

beginning of the study, population data (sex and age) and analytical data were collected at baseline and at 24 weeks: viral load (VL), CD4 lymphocytes and any adverse event (AE) produced by BIC/FTC/TAF.

**Results** During the study period, 95 patients were included: 25 naïve (76% men) with an average of 40 years and 70 patients who switched (66% men) with an average of 43 years.

#### Results for immunovirological efficacy were

- naïve group: median VL and CD4 at the beginning were 764 026 copies/mL and 402 cells/mL, respectively. After 24 weeks, 22 (88%) patients had undetectable VL (<50 copies/mL) and the remaining 12% failed due to poor adherence. Adherence was reinforced for them and in the next analysis they had undetectable VL. The median CD4 with undetectable VL was 736 cells/mL.
- switched group: median VL and CD4 lymphocytes at baseline were 120 413 copies/mL and 639 cells/mL, respectively. After 24 weeks, 65 (93%) patients had undetectable VL with median CD4 lymphocytes in these patients of 728 cells/mL.

In total, there were four patients (4.2%) who had insomnia during treatment with BIC/FTC/TAF. Also reported were: 3 (3.2%) patients with headache, 1 (1.1%) patient with osteoarticular pain, 1 (1.1%) patient with increased menstrual bleeding and 1 (1.1%) patient with gastrointestinal pain. None of these AE was a reason for treatment interruption.

**Conclusion and relevance** BIC/FTC/TAF was safe (mild AE with a low incidence rate) and effective (high percentages of undetectable VL and good results for CD4 lymphocytes).

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of interest** No conflict of interest

#### 4CPS-260 ANALYSIS OF DRUGS INTERACTIONS BETWEEN CORONAVIRUS (COVID-19) ANTIVIRAL TREATMENT AND CONCOMITANT MEDICATION

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**Background and importance** Drugs used for COVID-19 (lopinavir/ritonavir, hydroxychloroquine) have a large number of interactions. If any of these drugs are used, we should be cautious and monitor the clinical evolution of each patient closely. The hospital pharmacist plays an important role in the revision of treatment to ensure its safety and efficacy.

**Aim and objectives** To analyse potential drug interactions of treatment for COVID-19 and to evaluate physician acceptance of pharmacist recommendations.

**Material and methods** This was a prospective interventional study from March to May 2020. We included all patients who started antiviral treatment for COVID-19 with a positive PCR test and hospital admission. Data were collected from the electronic medical record (DIRAYA) and the prescription programme (PRISMA). The databases used for the detection of interactions were: Drugs.com and COVID-19 drug interactions.org (University of Liverpool).

**Collected data** were age, sex, concomitant medication, interaction classified according to severity (major/moderate),

mechanism of the interaction (MI) (pharmacokinetic/pharmacodynamic), drugs that prolong QT interval and pharmaceutical recommendation (PR).

Detection of an interaction was reported in the clinical course of the patient. In the case of a serious interaction or clinical risk situation, the prescribing doctor was notified directly. Descriptive statistics were used to analyse the results.

**Results** 178 patients (56.2% men) were analysed, with a median age of 63 (range 22–90) years. 267 interactions were detected (56.9% moderate/43.1% major). The MI involved was pharmacokinetic (63.9%)/pharmacodynamic (36.1%). 22.8% of the collected drugs could affect the QT interval.

**Antiviral therapy used** was lopinavir/ritonavir (96.6%) and hydroxychloroquine (94.9%). 72.5% of patients had at least one interaction. The main therapeutic groups involved were: 15.7% selective calcium channel blockers, 11.2% topical nasal corticosteroids, 10.5% angiotensin II receptor blockers and 8.8% HMG-COA reductase inhibitors. 185 PR were made. The rate of acceptance was 70.8%: 35.2% change dose, 24.1% change treatment and 11.5% drug suspension.

**Conclusion and relevance** Pharmacist participation in the multi-disciplinary COVID team was relevant for the detection of multiple interactions, helping doctors in decision making about drugs not commonly used in an overwhelmed healthcare situation.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

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2. <https://www.druginteractions.org/>

**Conflict of interest** No conflict of interest

#### 4CPS-261 USE OF INTRAVENOUS IMMUNOGLOBULIN: BY THE BOOK?

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**Background and importance** Intravenous immunoglobulin (IVIG) is a blood product used for replacement therapy and immunomodulation in various conditions. Its use is usually restricted to situations with clinical benefit and established evidence, due to the drug's production method and high economic value. Recently, the Portuguese National Pharmacy and Therapeutics Committee (NPTC) released guidance for a more evidence based IVIG use approach.<sup>1</sup>

**Aim and objectives** To characterise the IVIG prescription profile in our institution; to assess if IVIG is prescribed and used in accordance with guidance No 8, May 2020, from NPTC and the National Medicines Formulary (NMF); and to evaluate the impact of IVIG consumption on the hospital's financial budget.

