

percentages (cases). High-performance liquid chromatography-ultraviolet (HPLC-UV) was used to measure Cert.

Cert was measured after at least two doses of ertapenem (>48h) and before the next dose administration (trough). Renal function was measured as eGFR according to CKD-EPI (Chronic Kidney Disease Epidemiology Collaboration).

Pearson correlation coefficient (R) was calculated to study the correlation between eGFR (independent variable) and Cert (dependent variable). To determine the statistical significance of R, the analysis of variance (ANOVA) was performed and p value was obtained (IBM SPSS Statistics V21.0).

Results 102 patients with Cert determination were included, 53% male sex, with 73.0 ± 12.2 years old. Mean eGFR was 57.5 ± 27.86 mL/min/1,73 m². Cert was measured 6.4 ± 4.04 days after starting ertapenem and the mean duration of treatment was 15.5 ± 11.4 days.

R valor was -0.436 ($R^2=0.190$) which explains an inverse linear correlation between eGFR and Cert with statistical significance ($p=0.001$). Influence of other covariates (albumin, platelets, ertapenem dose, sampling time) on the relationship between Cert and eGFR was studied, with no significant impact observed.

Mean Cert for the different eGFR ranges were summarised in the table:

eGFR category (mL/min/1,73 m ²)	Cert (mcg/mL)
eGFR >90 (n=24)	7.3 ± 12.1
eGFR 60-90 (n=24)	14.1 ± 10.1
eGFR 30-60 (n=29)	19.4 ± 19.5
eGFR <30 (n=25)	29.7 ± 28.0
Total (n=102)	17.8 ± 20.3

Conclusion and Relevance

- Decrease in eGFR is correlated with an increased in Cert, with a possible overexposure in patients with renal dysfunction.
- A dose adjustment could be considered in patients with compromised renal function, even if the eGFR >30 mL/min/1,73 m².

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-251 HEREDITARY ANGIOEDEMA: IMPACT OF THE BURDEN OF DISEASE IN SPAIN

¹E Monte Boquet*, ²CB José, ³M Navarro Bruguera, ⁴AD Escobar Oblitas, ⁵MT Caballero Molina, ⁶S Smith Flotz. ¹Hospital Universitario Y Politécnico de la Fe, Hospital Pharmacy Service, Valencia, Spain; ²Hospital Universitario Clínico San Cecilio, Hospital Pharmacy Service, Granada, Spain; ³Hospital Universitario Santa María, Hospital Pharmacy Service, Lleida, Spain; ⁴Hospital Universitario Son Espases, Immunology Service, Palma de Mallorca, Spain; ⁵Hospital Universitario la Paz, Allergology Service, Madrid, Spain; ⁶Asociación Española de Angioedema Familiar Aedaf, President, Madrid, Spain

10.1136/ejhp-pharm-2023-eahp.222

Background and Importance Hereditary angioedema (HAE) is a rare disease with a negative impact on patients' quality of life. Understanding the patient pathway would contribute to reducing the burden of the disease.

Aim and Objectives Understand the patient with HAE pathway by identifying and assessing the elements that comprise the burden of the disease of patients.

Material and Methods Descriptive study based on a bibliographic review and the expertise of a multidisciplinary panel of 18 professionals with knowledge and experience in HAE (Allergology, Immunology, Medical Emergency, Hospital Pharmacy, Nursing and Patient Associations). The patient pathway was elaborated by identifying the elements that comprise the burden of the disease. Those elements were evaluated from the patient's and the healthcare system's perspectives.

Results A patient with HAE suffers an average of 5.8 attacks per year, although there is great variability among patients. It has been estimated that 35% of patients take long-term prophylaxis (LTP).

The estimated average cost of a patient with HAE is € 47,825/year, including pharmacological costs, admissions, medical appointments and procedures and indirect costs (transport and loss of productivity). Pharmacological treatment of LTP represents 79% of the total costs; however, it decreases the number of attacks by 76%, and therefore reducing the burden of disease.

In terms of lost productivity, it is estimated that a patient with HAE losses 2.5 days of work per year, although this varies depending on the treatment and situation. The loss of productivity associated with the loss of educational and professional opportunities and the emotional impact of HAE are important components of the burden of the disease.

