Material and methods The SDD protocol is a strategy included among the specific optional measures in the Pneumonia Zero Project (PZ) whose aim is to contribute to reducing the incidence of VAP in those critical care units where rates are above the recommended levels. Its application is intended to prevent and/or eradicate the oropharyngeal and gastrointestinal carrier state of potentially pathogenic microorganisms. It consists of applying an oropharyngeal paste in the oral cavity and a solution introduced through a nasogastric tube four times a day in patients on mechanical ventilation.

We prepared the paste and solution in the Pharmacy Service and incorporated their criteria for use as an ICU pharmacotherapeutic protocol for both intravenous antibiotic prophylaxis and SDD formulations in the electronic prescription programme. We applied the protocol to all the mechanically ventilated patients who met the selection criteria.

We compared VAP data between February and December 2019 with the same period in 2018.

Results In 2018, the VAP rate per 1000 days of mechanical ventilation was 12.34. After performing the SDD protocol in 2019, the rate of VAP per 1000 mechanical ventilation days decreased to 5.75. Between the two periods the overall incidence of pneumonia decreased from 5.8% to 2.7%.

We estimated a production cost in 2019 of € 5.37 per SDD paste and € 2.20 per SDD solution. We produced 610 units of SDD paste and 850 units of SDD solution in 2019 with a total estimated production cost of € 5145.70.

Conclusion and relevance SDD applied with other recommended VAP control measures gave preliminary positive results in reducing the rate of VAP infections. We need to extend the study period to confirm these findings.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-031 EFFICACY AND SAFETY OF HIGH-DOSE TWICE-WEEKLY SEBELIPASE ALFA IN SEVERE-ONSET WOLMAN DISEASE: A CASE REPORT

[1]A Castro Balado*, [2]MJ de Castro López, [2]P Sánchez Pintos, [1]EJ Bandín Vilar, [1]JM Giráldez Montero, [1]L García Quintanilla, [2]ML Couce Pico, [1]I Zarra Ferro. *[1]Complejo Hospitalario Universitario de Santiago de Compostela, Hospital Pharmacist Service, Santiago de Compostela, Spain; [2]Complejo Hospitalario Universitario de Santiago de Compostela, Paediatric Inherited Metabolic Diseases, Santiago de Compostela, Spain*

10.1136/ejhpharm-2022-eahp.78

Background and importance Lysosomal acid lipase (LAL) deficiency is a rare metabolic disease (0.2:10 000) characterised by lysosomal accumulation of cholesterol esters and triglycerides, with a severe and rapidly progressive form known as Wolman disease (WD), usually fatal in the first 6–12 months of life. Sebelipase alfa (SA) is a recombinant human LAL authorised as enzyme replacement. According to the technical data sheet, it is administered weekly and should be started at low doses (1 mg/kg) with a gradual increase according to response, thus avoiding serious hypersensitivity reactions. Dosing twice-weekly with rapid dose escalation had not been previously described in the literature.

Aim and objectives To describe the efficacy and safety of high-dose SA administered twice-weekly in severe WD.

Material and methods We describe the case of a 3-month-old baby diagnosed with WD with secondary haemophagocytic syndrome, admitted to the paediatric critical care unit. Since admission, she presented anaemia, thrombopenia, hyperferritininaemia, altered liver function tests and lipid profile, and massive hepatosplenomegaly. Given the rapid deterioration and critical situation, with severe respiratory and kidney failure, treatment with SA was started at high doses twice-weekly.

Results To date, the patient received 11 doses of SA over 35 days. The first dose was administered at 3 mg/kg, and the subsequent doses at 5 mg/kg, twice-weekly as an intravenous infusion over 240 min. She required mechanical ventilation and continuous haemodialysis for 2.5 weeks; and red blood cell and platelet transfusions repeatedly up to day +24 after the start of SA. Initially, ferritin was 9438 ng/mL, decreasing to 1583 ng/mL at day +35. Transaminases reached a peak (AST: 3×ULN, ALT: 2×ULN) at day +10, being within normal values at day +21, with a slight subsequent elevation without clinical relevance. Bilirubin also reached a peak of 14.7 mg/dL at day +10, being at 6.3 mg/dL at day +35. Lipid profile has not yet reached normal values. A reduction in hepatosplenomegaly was noticeable after 1 month. No adverse effects were reported.

