4CPS-250 EXPERIENCE OF TECOVIRIMAT AND CIDOFOVIR USE IN A PATIENT WITH MONKEYPOX: A CASE REPORT

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Background and Importance Current treatment for Monkeypox's disease (MPXV) is mainly symptomatic. However, in immunocompromised patients, hospitalisation and treatment with antiviral drugs may be necessary. With the recent outbreak of MPXV, new strategies have been proposed.
Aim and Objectives The aim of the study was to describe our clinical experience with tecovirimat and cidofovir in the treatment of MPXV in a patient whose CD4+ lymphocyte level is less than 50 cells/ml.
Material and Methods The effectiveness of tecovirimat-cidofovir was assessed by the evolution of the rash from macule to crusts that dry up and fall off.
Results The patient was a 35-year-old man diagnosed with MPXV who presented skin lesions in the perineal area, extremities, face, trunk and back and severe proctitis. At admission, the patient was diagnosed with HIV (severely immunosuppressed with CD4+ lymphocyte levels of <40 cells/ml), so he was started on antiretroviral treatment (BIC/TAF/TDF). Sexually transmitted infection screening detected Chlamydia trachomatis infection, which was treated with doxycycline. In the context of MPXV proctitis, it was decided to apply for tecovirimat, the antiviral treatment of choice. The dosage for tecovirimat is weight-based, 600 mg was administered every 12 hours for 14 days (30/08/22–12/09/22). Regarding effectiveness, no new lesions were observed and those already present were regressing, except in the perianal area, where the lesions continued to progress. Therefore, it was decided to administer intravenous cidofovir 5 mg/kg twice weekly (09/09/22, 16/09/22). To avoid toxicity, oral probenecid was administered concomitantly: 2 g 3 hours before and 1 g 2 and 8 hours after completing the perfusion, in addition to 0.9% saline solution 1000 ml 1 h before. After the treatment, there was a progression of lesions in the right inguinal region, palpating left inguinal adenopathy and intense involvement of the testicle, groin and perineal area.
Conclusion and Relevance In contrast to previous cases of patients whose CD4+ lymphocyte levels were above 500 cells/ml, the treatment with tecovirimat and cidofovir in this patient did not achieve a satisfactory response due to the continuous appearance of new lesions. The severe immunosuppression could probably explain the aggressive development of the disease.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-252 OPTIMISATION OF ERTAPENEM POSOLOGY IN A CRITICALLY ILL PATIENT BY THERAPEUTIC DRUG MONITORING: A CASE REPORT

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Background and Importance Therapeutic drug monitoring (TDM) of ertapenem is recommended in critically ill patients (CIP) to address their variability in exposure because of its time-dependent, highly protein bound and hydrophilic characteristics.
Aim and Objectives To describe efficacy and safety in a CIP after optimising the posology of ertapenem.
Material and Methods A case report in a CIP treated with ertapenem is described. Data were collected from electronic medical records and ertapenem concentrations were measured by high-performance liquid chromatography.
Results A 35-year-old men with a body mass index (BMI) of 32.6kg/m^2 with a surgical wound culture positive for AmpC-producing Klebsiella pneumoniae was started ertapenem 1g q24h (minimum inhibitory concentration (MIC) of 0.38 for Klebsiella). Three days after initiation, ertapenem plasma concentrations were determined. In that moment, his creatinine value was 0.21mg/dL with a glomerular filtration rate (GFR) of 700ml/min by the Cockroft-Gault formula, and his albumin value was 2.9mg/dL. Ertapenem serum concentrations were 1.65mcg/ml (total drug); 0.16mcg/ml of unbound fraction (fu), considering a protein binding of 90%. Fu should be above the MIC, ideally 4 times the MIC (≥1,52 mcg/ml), and fever persisted, so in agreement with the medical team the dosage was optimise to 0.5g q12h considering its time-dependent pharmacokinetics. Two days after posology optimisation, the patient became afebrile, and 6 days after being with the new regimen, blood concentrations were remeasured resulting in 6.97mcg/mL, and a fu of 0.69 mcg/mL, which is 1.8 times the MIC. Despite not having reached fu of 4 times the MIC, given that the patient remained afebrile after dose optimisation and as a precaution for not reaching toxic concentrations due to an increase in the total daily dose, the 0.5g q12h dosage was maintained for another week, when the infection was solved and the antibiotic discontinued.

No adverse effects related to ertapenem were reported.

Conclusion and Relevance The optimisation of ertapenem posology, changing the frequency without increasing the total daily dose, allowed increasing ertapenem concentrations and improved the clinical outcome of a CIP with augmented renal clearance, low albumin and high BMI, characteristics that may lower ertapenem concentrations, without decreasing the safety of the drug.

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4CPS-256 ENHANCING THE SAFETY OF INJECTABLE CYTOTOXIC CHEMOTHERAPY AT A TERTIARY CARE HOSPITAL: A RETROSPECTIVE ANALYSIS OF PHARMACISTS' INTERVENTIONS IN CHEMOTHERAPY PREPARATION SERVICES

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Background and Importance Cytotoxic chemotherapeutic agents are classified as high alert medications according health accreditation standards. Detection and resolving of drug related problems (DRP) in chemotherapy prescriptions was associated with overall positive clinical and economic impact in international studies.