

remaining patients, median basal VL was 1135 IU/mL (3.34–65400), 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.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

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.

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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.

Conclusion and relevance Electronic prescription and pharmacist validation allowed us to detect potential medication errors, promoting patient safety in vaccine administration. This circuit is applicable to all hospitals with an EPP and should allow them to detect and prevent potential medication errors.

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5PSQ-149 DRUG INTERACTION IN BREAST CANCER TRIPLE NEGATIVE THERAPY: DOCETAXEL AND FLUVOXAMINE. A CASE REPORT

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Background and importance To alert clinicians to the potential problems of combining docetaxel (and taxanes in general) with fluvoxamine.

Aim and objectives To report a live conditioning interaction between docetaxel and fluvoxamine in a breast cancer patient.

Material and methods A 60-year-old woman (60 kg, 164 cm) was diagnosed with triple negative right breast ductal carcinoma (TNM stage T1N0M0). The treatment plan consisted of four cycles of neoadjuvant chemotherapy with cyclophosphamide 600 mg/m² and epirubicin 95 mg/m² (EC) biweekly, four cycles of carboplatin AUC5 and docetaxel 75 mg/m² followed by pegfilgrastim 6 mg on day +2 and surgical intervention. After completion of the EC scheme, the patient showed haematological tolerance and clinical improvement. The patient completed the first dose of the carboplatin-docetaxel regimen with proper tolerance. However, before the second cycle, the patient experienced syncope, asthenia and hyporexia. A complete blood count (CBC) was performed at the second consult, showing that the patient was in range to receive chemotherapy. However, due to the syncopal episode and suspicion of neutropenia on that day, the oncologist decided to decrease the dose of docetaxel to 70 mg/m². On day +9, the patient presented to the emergency room with a recurring syncopal episode and neutropenia, and was admitted with septic shock. Blood cultures were obtained and were positive for *Pseudomonas aeruginosa*. Meropenem was started. Furthermore, it was discovered that the patient had started taking fluvoxamine as an antidepressant the same day she started the first cycle of docetaxel-carboplatin. The interaction between docetaxel and fluvoxamine was assimilated, and fluvoxamine was discontinued and exchanged for mirtazapine.

Results Fluvoxamine is an inhibitor of the CYP3A4 isoenzyme. Docetaxel is metabolised through CYP3A4, and the concomitant use may increase concentrations, leading to toxicity. Although the score was 4 (possible) for the drug interaction probability scale, if pharmacokinetic analysis had been performed, we could have proven that the AUC of docetaxel had reached toxic levels.

Conclusion and relevance Although SSRIs are often prescribed to combat depression, in breast cancer patients they can also be used to control hot flushes. It is mandatory to avoid using SSRIs that are metabolised through CYP3A4, such as fluvoxamine, fluoxetine, paroxetine, sertraline and venlafaxine

in the setting of docetaxel. Therefore, it would be best to recommend SSRIs such as mirtazapine, citalopram and escitalopram.

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5PSQ-150 DISSEMINATED INTRAVASCULAR COAGULATION AFTER PD-1 BLOCKADE WITH NIVOLUMAB IN ADVANCED MELANOMA: A CASE REPORT

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Background and importance Immune checkpoint inhibitors (ICIs) represent a milestone therapy in many types of cancer, such as melanoma. Nivolumab is a programmed death receptor-1 (PD-1) blocking antibody with antitumour activity in melanoma. Only a few studies have investigated the relationship between ICIs and disorders of the coagulation-fibrinolysis system.

Aim and objectives To report a case of disseminated intravascular coagulation (DIC) in a metastatic melanoma patient treated with nivolumab. A 50-year-old woman was diagnosed with melanoma stage IB and resected in 2008. In December 2019, she relapsed (pulmonary and intracardiac metastasis). Then, she underwent treatment with nivolumab 240 mg/14 days, 14 cycles (last cycle 26 June 2020), with greater tumour partial response. During the last nivolumab cycles she had asthenia and thrombocytopenia and nivolumab was stopped. She was treated with methylprednisolone, but low platelet count persisted and she had extensive haematomas. She was admitted to hospital on 27 July due to probable DIC as an immune related adverse event (IrAE).

Material and methods Laboratory tests on admission showed grade 3 thrombocytopenia ($36 \times 10^9/L$ platelet count) and disordered coagulation (35 mg/dL fibrinogen, 75 468 ng/mL D-dimer). International normalised ratio for prothrombin time and activated partial thromboplastin time were in the normal range. PCR for SARS coronavirus screening and blood tests for mycobacteria were both negative.

Results The patient was treated with fibrinogen. There was no evidence of tumoral progression or signs of infection. Furthermore, the patient had no history of other blood disorders, and there were no signs of trauma or sepsis. She was diagnosed with DIC related to nivolumab and she received gamma globulins, fresh frozen plasma and platelet transfusion with negative clinical evolution; so, she began treatment with infliximab and methylprednisolone pulse, without signs of bleeding, except for the persistence of haematomas and low levels of fibrinogen and platelets. The patient's condition deteriorated, and platelet count decreased despite therapy with fibrinogen, anticoagulants, transfusions of blood and antibiotic-antifungal therapy. Finally, the patient showed neurological damage related to cerebral haemorrhage due to the low platelet count and she died in hospital.

Conclusion and relevance Disseminated intravascular coagulation had the highest proportion of death outcomes among the top 10 most frequently reported ICI associated haematological IrAEs. For this reason, clinicians need to be careful, paying