



Abstract 4CPS-108 Figure 1 Evolution of biomarkers from day 0 (D +0) to day 10 (D+10) after initiation of baricitinib treatment

The REDCap database was used for data collection and the G-STAT-2.0.1 for statistical analysis (paired t-test/Holm–Bonferroni correction).

Results A total of 31 patients were included: 6 women and 25 men. Median age (IQR) was 64 (55;75) years.

Main comorbidities were dyslipidaemia (39%), hypertension (35%), pulmonary disease (29%), diabetes (16%) and cardiopathy (16%). During admission, 15 (48%) received corticosteroids and 18 (58%) remdesivir, 7 (23%) needed high-flow oxygen, 5 (16%) required intensive care unit (ICU) admission and 2 (6%) died.

Baseline biomarkers, as median (IQR), were: CRP 8.2 (5;11) mg/dL, ferritin 402 (176;794) ng/mL, LDH 280 (237;340) U/L, lymphocytes 0.6 (0.4;0.9) 10⁹/L and D-dimer 500 (300;700) ng/mL.

The change in the biomarkers is shown in Figure 1. There was a decrease in CRP which was statistically significant from D+5 ($p=0.0144$) onwards and an increase in lymphocyte count significant from D+2 ($p=0.0148$) onwards. LDH, ferritin and D-dimer did not significantly improve. No patient had thromboembolic complications or other adverse reactions associated with treatment.

Conclusion and relevance Patients with severe SARS-CoV-2 pneumonia treated with baricitinib showed a significant increase in lymphocyte counts as well as a significant decrease in CRP shortly after baricitinib treatment. This fact, together with the low mortality, and good tolerance supports the use of baricitinib for patients with COVID-19 pneumonia.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-109

DESCRIPTIVE ANALYSIS OF PATIENTS CO-INFECTED WITH HIV AND HEPATITIS C VIRUS (HCV) TREATED WITH ANTIVIRALS FOR HCV AND ITS EFFICACY IN A PRISON FROM 2002 TO 2020

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Background and importance The prevalence of patients with hepatitis C virus (HCV) viral load in national prisons was 3% in 2018, 2.5 times lower than the one obtained 10 years ago. In fact, since patients started to be treated with interferon-free-based treatments in 2015, a drastic decrease in HCV viral load prevalence was observed.

Aim and objectives To evaluate the response to treatment in inmates of a prison presenting HIV-HCV co-infection and that following treatment with HCV antiviral drugs.

Material and methods A descriptive observational study was conducted. The electronic clinical history and prescriptions of patients receiving HCV antivirals between 1 November 2002 and 31 December 2020 were reviewed. Moreover, the following data were collected: age, gender, HIV serology, discontinuation or not of the treatment and sustained viral response (SVR) at 12–24 weeks after treatment end. This response was defined as undetectable HCV-RNA 12–24 weeks after treatment compliance. The role of the pharmacist was adherence and adverse effects monitoring and to undertake an educational work.

Results During the study 251 patients were treated, of which 33.4% were co-infected with HIV-HCV. Their average age was 43 years and 86.9% were males.

From 2002 to 2014, 33% of the 127 patients treated with interferon-based regimens were co-infected, and 50% of them obtained SVR, in contrast with mono-infected individuals, of whom 70.5% obtained SVR. Moreover, 28.5% co-infected patients did not respond to the treatment, 9.5% discontinued, 7.1% relapsed, 2.3% abandoned treatment because of intolerance and 2.3% were moved to another prison.

However, between 2015 and 2020, from the 34.4% co-infected patients (from a total of 125) treated with interferon-free regimens (DDA), 95.2% obtained a SVR, meanwhile 92.5% of the mono-infected individuals obtained SVR. One of the co-infected patients relapsed and another obtained a response of breakthrough.

Conclusion and relevance The efficacy of antivirals in co-infected patients has increased due to the implementation of improved treatment guidelines, reaching more than 95% SVR with DDA, which approximates to the rates in the rest of the population. Treatment access for all patients and high treatment efficacy has led to 0% prevalence in this prison.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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Conflict of interest No conflict of interest

4CPS-110

INITIAL EXPERIENCE OF THE USE OF CEFIDEROCOL FOR MULTIDRUG RESISTANT INFECTIONS IN A UNIVERSITY HOSPITAL

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Background and importance Recently new antibiotics were introduced in our hospital formulary for the treatment of serious infections caused by multidrug-resistant (MDR) organisms (CRE, ESBL, MDR-PA, CRA-AB). Cefiderocol, thanks to its

structure and mechanism of action, may play a unique role in patients who have limited or no alternative treatment options.

Aim and objectives The aim of this study was to describe the first cases of prescriptions of cefiderocol used in the 5 months following its availability in Italy, and the hospital pharmacist interventions in assisting clinicians from microbiology select a safe and appropriate antibiotic treatment.

