Background and importance The introduction of the unit dose (DU) as a drug dispensing system produces a multiplicity of advantages, ranging from prescribing to administering therapies.

Aim and objectives The purpose of this study was to evaluate, through the computerised prescription, the prescriptive appropriateness of antibiotic therapy and the economic impact of a targeted therapy after an antibiogram compared with empirical therapy.

Material and methods The analysis was carried out by extrapolating, from the prescription software and administration in use, the antibiotic prescriptions subjected to a single request motivated (SRM) from 1 January 2019 to 31 December 2019. With the Modulab software, a clinical information management system, prescriptions with antibiograms were verified and divided into appropriate and inappropriate. Prescriptions initiated as empirical therapies were defined as appropriate if the results of the antibiogram confirmed the therapy already started or if the prescriptions changed following the antibiogram. Therapies were considered inappropriate if the antibiogram results were different from the antibiotics used as empirical therapy (resistant/intermediate) or were not tested.

Prescriptions were grouped for empirically prescribed antibiotics and for sensitive antibiotics (as a result of the antibiogram), considering a median duration of therapy. The maximum daily dosage from the technical data sheet was considered for the calculation of the cost of the therapy. Only inappropriate prescriptions were considered in the pharmacoeconomic evaluation.

Results During the study period, total prescriptions of antibiotics with SRM were 2067 of which 1322 (64%) had no antibiogram and 745 (36%) had an antibiogram. The latter were divided into appropriate (63%) and inappropriate (37%). The pharmacoeconomic analysis showed a cost of non-appropriate therapy of 53 950€, with a possible saving of around 49 274€ if the same had been transferred to the sensitive antibiotic resulting from the antibiogram.

Conclusion and relevance We hope, in the future, to directly consult the antibiogram from the computerised prescription to highlight extemporaneously the limitations of long term empirical therapies both for prescriptive appropriateness and for cost savings.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest
generated more oscillation in plasma levels. For qualitative variables, absolute and relative frequencies were obtained, and for quantitative variables, the median (IQR) were used. For hypothesis contrast, Fisher’s exact test or the Mann–Whitney U test was performed according to the type of variable.

Results 45 patients were included, 23 received voriconazole and 22 isavuconazole. Median age was 62 years (56–67) for those receiving voriconazole versus 63 years (54–68) for those receiving isavuconazole (p=0.91). 34.8% (n=8) of patients treated with voriconazole achieved concentrations of tacrolimus >20 ng/mL (toxic concentration) within 10 days from the start of the combination compared with 14.3% (n=3) of patients treated with isavuconazole (p=0.1685). The median standard deviation of plasma concentrations was 3.76 ng/mL (2.89–4.5) with voriconazole versus 3.17 ng/mL (1.4–5) with isavuconazole (p=0.272). The proportion of patients who temporarily discontinued tacrolimus treatment due to high level concentrations and associated toxicity was 18.2% (n=4) with isavuconazole versus 34.8% (n=8) with voriconazole (p=0.318).

Regarding tolerance to treatment, 28.57% of patients treated with isavuconazole had side effects associated with azole, compared with 82.6% of those treated with voriconazole (p<0.005). Treatment had to be suspended due to these side effects in 47.82% (n=11) of patients treated with voriconazole and in no patient treated with isavuconazole (p<0.005).

Conclusion and relevance Treatment with isavuconazole resulted in fewer tacrolimus poisonings, although the difference was not statistically significant. In addition, treatment with isavuconazole was found to be safer, had fewer side effects and did not require antifungal discontinuation.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

Abstracts

5PSQ-144 PHARMACOTHERAPY OPTIMISATION IN PATIENTS OVER 50 YEARS OF AGE WITH HIV INFECTION: FIRST STEPS

Background and importance HIV infection causes premature aging. As a result, there is an increase in comorbidities and therapeutic burden in these patients earlier than in the rest of the population.

Aim and objectives To evaluate the prevalence of pluripathology, polypharmacy and pharmacotherapeutic complexity in HIV patients aged over 50 years and to determine the need for optimisation of non-antiretroviral therapy.

Material and methods A cross sectional observational study was conducted (November 2019 – September 2020) in HIV patients aged over 50 years. Electronic prescription programme and clinical history were used to collect the following data: sex, age, comorbidities, antiretroviral therapy (ART) and concomitant medication. Pluripathology was defined as three or more comorbidities, and polypharmacy as six or more prescribed drugs. Pharmacotherapeutic complexity was determined by calculating: anticholinergic burden and the drugs involved, using the anticholinergic burden calculator programme; and relevant interactions between non-ART/ART medication (potential interaction/not coadminister), using the University of Liverpool and Lexicomp databases. Pharmaceutical interventions (PI) were performed based on criteria for optimisation of non-antiretroviral therapy from a guide for pharmacological deprescription in HIV patients, published by the Spanish AIDS Study Group (GESIDA).

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