Results 71 patients (69% men) with mean age of 55.1 (50–65) years were evaluated. 34 patients (47.9%) had pluripathology and 39 (54.9%) had polypharmacy, with a mean of 9.3 (6–26) drugs/patient. 37 drugs with anticholinergic burden were identified in 20 (28.2%) patients, and 10 of them (50%) had more than one anticholinergic burden drug. The most common drugs involved were chlorpromazine (15.2%), clorazepate (12.1%), paroxetine (12.1%), alprazolam (12.1%) and trazodone (9.1%).

A total of 67 interactions (16 non-ART medication/51 ART medication) were detected in 34 patients (47.9%) with a mean of 2 (1–6) interactions/patient. 49 (73.1%) were considered potential interactions and 18 (26.9%) were not coadministered. 73 PI were performed in 40 patients (56.3%) with a mean of 1.8 (1–5) PI/patient. The main drug classes that were candidates for deprescription were: anxiolytics/sedatives (20.5%), antiulcers (13.7%), antipsychotics (9.6%), antidepressants (8.2%) and antidiabetics (8.2%).

Conclusion and relevance About half of the patients had pluripathology and polypharmacy. Pharmacotherapeutic complexity was mainly due to the number of interactions. Considering the high number of drugs identified as candidates for optimisation, more coordinated intervention would be needed to improve pharmacotherapeutic prescriptions in the HIV population.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-145 ANALYSIS OF THERAPEUTIC REGIMENS CONTAINING TENOFOVIR DISOPROXIL AND TENOFOVIR ALAFENAMIDE IN THE 4 YEAR PERIOD 2016–2019 IN A RESEARCH, HOSPITALISATION AND HEALTHCARE INSTITUTE

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Background and importance Tenofovir disoproxil (TDF) is a nucleotide reverse transcriptase inhibitor (NRTTI) used for the treatment of HIV-1 infections in combination with other antiretrovirals. In 2016, the main TDF therapeutic regimens in our centre were: emtricitabine (FTC)/TDF/rilpivirine (RVP), FTC/TDF/elvitegravir (EVG)+cobicistat (COBI), FTC/TDF/efavirenz (EFV) and FTC/TDF in combination with other drugs. Starting from the same year, these formulations were marketed (except for FTC/TDF/EFV), containing tenofovir alafenamide (TAF) instead of TDF. TAF is a chemical precursor of TDF which has demonstrated high antiviral efficacy comparable with TDF but at a lower dosage and with fewer side effects (kidney and bone diseases). Furthermore, in 2018 and 2019, additional formulations containing the TAF were produced even though there was no corresponding formulation for TDF.

Aim and objectives The purpose of the study was to analyse the variation in therapeutic regimens from the marketing of TAF formulations in the 2016–2019 4 year period.

Material and methods Patient dispensations were analysed, extracting data from the information system. The focus was on prescriptive trends with TDF based TAF based formulations.

Results At the beginning of 2016, 4526 out of 6405 (70.66%) patients were treated with TDF, as follows: 1127 with FCT/TDF/EFV (24.90%), 1207 with FTC/TDF/RVP (26.68%), 457 with FTC/TDF/EVG+COBI (10.09%) and 1735 with FTC/TDF in combination with other antiretrovirals (38.33%). In 2017, TDF therapies were 3599 (55.69%) and TAF therapies 1175 (18.18%) of 6463. In 2018, TDF based regimens were 2542 (38.99%) and TAF based regimens 2268 (34.79%) of 6518. At the end of 2019, 2184 out of 6571 patients (33.23%) were treated with TDF and those with TAF were 2679 (40.77%). In comparison with the starting point, in 2019 TDF based therapies included: 648 with FCT/TDF/EFV (29.67%), 767 with FTC/TDF/RVP (35.12%), 0 with FTC/TDF/EVG+COBI and 769 with FTC/TDF in combination with other antiretrovirals (35.21%). TAF based therapies included: 708 with FTC/TAF/RVP (26.43%), 136 with FTC/TAF/EVG+COBI (5.08%), 592 with FTC/TAF/bictegravir (BIC) (22, 10%), 690 with FTC/TAF/DRV+COBI (25.75%) and 553 with FTC/TAF in combination with other drugs (20.64%).

Conclusion and relevance Analysis of prescriptions in 2016–2019 showed a decrease in TDF based therapies in favour of TAF based prescriptive regimens. Although TDF formulations remained a valid therapeutic opportunity, TAF formulations, with minor kidney and bone side effects, are an even more relevant alternative for physicians.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-146 'REAL LIFE' EFFECTIVENESS AND SAFETY ASSESSMENT OF FOSCARNET

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Background and importance Cytomegalovirus (CMV) infection is an important cause of mortality, especially in haematological patients. Foscarnet has been used to treat ganciclovir resistant CMV infections. Only a few studies assessing safety and effectiveness of foscarnet have been reported so far.

Aim and objectives To evaluate the effectiveness and safety of foscarnet in the treatment of CMV infection in a third level hospital.

Material and methods A retrospective observational study was conducted in patients who received foscarnet as treatment for CMV viraemia from January 2018 to April 2020. Variables collected were: age, sex, pathology, time of treatment, pattern, basal (start of foscarnet) and final (when foscarnet was suspended) viral load (VL), basal and nadir glomerular filtrate (GF) and metabolic toxicity (basal and nadir serum electrolytes). The results were obtained from the electronic history and prescription software (Farmatools).