Material and methods A standardised prescription form was sent to the infectious disease specialist to collect patients' characteristics, infection type, reasons for cefiderocol use, doses and duration of treatment (concomitant treatments, adverse events and outcome). A susceptibility testing kit (30 µg cefiderocol disc) was provided to the microbiology specialist in order to reserve this new antibiotic for patients with cefiderocol-susceptible isolates. A retrospective study was performed to collect the data of adult patients who received cefiderocol.

Results A total of 30 patients with mean age of 56 (23–90) years received cefiderocol (9 females, 21 males). Of these, 19 patients were treated in intensive care units, with the most common regimen of 2 g three times/day tid (n=6), while 3 patients with acute renal failure required a regimen of 750 mg twice daily. The main sites of infection were respiratory tract (n=16), urinary tract (n=3), intra-abdominal (n=4) and bloodstream (n=5). 5 patients had multisite infections.

The duration of therapy was in the range 6–16 days. The most common pathogens were *Acinetobacter baumannii* (n=13), *Klebsiella pneumoniae* (n= 8), *Pseudomonas aeruginosa* (n=10) and *Enterobacter* spp (n=5). 10 patients had superinfections. The most concomitant therapy was colistin (n=9). No severe adverse events were reported. 7 patients with septic shock died.

Conclusion and relevance Our study describes real-life experience of the use of cefiderocol as a salvage option in critical patients, providing additional data on its benefit, safety and limits in both empirical and targeted treatment of multidrug-resistant Gram-negative bacteria (MDR-GNB) infections, and it confirms the need for a multidisciplinary team.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-111 RUXOLITINIB FOR REFRACTORY GRAFT-VERSUS-HOST DISEASE IN PAEDIATRIC PATIENTS

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Background and importance Ruxolitinib has shown efficacy in the treatment of steroid-refractory graft-versus-host disease (GVHD) after haematopoietic stem cell transplantation (HSCT) in adults, but the evidence in children is still scarce.

Aim and objectives To evaluate the effectiveness and safety of ruxolitinib in paediatric patients with steroid-refractory GVHD.

Material and methods A retrospective observational study including all patients treated with ruxolitinib in our paediatric hospital (January 2017–September 2021) was carried out.

Variables collected from electronic medical records and the pharmacy dispensing program were: age, sex, weight, previous treatments for GVHD, length of treatment, dose, treatment response, reasons for discontinuation and adverse events (AEs) related to ruxolitinib. Effectiveness was assessed by the clinical resolution of GVHD.

Results 31 patients (64.5% male, n=20; median age 13.5 (1–19) years; median weight 36.9 (10–85) kg) received treatment during the period of the study in 34 episodes. In 15 episodes (44.1%) the treatment was for acute GVHD (aGVHD) and in 19 (55.9%) for chronic (cGVHD).

The median number of previous lines was 2 (1–4); all patients had previously received steroids. The median length of treatment was 7.4 (1.4–52.3) months. The median initial dose of ruxolitinib was 11.8% 2.5 mg/12 hours (n=4, weight <15 kg); 58.8% 5 mg/12 hours (n=20, weight 15–60 kg) and 29.4% 10 mg/12 hours (n=10, weight 47–85 kg).

4 episodes of cGVHD were not included in the effectiveness analysis: follow-up was continued in another centre (n=2) and 2 patients died while on treatment from other causes. Complete response rate in aGVHD and cGVHD was 86.7% (n=13) and 60.0% (n=9), respectively. 2 (13.3%) patients with cGVHD showed partial response and treatment was switched to other lines. 2 (13.3%) patients with aGVHD and 1 (6.7%) with cGVHD showed treatment failure. 3 (20.0%) patients were receiving ruxolitinib at the time of the analysis for cGVHD showing stable response (n=2) and improvement (n=1).

AEs related to ruxolitinib were: increased serum alanine aminotransferase and aspartate aminotransferase 8.8% (n=3), herpes zoster infection 5.9% (n=2), hypertension 2.9% (n=1) and anaemia 2.9% (n=1). 1 patient required dose reduction due to grade 4 hepatic toxicity, that was resolved.

Conclusion and relevance In our study, ruxolitinib has shown effectiveness for refractory GVHD in most of the patients. The safety profile in our population is consistent with the literature. Further studies in paediatric patients are warranted.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-112 VORICONAZOLE THERAPEUTIC DRUG MONITORING: RELATIONSHIP WITH LIVER TOXICITY

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Background and importance Serious fungal infections are a subject of concern in hospital medicine. Voriconazole is one of the most used antifungal agents to treat these situations. Voriconazole therapeutic drug monitoring (TDM) may help to avoid treatment failures or adverse events.

Aim and objectives This study aimed to evaluate the impact of voriconazole TDM in dose or drug changes and seek a relationship between voriconazole plasma levels and liver toxicity.

Material and methods TDM was performed in patients treated with voriconazole. Plasma levels were measured once a steady state was achieved and immediately before administering the drug (though drug concentration).

Voriconazole concentrations were analysed by a validated reverse phase-high performance liquid chromatography-ultra-violet (RP-HPLC-UV) method.

Liver enzymes and cholestasis markers concentrations (aspartate aminotransferase (AST), alanine aminotransferase