

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.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Comissão Nacional de Farmácia/Terapêutica. (2020). Recomendação sobre utilização de IgHN. *Orientações Comissão Nacional Farmácia/Terapêutica*.

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.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Perez EE, *et al.* Update on the use of immunoglobulin in human disease: A review of evidence. *J Allergy Clin Immunol* 2017.
2. Updated Commissioning Criteria for the use of therapeutic immunoglobulin in immunology, haematology, neurology and infectious diseases in England January 2019. Department of Health 2019.
3. National Blood Authority of Australia. Criteria for the clinical use of intravenous immunoglobulins in Australia. October 2019.

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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

syndrome and multiorgan failure occurred. Respiratory support and inotropic agents were started in the intensive care unit. The diagnostic suspicion of atypical incomplete KD, non-coronary involvement, was confirmed and treatment was switched to intravenous immunoglobulin 2 g/kg/day, acetylsalicylic acid 30 mg/kg/day and methylprednisolone infusion until the day of discharge. On illness day 10, laboratory blood tests showed progressive reduction in inflammation markers and rapid normalisation of liver enzymes (lipase 1824, amylase 502, declining leucocytes 8.57, Hb 12, negative CRP). Because of the uncertainty about the cause, anti-S-specific IgG antibodies to SARS-CoV-2 were measured. Serology testing for SARS-CoV-2 revealed IgG antibody concentrations. On day 12 of the illness, she was discharged.

Conclusion and relevance It is known that SARS-CoV-2 infection can activate uncontrolled inflammation. Cases are being informally reported among paediatricians, and recently patients with severe forms have been reported, emphasising the apparent rise in the number of children presenting with a multisystem inflammatory state requiring intensive care. The connection between viral infections and KD, the analogies between the two conditions, open new perspectives with regard to aetiopathogenesis.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-264 AUTOIMMUNE MYOPATHY RESULTING FROM A THERAPY WITH NIVOLUMAB FOR METASTATIC NON-SMALL CELL LUNG CANCER: A CASE REPORT

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Background and importance Immune checkpoint inhibitors, such as the anti-PD1 monoclonal antibody nivolumab, have proven efficacy as first or secondline therapy for several tumours. Specific immune related adverse effects (IRAE) involving various organs have been reported and are considered to be caused by immune over activation. IRAE involving the nervous system or muscle are rare, but some are serious and may have fatal outcomes if they are not monitored.

Aim and objectives We report a case of autoimmune myopathy following treatment with nivolumab for metastatic non-small cell lung cancer.

Material and methods This was a descriptive and retrospective clinical case. Data were obtained by review of the electronic medical records. The causality of the adverse reaction was established using the Karch–Lasagna algorithm.

Results A 70-year-old man was followed by the oncology service for a stage-IV lung adenocarcinoma. He received treatment with carboplatin, AUC=5/pemetrexed 500 mg/m², from January to May 2017. He then carried on with pemetrexed as maintenance for 12 cycles. Disease progression was determined by imaging tests. In February 2018, nivolumab was started as secondline treatment with laboratory parameters in the normal range and was well tolerated at first. After cycle 10, the patient had right knee swelling which decreased after local dexamethasone infiltration. He then had pain in his legs (cycle 14), and later there was weakness present with a sustained

effort in these muscle groups. After cycle 18, treatment was interrupted and blood tests ordered. Blood analysis showed increased levels of creatine kinase (CK) (1950 U/L, normal <200), C reactive protein 52.9 mg/mL (0–5.0) and normal levels of anti-cyclic citrullinated peptide 9.9 U/mL (0–20). The patient received intravenous methylprednisolone 1 g for 2 days, leading to improved CK levels and the pain disappeared. He started docetaxel 75 mg/m² without suffering from myopathy again. The Karch–Lasagna algorithm established a ‘possible’ relationship between myopathy and nivolumab treatment due to the existence of a temporal correlation between the facts.

Conclusion and relevance Health professionals must be vigilant in identifying drug related adverse reactions, particularly those related to drugs on the European list of medicinal products under additional monitoring. Myopathy has been reported in patients receiving nivolumab, and consequently patients should be monitored for changes in muscle function, and other causes of dysfunction should be excluded.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-265 CEMIPIMAB FOR THE TREATMENT OF RELAPSE OF A CUTANEOUS SQUAMOUS CELL CARCINOMA IN AN ADULT PATIENT: A CASE REPORT

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Background and importance Cutaneous squamous cell carcinoma (CSCC) is the second most common skin cancer. Risk factors for CSCC include chronic sun exposure, advanced age, skin that is sensitive to ultraviolet radiation and immunosuppression. Patients who have undergone solid organ transplantation and are receiving immunosuppressive therapy have a high risk of CSCC, which suggests that immune surveillance is critical for preventing CSCC in immunocompetent people. Immune checkpoint inhibitors, such as the anti-PD1 monoclonal antibody cemiplimab, have proven efficacy as firstline therapy for the treatment of adult patients with metastatic or locally advanced CSCC, who are not candidates for curative surgery or radiation.

Aim and objectives We report a case of a patient with CSCC treated with cemiplimab.

Material and methods This was an observational retrospective study of the use of cemiplimab in a 66-year-old man diagnosed with CSCC. Data were obtained from the electronic medical records.

Results The patient was diagnosed with nose CSCC in May 2019 and had other comorbidities: B cell chronic lymphocytic leukaemia (B-CLL), hypothyroidism and atrial fibrillation. This CSCC was resected completely in June 2019, but a CT scan in December 2019 revealed minimal but progressive splenomegaly and supraclavicular lymphadenopathy and a posterior biopsy confirmed CSCC. Other abnormal adenopathies were observed (posterior cervical and axilla likely in relation to B-CLL). He started cemiplimab 350 mg every cycle (21 day cycles) on 6 February 2020. After six cycles, repeat CT scan showed an increase in the size of the supraclavicular