(cSSSI), and community acquired pneumonia (CAP). However, the most specific aspect of the drug is that it is a beta-lactam with activity against methicillin resistant *Staphylococcus aureus* (MRSA). These characteristics mean that a large part of its use in clinical practice is in off-label indications.

Aim and objectives To determine the use of ceftaroline in the clinical practice of a third level hospital, and its effectiveness and safety.

Material and methods An observational retrospective study was conducted that included all patients treated with ceftaroline in the hospital from May 2016 to September 2020. Variables studied were: age, sex, indication, dose, microorganism, clinical and microbiological cure, and adverse effects.

Results 57 patients received treatment with ceftaroline, 75.4% men, with a median age of 69 years (28–89). In 11/57 patients it was used as empirical treatment (for suspected multiresistant germ) and in 46/57 as directed treatment, for the following indications: 13 bacteraemia, 14 endocarditis (with bacteraemia), 15 pneumonia (11 with bacteraemia, 1 with CNS infection and 2 with cSSSI), 2 cSSSI and 2 CNS infection. Infections were caused by MRSA in 23/46 patients, 15/46 by methicillin resistant coagulase negative *Staphylococcus*, 5/46 methicillin sensitive *Staphylococcus aureus* (MSAS), 2/46 *Streptococcus pneumoniae* and in 1 patient due to MSAS and *Streptococcus pneumoniae*. Methicillin resistant microorganisms caused the infections in 38/46 patients. The median duration of treatment was 7 days (1–42). Posology: 600 mg/8 hours was used in bacteraemia, endocarditis and in CNS infection, and 600 mg/12 hours in cSSSI. The regimen used in pneumonia was 600 mg/12 hours in 6/15 patients and 600 mg/8 hours in 9/15 patients (8 of whom had bacteraemia and one had concomitant CNS infection). The dosage used in the empirical treatment was 600 mg/12 hours in eight patients and 600 mg/8 hours in three. In six patients it was adjusted for renal function. 78.7% of the patients presented with clinical resolution (82.9% microbiological). Thrombopenia was detected in two patients, probably associated with treatment with the drug.

Conclusion and relevance Our results suggested that ceftaroline was effective in severe cases of methicillin resistant gram positive infections. In most cases, ceftaroline was used for off-label indications. In these cases, higher dosages are being recommended, which are usually prolonged in time, so it is advisable to evaluate the profile of adverse effects.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-256 HEPATITIS C RETREATMENT OF A PATIENT WHO FAILED MULTIPLE TREATMENTS INCLUDING PROTEASE INHIBITOR AND NON-STRUCTURAL PROTEIN 5A INHIBITORS: A CASE REPORT

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Background and importance It is well documented that direct acting antiviral (DAA) combinations in the treatment of hepatitis C virus (HCV) achieve high rates of sustained virologic response. However, studies on retreatment options for patients who have failed several DAA treatment regimens that include non-structural protein 5A (NS5A) inhibitors remain scarce.

Aim and objectives To assess the efficacy of glecaprevir/pibrentasvir plus sofosbuvir and ribavirin for 12 weeks in genotype 1b patient with compensated cirrhosis who had virologic failure to multiple treatments including regimens containing NS5A inhibitors.

Material and methods A 50-year-old man failed multiple hepatitis C treatments, including peginterferon plus ribavirin (2003) for 9 months, sofosbuvir/ledipasvir plus ribavirin (2014) for 24 weeks, sofosbuvir/simeprevir plus ribavirin (2015) for 24 weeks and sofosbuvir/velpatasvir plus ribavirin (2018) for 24 weeks. Adherence to these treatments was correct according to the dispensing records. Headache, fatigue, anaemia, nausea and pruritus were reported with oral treatments, but drug withdrawal was not required. However, peginterferon was stopped due to anxiety and depression.

There are no specific algorithms to guide retreatment decisions. These must be guided by the drugs administered in previous treatment courses or, if resistance testing is performed, by probabilities of response according to the resistance profile and the treating team's experience. Resistance testing showed resistance to NS5A inhibitors: daclatasvir, elvasvir, ledipasvir, ombitasvir and velpatasvir, but not to pibrentasvir. The multidisciplinary team decided on a new treatment with glecaprevir/pibrentasvir plus sofosbuvir and ribavirin for 12 weeks and it was started in November 2019. Prior to treatment, drug interactions were checked. An undetectable HCV RNA level 12 weeks after completion of therapy (SVR12) defined treatment success.

Results Two potential drug interactions were detected: (1) gemfibrozil was discontinued because of the increased risk of gastrointestinal side effects; (2) due to the potential increase in carvedilol concentrations, close monitoring of heart rate and blood pressure was recommended. The patient achieved SVR12 with the fifth hepatitis C treatment with glecaprevir/pibrentasvir plus sofosbuvir and ribavirin for 12 weeks. The treatment was well tolerated, and adherence was correct.

Conclusion and relevance In this particularly difficult to cure cirrhotic patient previously exposed to NS5A inhibitors, the combination of glecaprevir/pibrentasvir plus sofosbuvir and ribavirin administered for 12 weeks achieved SVR12.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-257 RELEVANCE OF RITONAVIR INTERACTIONS IN HIV TREATMENTS THAT INVOLVE TREATMENT MODIFICATION

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Background and importance The protease inhibitor (PI)/enhancer combination, more than 20 years after its appearance, continues to be the antiretroviral therapy (ART) of choice in certain circumstances due to its high genetic barrier. Ritonavir (RTV) acts as an enhancer and has a higher potential for drug interactions.

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

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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