and 44 (66.7%) had primary school education. Of the surveyed patients, 51 (77.2%) has been collecting HBV medication over 3 years and 3 (4.5%) for <1 year. 29 patients (43.9%) had never looked at information about their disease and 37 (56%) answered three out of four questions correctly about the natural history of the infection. 51 patients said they did not require a medication reminder strategy while 8 (12.2%) used a medication remainder. 18 patients (27.3%) acknowledged skipping any medication in the last month, with the main cause of lack of adherence being forgetting the medication (15 patients, 83.3%). With regards to adherence to medication based on the pharmacy dispensation record database, 58 patients (87.9%) had more than 90% estimated adherence, with 100% adherence among patients who attended university or had a high school degree.
Conclusion and relevance HBV patients showed high adherence compliance. Most had not made special arrangements to remind them to take their medication. Generally, patients showed poor knowledge of the natural history of their illness. Our study showed a link between the patient's educational attainment and medication compliance.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-259 ONE YEAR WITH BICTEGRAVIR/EMTRICITABINE/TENOFOVIR ALAFENAMIDE

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Background and importance Bictegravir (BIC), a second generation integrase strand transfer inhibitor, approved for HIV treatment in fixed dose combination with emtricitabine (FTC) and tenofovir alafenamide (TAF), has potent antiviral activity in vitro to wild-type virus.
Aim and objectives To assess the virological and immunological efficacy and to evaluate safety at 24 weeks of BIC/FTC/TAF in naive patients and patients switching to BIC/FTC/TAF, and to analyse, by subgroup, the results in the switch group.
Material and methods This was a multicentre, observational, retrospective study in naive patients and patients switching to BIC/FTC/TAF in 2019, treated for at least 24 weeks. At the

beginning of the study, population data (sex and age) and analytical data were collected at baseline and at 24 weeks: viral load (VL), CD4 lymphocytes and any adverse event (AE) produced by BIC/FTC/TAF.

Results During the study period, 95 patients were included: 25 naive (76% men) with an average of 40 years and 70 patients who switched (66% men) with an average of 43 years.

Results for immunovirological efficacy were

- naïve group: median VL and CD4 at the beginning were 764 026 copies/mL and 402 cells/mL, respectively. After 24 weeks, 22 (88%) patients had undetectable VL (<50 copies/mL) and the remaining 12% failed due to poor adherence. Adherence was reinforced for them and in the next analysis they had undetectable VL. The median CD4 with undetectable VL was 736 cells/mL.
- switched group: median VL and CD4 lymphocytes at baseline were 120 413 copies/mL and 639 cells/mL, respectively. After 24 weeks, 65 (93%) patients had undetectable VL with median CD4 lymphocytes in these patients of 728 cells/mL.

In total, there were four patients (4.2%) who had insomnia during treatment with BIC/FTC/TAF. Also reported were: 3 (3.2%) patients with headache, 1 (1.1%) patient with osteoarticular pain, 1 (1.1%) patient with increased menstrual bleeding and 1 (1.1%) patient with gastrointestinal pain. None of these AE was a reason for treatment interruption.

Conclusion and relevance BIC/FTC/TAF was safe (mild AE with a low incidence rate) and effective (high percentages of undetectable VL and good results for CD4 lymphocytes).

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-260 ANALYSIS OF DRUGS INTERACTIONS BETWEEN CORONAVIRUS (COVID-19) ANTIVIRAL TREATMENT AND CONCOMITANT MEDICATION

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Background and importance Drugs used for COVID-19 (lopinavir/ritonavir, hydroxychloroquine) have a large number of interactions. If any of these drugs are used, we should be cautious and monitor the clinical evolution of each patient closely. The hospital pharmacist plays an important role in the revision of treatment to ensure its safety and efficacy.

Aim and objectives To analyse potential drug interactions of treatment for COVID-19 and to evaluate physician acceptance of pharmacist recommendations.

Material and methods This was a prospective interventional study from March to May 2020. We included all patients who started antiviral treatment for COVID-19 with a positive PCR test and hospital admission. Data were collected from the electronic medical record (DIRAYA) and the prescription programme (PRISMA). The databases used for the detection of interactions were: Drugs.com and COVID-19 drug interactions.org (University of Liverpool).

Collected data were age, sex, concomitant medication, interaction classified according to severity (major/moderate), mechanism of the interaction (MI) (pharmacokinetic/pharmacodynamic), drugs that prolong QT interval and pharmaceutical recommendation (PR).

Detection of an interaction was reported in the clinical course of the patient. In the case of a serious interaction or clinical risk situation, the prescribing doctor was notified directly. Descriptive statistics were used to analyse the results.

Results 178 patients (56.2% men) were analysed, with a median age of 63 (range 22–90) years. 267 interactions were detected (56.9% moderate/43.1% major). The MI involved was pharmacokinetic (63.9%)/pharmacodynamic (36.1%). 22.8% of the collected drugs could affect the QT interval.

Antiviral therapy used was lopinavir/ritonavir (96.6%) and hydroxychloroquine (94.9%). 72.5% of patients had at least one interaction. The main therapeutic groups involved were: 15.7% selective calcium channel blockers, 11.2% topical nasal corticosteroids, 10.5% angiotensin II receptor blockers and 8.8% HMG-COA reductase inhibitors. 185 PR were made. The rate of acceptance was 70.8%: 35.2% change dose, 24.1% change treatment and 11.5% drug suspension.

Conclusion and relevance Pharmacist participation in the multidisciplinary COVID team was relevant for the detection of multiple interactions, helping doctors in decision making about drugs not commonly used in an overwhelmed healthcare situation.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. https://www.drugs.com/
2. https://www.druginteractions.org/

Conflict of interest No conflict of interest

4CPS-261 USE OF INTRAVENOUS IMMUNOGLOBULIN: BY THE BOOK?

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Background and importance Intravenous immunoglobulin (IVIG) is a blood product used for replacement therapy and immunomodulation in various conditions. Its use is usually restricted to situations with clinical benefit and established evidence, due to the drug's production method and high economic value. Recently, the Portuguese National Pharmacy and Therapeutics Committee (NPTC) released guidance for a more evidence based IVIG use approach.[1]

Aim and objectives To characterise the IVIG prescription profile in our institution; to assess if IVIG is prescribed and used in accordance with guidance No 8, May 2020, from NPTC and the National Medicines Formulary (NMF); and to evaluate the impact of IVIG consumption on the hospital's financial budget.

Material and methods All IVIG prescriptions from January 2018 to May 2020 were analysed. Indications, doses, infusion rates (IR) and adverse reactions (AR) were registered in an Excel spreadsheet. The indications were classified as either on or off-label, regarding their inclusion in the aforementioned guidance and as per the NMF. The economic impact was calculated from the average price, using SGICM-GLINTT pharmacy software.

Results The study included 131 prescriptions, of which 92.4% conformed to the NMF: 60.3% were replacement therapy,