

Background and Importance Systemic lupus erythematosus (SLE) is a multisystem autoimmune disease with wide-ranging pleuropulmonary manifestations. Acute lupus pneumonitis (ALP) is one of its uncommon complications. Systemic steroids associated with immunosuppressive therapy (cyclophosphamide, rituximab, hydroxychloroquine and intravenous immunoglobulin) are the mainstream treatment of ALP.

Aim and Objectives To describe the case of a patient with ALP treated with intravenous cyclophosphamide as well as to evaluate the effectiveness and safety of this treatment.

Material and Methods We report the case of a 67-year-old woman with a medical history of breast cancer and polymyalgia rheumatica treated with corticosteroids. She was referred to the emergency department due to intermittent fever, fatigue, generalised myalgia and arthralgia, mild dyspnoea and dry cough with sputum for the past 3 weeks. Multiple and bilateral lung opacities were present on chest X-ray so she was diagnosed with community-acquired pneumonia. The woman presented slight improvement despite empirical antibiotic and antifungal coverage. Subsequently, laboratory findings showed leukopenia and positive anti-double-stranded-DNA antibodies so the final diagnosis was ALP secondary to SLE. Systemic steroid treatment was initiated with a high-dose of methylprednisolone and hydroxychloroquine. Due to the severity of the pulmonary involvement, it was requested to start treatment with intravenous cyclophosphamide.

Results The patient received a total of three doses (600 mg/m²) of intravenous cyclophosphamide. MESNA, ondansetron and oral hydration were prescribed as supportive treatment. Despite the decrease in inflammatory analytical parameters, the woman presented modest reduction of lung injury and symptoms. She reported high-grade myalgia and vomiting after first infusion, which was successfully treated with paracetamol and metoclopramide. Sequential therapy with oral cyclophosphamide was considered, but because it is not funded for ALP and its adverse effect profile, treatment with methotrexate was started. Currently, the patient continues treatment with methotrexate, hydroxychloroquine and oral steroids. Computed tomography, performed 3 months after ending intravenous cyclophosphamide, showed stability of the disease.

Conclusion and Relevance Treatment with intravenous cyclophosphamide has not shown promising results in our patient although its safety profile is good. Because the therapeutic alternatives in patients with ALP are limited, it would have been interesting to verify that sequential therapy with oral cyclophosphamide improves the signs and symptoms of the disease, and long-term adverse effects could also be analysed.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

5PSQ-010 NATIONAL STANDARDISATION OF PRETERM PARENTERAL NUTRITION IN NEONATAL UNITS

^{1,2}S Fenton*, ^{2,3}B Murphy, ⁴A Doolan, ⁵R Mccarthy, ^{2,6}AM Brennan. ¹Cork University Hospital, Pharmacy Department, Cork, Ireland Rep; ²University College Cork, Infant Research Centre, Cork, Ireland Rep; ³University Hospital Waterford, Paediatrics/Neonatology, Waterford, Ireland Rep; ⁴The Coombe Hospital, Neonatology, Dublin, Ireland Rep; ⁵The National Maternity Hospital, Department of Clinical Nutrition and Dietetics, Dublin, Ireland Rep; ⁶Cork University Maternity Hospital, Department of Dietetics and Nutrition, Cork, Ireland Rep

10.1136/ejhpharm-2024-eahp.344

Background and Importance Parenteral nutrition (PN) is a high alert medication, essential for the survival of infants born pre-term. European expert guidelines recommend that standardised parenteral nutrition (SPN) rather the individualised (IPN) is used for the majority of infants, due to increased patient safety and resource efficiency.¹ There has been a failure to implement this practice, with large variations in the quality and models of PN provision and practices.^{2,3}

Nationally, neonatal units (NUs) have introduced a precision SPN system, including two externally compounded SPN bags and accompanying clinical decision support tool. The SPN system, developed over 10 years of multidisciplinary translational research has demonstrated improved clinical and economic outcomes.^{4,5} In 2018 the SPN system was endorsed as the national Model of Care for Preterm Standardised Parenteral Nutrition and an implementation group oversaw a national rollout, completed mid-2021.

Aim and Objectives To describe the pattern of preterm PN purchased by NUs from before implementation to the completion of national roll-out.

Material and Methods A retrospective analysis of preterm PN purchasing data from NUs (n=13) over 6 years, 2017 – 2022.⁶

Results The percentage of preterm SPN purchased by NUs increased nationally year on year from 56% (3,662/6,522) pre-implementation to 95% (4,823/5,074) in the first full year following a national rollout. This corresponded to a ~90% reduction in IPN purchased nationally.