Conclusion and relevance After the diagnosis of WD with aggressive and severe presentation, treatment with high-dose twice-weekly SA has been an effective and well-tolerated treatment so far in our case, although it will be necessary to maintain enzyme replacement for life.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-033 DEVELOPMENT AND EVALUATION OF AN AMITRIPTYLINE TOPICAL FORM FOR THE TREATMENT OF CANCER-RELATED NEUROPATHY

[1]J Bonamour*, [2]MA Seveque, [1]A Choquer, [1]T Fleury, [1]D Emmanuel, [1]H Aboudagga, [2]S Laurent, [2]R Kortbaoui, [1]A Rieutord, [1]M Annereau. *[1]Gustave Roussy Cancer Campus, Pharmacy, Villejuif, France; [2]Gustave Roussy Cancer Campus, Pain Assessment and Treatment Center, Villejuif, France*

10.1136/ejhpharm-2022-eahp.79

Background and importance In France, 6.9% of the general population suffer from neuropathic pain.[1] Among the causes are surgery (20%), including cancer surgery, and chemically induced paresthesia (4.1%).[2] There are few treatments developed for this indication, and patients quickly find themselves in a therapeutic impasse. In addition, oral treatments could possibly cause undesired systemic effects.

Aim and objectives The aim was to develop and evaluate a topical form of amitryptiline at 10% for second-line treatment of patients.

Material and methods A galenic development was carried out following the recommendations of the International Council for Harmonisation (ICH) Q2 and 3 that addressed the galenic, physicochemical and microbiological parameters. Different types of topicals have been designed, from the cream to the thermogel with poloxamer.

Once the form was judged satisfactory on the pharmaceutical criteria, the preparation was assessed in the clinical context. Pain evaluation was carried out according to a visual analogue scale (VAS). A reduction of at least 30% was considered clinically relevant according to the recommendations of the French Society of Evaluation of the Treatment of the Pain.

Results The best compromise found was a 10% amitriptyline cream made in Versatile with urea at 2% as an emollient agent. This cream retains its diffusion properties, its organoleptic characteristics but also its physicochemical and microbiological stability for more than 6 months (stability data are still ongoing) in a PVC/ALU packaging.

81 patients were included (February–November 2020). For 49 patients (60.5%), the cream was effective. The etiologies for which the cream seems to be the most effective are post-chemotherapy pain (64% efficiency with taxane-based chemotherapy, 70% efficiency with platinum-based chemotherapy).

Conclusion and relevance The development of this topical has allowed neuropathic patients to gain relief. These data are very encouraging and will be confirmed through the implementation of a clinical trial.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Bouhassira D, Lantéri-Minet M, Attal N, Laurent B, Touboul C. Prevalence of chronic pain with neuropathic characteristics in the general population. *Pain* 2008;**136**(3):380–7.
2. Torrance N, Smith BH, Bennett MI, Lee AJ. The epidemiology of chronic pain of predominantly neuropathic origin. Results from a general population survey. *J Pain Off J Am Pain Soc* 2006;**7**(4):281–9.

Conflict of interest No conflict of interest

4CPS-034 DEPRESCRIBING ORAL IRON IN ELDERLY PATIENTS: EXPERIENCE FROM A NURSING HOME ASSOCIATED WITH A THIRD LEVEL HOSPITAL

J Ibanez-Caturla, P Pacheco*, T Alonso-Domínguez, MA Carvajal-Sánchez, L Fructuoso-González, P Torrano-Belmonte, M Hernández-Sánchez, JA Gutiérrez Sánchez, S Clavijos-Bautista, C Fernández-Zamora, MA Meroño-Saura. *Hospital Morales Meseguer, Pharmacy Service, Murcia, Spain*

10.1136/ejhpharm-2022-eahp.80

Background and importance Oral iron is prescribed to elderly patients as the treatment for episodes of iron deficiency anaemia. Inadequate follow-up and chronic prescription in patients who no longer benefit from it is common.

Aim and objectives To identify potentially inappropriate prescriptions (PIP) for oral iron (OI) in institutionalised elderly patients, as well as describing the deprescribing process in consensus with the centre's medical team.