Results 39 patients, 22 men, were included, and mean age was 55.8±14.9 years (26–82). 71.8% were haematological patients, of whom 41.0% had received bone marrow transplantation. Mean time in treatment was 11±6.6 days (1–27). The dosage pattern was 90 mg/kg/12 hours in 69.2%. 23.0% started treatment as prophylaxis with undetectable VL. In the

remaining patients, median basal VL was 1135 IU/mL (334–65400), final VL was undetectable in 46.1% and in those who did not negatively affect the median final VL was 215 IU/mL (34.5–6690). Mean reduction in VL was $90.4 \pm 17.9\%$ (18–100). There was a 64.1% reduction in GF (mean reduction of $25.6 \pm 21.2\%$ and $36.7 \pm 22.0\%$ over >65 years).

Metabolic toxicity, according to the CTCAE classification (V4.0), hypokalaemia (grade 1 in 10.2% patients, grades 2 and 3 in 33.3%, grade 4 in 5.1% and the rest were not altered) and hypophosphataemia (grade 1 in 10.2%, grades 2 and 3 in 33.3% and grade 4 in 2.5%) were studied. In addition, hypomagnesaemia (grade 1 in 12.8%) and hypocalcaemia (grade 2 in 28.2% and grade 3 in 33.3%) were also observed. 41.0% of patients died during or immediately after treatment with foscarnet. Their average age was 61 ± 14.4 (27–82) years and 81.2% presented haematological pathologies.

Conclusion and relevance Despite the high mortality observed, foscarnet effectively reduced viraemia due to CMV infection, with a high rate of viral negativisation. Further studies are needed to extend the toxicity data and improve the quality of care.

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5PSQ-147 IMMUNOGLOBULIN SHORTAGE: PRACTICE MODIFICATIONS AND CLINICAL OUTCOMES IN A REFERENCE CENTRE

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Background and importance An enlargement of the number of indications for intravenous immunoglobulins (IVIg) in recent years has resulted in an increase in the consumption of these products. A lack of raw material has led to shortages of IVIg.¹

Aim and objectives The objective of this work was to evaluate the impact of this situation on patient management in one French university centre, considering practice modifications and clinical outcomes.

Material and methods All patients treated with IVIg for chronic inflammatory demyelinating polyneuropathy, multifocal motor neuropathy, Guillain-Barré syndrome and myasthenia gravis were included, from October 2017 to October 2018. The analysis of practices was carried out between 2016 and 2019.

Results Of 155 patients, 72% had a modification of IVIg treatment, including 51% who had a delay in treatment, 28% a decrease in dose and 21% experienced an interruption in IVIg treatment. About 29% of patients for whom IVIg treatment was stopped were switched to other treatments, mainly plasma exchange. 58 patients presented one deterioration of their clinical score after prescription changes, including 31 patients who had a moderate or a clinically significant deterioration. For 17 patients, clinical deterioration was directly related to the IVIg shortage.

Concerning practice modifications, we noted a substantial but not significant decrease in the median dose for myasthenia gravis and a significant increase in the delay between treatments for chronic inflammatory demyelinating polyneuropathy and multifocal motor neuropathy ($p=0.011$ and $p=0.018$).

Conclusion and relevance Our study showed a rather important number of IVIg prescription changes related to IVIg shortages during the study period. These changes had a negative impact on the clinical status of some patients. The interest of this study is essential because of the fragility of the post coronavirus disease period related to a lack of plasma from which blood products derive.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Sewell WAC, Kerr J, Behr-Gross M-E, et al. European consensus proposal for immunoglobulin therapies. *Eur J Immunol* 2014;**44**:2207–14.

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5PSQ-148 IMPROVING SAFETY IN THE VACCINE CIRCUIT

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Background and importance In our healthcare district, vaccine electronic prescriptions are not usual. Nurses use immunisation schedules as a prescription and there is no pharmacist validation. The electronic prescription and the pharmacist validation could help us to detect and avoid potential medication errors, improving patient safety.

Aim and objectives To describe the vaccine prescription, validation and dispensation circuit; and to analyse the discrepancies detected after implementation of this procedure.

Material and methods In January 2018, the pharmacy department, in collaboration with the preventive medicine service, developed a procedure for the safe use of vaccines: medical prescription, pharmaceutical validation, dispensing and administration. Vaccine prescription protocols were agreed with the preventive medicine physician and mandatory electronic prescription was established. Since then, the preventive medicine physician prescribes every vaccine through the electronic prescription programme (EPP). The pharmacist validates every prescription: indication, dose and immunisation schedule. If the pharmacist detects any discrepancy, the preventive medicine physician is contacted to resolve it before vaccines are dispensed. Lastly, the nurse administers the vaccine and registers the batch and expiration date in the electronic medical record, guaranteeing drug traceability.

Results Between July 2019 and September 2020, 1084 vaccines were prescribed and 27 discrepancies were found. 4 of them (14.82%) were justified because the patients needed an accelerated vaccine regimen, but 23 of them (85.18%) were not justified: 3 discrepancies (13.04%) were prescription errors (the wrong vaccine was prescribed), 7 (30.43%) were dosage errors, 8 (34.78%) were errors in the immunisation schedule, in 2 cases (8.66%) no more doses were needed and 3 (13.04%) had a registration error of the last vaccine administration in the electronic medical record. In all cases, a potential medication error was avoided.