**Material and methods** All IVIG prescriptions from January 2018 to May 2020 were analysed. Indications, doses, infusion rates (IR) and adverse reactions (AR) were registered in an Excel spreadsheet. The indications were classified as either on or off-label, regarding their inclusion in the aforementioned guidance and as per the NMF. The economic impact was calculated from the average price, using SGICM-GLINTT pharmacy software.

**Results** The study included 131 prescriptions, of which 92.4% conformed to the NMF: 60.3% were replacement therapy,

31.2% immunomodulation cases and the remaining 8.5% were off-label (of these, 64% had probable benefit). The most prevalent indications were chronic inflammatory demyelinating polyradiculopathy (39%) and MyD88 deficiency (31%). Doses and IR were as indicated. There were recorded AR. IVIG accounted for 1.21% of the institution's total medication expenses.

**Conclusion and relevance** IVIG was mostly used for approved indications. Doses and IR were within the recommended range and no AR were reported, suggesting that the administrations was well tolerated. Off-label use, although characterised by limited expression and for indications with probable benefit, included indications not mentioned in the guidance. In this study, hospital prescriptions showed a low level of compliance with the NPTC guidance; therefore, an institutional protocol should be developed for a more evidence based approach to IVIG use. Locally, the annual expenses for IVIG (1.21%), a value way below the national average (2.83%), may be due to the smaller size and complexity of the hospital and slight off-label use.

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**Conflict of interest** No conflict of interest

4CPS-262

#### CLINICAL EFFICACY OF INTRAVENOUS IMMUNOGLOBULIN IN NEUROLOGY: A RETROSPECTIVE COHORT STUDY AT THE MATER MISERICORDIAE UNIVERSITY HOSPITAL

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**Background and importance** Intravenous immunoglobulin (IVIg) is a blood derived medicinal product prescribed for a range of medical conditions. Clinical evidence strongly supports the use of IVIg as firstline therapy in three neurological disorders; chronic inflammatory demyelinating polyneuropathy (CIDP), Guillain-Barré syndrome (GBS) and multifocal motor neuropathy. There are an increasing number of other neurological conditions where IVIg is used despite limited evidence based data. Careful consideration of the efficacy of IVIg in each indication is required as it is a limited resource associated with high costs and potential supply shortages.

**Aim and objectives** To review the clinical indications for IVIg use in neurology patients at the Mater Misericordiae University Hospital (MMUH) and to compare prescribing practices to international evidence based guidelines.

**Material and methods** All neurology patients treated with IVIg between 2016 and 2018 were retrospectively reviewed using patient medical notes and pharmacy functionalities at the MMUH. Data collected included indication, dose prescribed, total number of IVIg courses, use of alternative therapies before IVIg and documentation of clinical benefit. Results were compared with international evidence based guidelines and verified by a neurology consultant.

**Results** 67 patients were included in the study. IVIg was prescribed for 15 indications. The most common were GBS,

myasthenia gravis and CIDP. 31 patients received IVIg for licensed indications, whereas 36 patients received IVIg for unlicensed indications. The level of evidence from international evidence based guidelines supported the use of IVIg for most indications.

**Conclusion and relevance** This study demonstrated that IVIg was prescribed for a variety of neurological conditions at the MMUH, the majority of which were unlicensed. IVIg use was supported for most indications compared with international evidence based guidelines. However, IVIg was prescribed for several indications despite limited evidence of efficacy. This study highlights the need for evidence based clinical practice guidelines for IVIg use at the MMUH and Ireland.

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**Conflict of interest** No conflict of interest

4CPS-263

#### CASE REPORT OF KAWASAKI DISEASE AND SARS-COV-2 INFECTION IN A PAEDIATRIC HOSPITAL

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**Background and importance** Kawasaki disease (KD) is a systemic vasculitis of unknown aetiology that affects children younger than 5 years old. The SARS-CoV-2 COVID pandemic highlighted cases reported to have an association between SARS-CoV-2 infection and KD. Clinical analogies verified between the two conditions open new perspectives with regard to aetiopathogenesis.

**Aim and objectives** To describe a severe hyperinflammation case of a 9-year-old girl (27 kg, 131 cm), previously healthy (mother tested positive for SARS-CoV-2; symptoms of high fever, diarrhoea, headache, abdominal pain), with clinical data regarding the association of SARS-CoV-2 infection and KD.

**Material and methods** In collaboration with the clinician, we reviewed a medical chart of a KD SARS-CoV-2 associated case, diagnosed between January and July 2020.

**Results** On 16 April 2020, a 9-year-old girl was admitted to the emergency department for suspicion of acute abdomen with an associated persistent fever. Nasopharyngeal swab and bronchoalveolar lavage tests for SARS-CoV-2 were negative. Abdominal ECO showed lymphadenomegaly due to hyperinflammation and CT scan reported evidence of interstitial, parenchymal thickening and pulmonary infiltration. Echocardiogram showed normal coronary arteries with minimal pericardial effusion. Broad spectrum empirical antibiotics were started. On 18 April (illness day 7) respiratory distress appeared, a critical condition similar to a shock