Conclusion and Relevance This is the first time a country has reported this level of preterm SPN usage, delivering safe and equitable care. A national study is underway to evaluate the implementation and economic impact.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Riskin A, et al. ESPGHAN/ESPEN/ESPR guidelines on pediatric parenteral nutrition: Standard versus individualized parenteral nutrition. *Clinical Nutrition*. 2018. [https://www.clinicalnutritionjournal.com/article/S0261-5614\(18\)31174-9/fulltext](https://www.clinicalnutritionjournal.com/article/S0261-5614(18)31174-9/fulltext)
2. Lapillonne A, et al. Quality of newborn care: adherence to guidelines for parenteral nutrition in preterm infants in four European countries. *BMJ Open*. 2013. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3780296/pdf/bmjopen-2013-003478.pdf>
3. Sommer I, et al. Quality and safety of parenteral nutrition for newborn and preterm infants as an on-ward preparation. *Eur J Hosp Pharm*. 2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7447241/pdf/ejhpharm-2018-001788.pdf>
4. Brennan AM, et al. Standardized parenteral nutrition for the transition Phase in preterm infants: A bag that fits. *Nutrients*. 2018. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5852746/pdf/nutrients-10-00170.pdf>
5. 9th Congress of the European Academy of Paediatric Societies. 2022. https://www.frontiersin.org/books/9th_Congress_of_the_European_Academy_of_Paediatric_Societies/8754
6. Correspondence from national PN compounder, June 2023.

Conflict of Interest No conflict of interest.

5PSQ-011 TOXICITY OF IMMUNOTHERAPY TREATMENT IN CLINICAL PRACTICE

B Rodriguez De Castro*, C Rodriguez Lage. *HM Hospitales, Pharmacy, Leon, Spain*

10.1136/ejhpharm-2024-eahp.345

Background and Importance Immunotherapy has broken new ground in the treatment of oncological disease. However, it is not exempt from Adverse Events (AE).

Aim and Objectives To analyse and describe the toxicity profile of immunotherapy in clinical practice.

Material and Methods Multicentre descriptive observational retrospective study of patients who initiated immunotherapy treatment (June 2018 to June 2023). Clinical data were obtained from the computerised clinical histories (Doctoris®) and the eOncology® database. The following variables were collected: demographic data (sex and age), smoking status, comorbidities, history of autoimmune disease, oncological diagnosis and stage, treatment line, treatment regimen used, number of administered cycles, and toxicity assessed according to the CTCAE v5 (Common Terminology Criteria for Adverse Events) criteria of the NCI (National Cancer Institute).

Results During the study period, 40 patients (65% male) initiated immunotherapy treatment, median age 67 years [39–87]. 35% were active smokers and 47% were former smokers. The most frequent comorbidities were hypertension 47%, dyslipidaemia 42%, diabetes mellitus 27%, and psychiatric illness 17%. Two patients had an autoimmune disease.

57.5% lung cancer; 12.5% renal cancer; 12.5% melanoma; 10% bladder urothelial cancer; 2.5% gastric cancer; 2.5% hepatic cancer, and 2.5% pancreatic cancer. 63% in first-line immunotherapy treatment, 27% second-line, 10% third-line.

20 patients (50%) experienced at least one immune-mediated AE, mostly of grade 2 (moderate, 48%), followed by grade 1 (mild, 35%), and grade 3 or higher (severe and very severe, 12.5%). Corticosteroids were used in 63%.

In 80% of patients treated with nivolumab, toxicity was observed (20% of which were severe), compared to 50% for durvalumab (non-severe), 50% avelumab (non-severe), 35% pembrolizumab (10% severe), and 16% atezolizumab (non-severe).

Digestive AEs were the most frequent (29.6%), followed by cutaneous AEs (22.2%), musculoskeletal (arthralgia, weakness) (18.5%), and pulmonary AEs (14.8%).

Conclusion and Relevance Immunotherapy is becoming a first-line treatment for several tumours.

Our real-world clinical experience shows that immunotherapy has been reasonably well tolerated, with most immune-mediated AEs being moderate or mild.

Corticosteroids were the most widely used drugs to treat this type of toxicity.

Severe immune-mediated reactions have required hospitalisation and discontinuation of treatment.

A larger sample size and an extended study period are needed to confirm the correlation between treatment response and toxicity.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

5PSQ-012 ABSTRACT WITHDRAWN

5PSQ-013 NEW METHOD FOR ASSESSMENT OF ENVIRONMENTAL VIRAL CONTAMINATION OF LIQUIDS PREPARED IN CLOSED-SYSTEM DRUG TRANSFER DEVICES

¹E Slutsky Smith*, ²M Amichay. ¹Simplivia Healthcare- Ltd., Design and Development, Kiryat Shmona, Israel; ²HY Laboratories- Ltd., Virology and Tissue Culture Unit, Rehovot, Israel

10.1136/ejhp-2024-eahp.347

Background and Importance Closed system transfer devices (CSTDs) enable sterile preparation and administration of drugs.

Drugs contaminated by microbes harbour clinical risk to patients. Drugs suspected of contamination must be disposed of, adding economic burden to pharmacies. CSTDs can prevent contamination by bacteria and fungi.¹ However, a method for testing CSTDs' ability to prevent viral contamination is needed.

Aim and Objectives The aim was to develop a method for evaluating CSTDs' ability to prevent viral contamination,