Material and methods Demographic (age, sex), clinical (pathologies), analytical (haemoglobin, ferritin and serum iron) and pharmacological variables (dosage, possible adverse reactions) were collected from all patients undergoing oral iron treatment at the centre under our care. The Selene medical record and the Mira electronic prescription were used for data collection.

Chronically prescribed treatments without evidence of iron deficiency anaemia and non-iron deficiency analytical profile in elderly patients (Hb >12 g/dL, ferritin >100 ng/mL) were ruled as cut-off points for PIP. Data weres collected prior to and 3 months after the intervention.

Results Out of the 129 institutionalised patients, a total of 27 patients (21%) followed a chronic treatment with different presentations of OI (10 iron lactate, 17 sulfate). With a median age of 88 years, the majority (74%) were women. 56% of the patients in treatment had chronic constipation, possibly exacerbated by OI.

Of the 27 patients with OI, 16 PIPs (59%) were found. 12 patients (75%) had high iron reserve values (ferritin and haemoglobin) and 4 patients followed a chronic prescription without adequate analytical testing.

We proposed to the medical team to study the possibility of suspending OI treatment in those 12 patients with high iron reserve values, as well as assessing those 4 patients without previous blood tests, and to reevaluate after 3 months. The pharmaceutical deprescribing recommendation was accepted in 10 patients (63%).

Three months after the withdrawal, 4 patients had normal values of iron reserve tests, 3 were deceased, 2 had no analytical data, and 1 patient restarted a 3-month course of OI treatment.

Conclusion and relevance Oral iron treatments are prone to inadequate chronic prescription; these drugs commonly cause gastrointestinal adverse effects. Deprescribing efforts by pharmacists in a nursing home as part of a multidisciplinary team is a effective way of optimising treatment in polymedicated, elderly patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-035 PHARMACIST-LED MEDICATION RECONCILIATION AT DISCHARGE SHALL NOT BE SUFFICIENT TO REDUCE UNPLANNED HEALTHCARE UTILISATION: HEAR THE PATIENT EXPERIENCE!

[1]F Laval*, [2]R Lhermitte, [3]L Alix, [4]D Somme, [2]B Marie-Dit-Dinard, [1]V Gicquel, [1]A Bacle, [1]B Hue, [5]E Bajeux. *[1]CHU Rennes – Hôpital de Ponchaillou, Service de Pharmacie, Rennes, France; [2]CH de Fougeres, Service de Pharmacie, Rennes, France; [3]CHU Rennes – Hôpital de Ponchaillou, Service de Médecine Interne, Rennes, France; [4]CHU Rennes – Hôpital de Ponchaillou, Service de Gériatrie Aiguë, Rennes, France; [5]CHU Rennes – Hôpital de Ponchaillou, Service d'Épidémiologie et de Santé Publique, Rennes, France*

10.1136/ejhpharm-2022-eahp.81

Background and importance Older patients often experience adverse drug events (ADEs) after discharge that may lead to unplanned readmission. Pharmacist-led medication reconciliation at discharge (MRD) is known to reduce medication errors that lead to ADE but results on healthcare utilisation are controversial.

Aim and objectives The main aim of this study was to evaluate the MRD's effect provided to patients aged over 65 years on their unplanned rehospitalisation for ADE within 30 days. A secondary objective was to assess the impact of the pharmacist's presence on patient experience and knowledge about their treatment.

Material and methods An observational, multicentre prospective study, in medical and rehabilitation wards in 5 hospitals in Brittany, France. Included patients were aged 65 years and over who received MR at admission (MRA). A pharmacist-led MRD was the intervention. The primary endpoint was the proportion of patients experiencing death, unplanned rehospitalisation and/or visit to an emergency department within 30 days after discharge. Secondary endpoints encompassed the patient's experience of discharge and knowledge about their medication changes.

Results Patients who received MRA and MRD did not have significantly fewer deaths, unplanned rehospitalisations and/or emergency visits related to ADE or other (p=0.960) 30 days after discharge than patients receiving MRA alone.

The discharge from hospital seemed well organised for these patients (p=0.003) and they reported more frequently