The prescription of LTP in patients with a high number of attacks and the implementation of telepharmacy/telemedicine programs improves the quality of life, reduces visits to health care facilities and decreases sick leaves. The possibility of having the medication available at home for self-administration is an important benefit for patients and the healthcare system.

Conclusion and Relevance HAE has a high impact on patients and the healthcare system. Identifying the key elements at each stage of the patient pathway is essential to improve their quality of life while ensuring the sustainability of the healthcare system.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-254 DAPAGLIFOZIN PRESCRIPTION PRACTICE IN PATIENTS WITH CHRONIC HEART FAILURE

M García Hervalejo*, Am López-González, R Aparicio Peñacoba, I Conde González, JC García Casanueva, MJ Otero. Hospital of Salamanca, Hospital Pharmacy- Salamanca-Spain, Salamanca, Spain

10.1136/ejhp-pharm-2023-eahp.223

Background and Importance Dapagliflozin is a sodium-glucose cotransporter 2 (SGLT2) inhibitor authorised by the Spanish Medication and Healthcare Products Agency for chronic symptomatic heart failure (HF) with reduced left ventricular ejection fraction (LVEF). In the pivotal study DAPA-HF, the risk of cardiovascular death or worsening of the HF was reduced with dapagliflozin compared with placebo.

Aim and Objectives The objective of the study was to evaluate the use of dapagliflozin in a level four university hospital for HF indication according to the DAPA-HF study inclusion

criteria, emergency room visits, and hospital readmissions due to HF decompensation, or death from any cause.

Material and Methods This was a retrospective study January-July 2021 that included HF patients with at least one dose of dapagliflozin. The variables recorded were: gender, age, LVEF, N-terminal B-type natriuretic peptide (NT-proBNP), standard treatment, HF classification according to the New York Heart Association (NYHA), readmissions/emergency room visits for HF, and death. The follow-up period lasted 14 months.

We evaluated whether the prescription of dapagliflozin met the inclusion criteria of the DAPA-HF study which were: LVEF $\leq 40\%$, NT-proBNP ≥ 600 pg/mL, NYHA class II-IV and standard therapy (angiotensin-converting-enzyme inhibitors, angiotensin II receptor blockers or sacubitril/valsartan, plus beta blockers and mineralocorticoid antagonists).

Results We had 51 patients (20% female) with an average age of 71 (49-88). Prescriber adherence to all of the criteria was achieved in 30/51 patients (59%). Adherence for each criterion was: LVEF $\leq 40\%$ in 46 patients (90%), NT-proBNP ≥ 600 pg/mL in 44 (86%), NYHA II-IV in 38 (74.5%) and adequate treatment with standard therapy in 45 (88%) patients.

Seventy-six percent (39/51) of patients continued with dapagliflozin at 14 months. During the follow-up period 10/51 visited an emergency room and 10/51 were readmitted for HF decompensation. The cause of death of three of the four patients who died was cardiovascular.

Conclusion and Relevance More than half of the prescriptions for dapagliflozin met the criteria for inclusion in the study. The percentage of HF decompensation or death from cardiovascular causes was greater in our cohort than in the clinical trial sample.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-255 ANTIPARKINSONIAN MEDICATION RECONCILIATION: HOW PREVENTING MEDICATION ERRORS PROMOTES THERAPEUTIC QUALITY AND SAFETY

A Viudez-Martinez, AM Ramirez Lopez*, J Lopez-Nieto, E Climent-Grana, G Riera. *Hospital General Universitario Dr Balmis de Alicante, Pharmacy, Alicante, Spain*

10.1136/ejhp-2023-eahp.224

Background and Importance Pharmacotherapy is the primary treatment for Parkinson Disease (PD). The administration of PD medication needs to be carried out at a particular time to avoid missing doses or inaccurate dosage schemes that may result in motor and non-motor consequences. One-third of all patients with PD visit an emergency department or hospital each year, yet about 70% of neurologists report that PD patients do not get their medication properly when hospitalised. Besides, 1 in 3 patients with PD is prescribed contraindicated drugs during hospitalisation and serious complications, mostly neuropsychiatric, occur in more than half of these patients.

Aim and Objectives To design and implement a medication reconciliation protocol led by clinical pharmacists that allowed to identify, characterise and, eventually, prevent antiparkinsonian medication errors to promote therapeutic quality and safety in daily practice.

Material and Methods This was an interventional, single-centre, one-year, prospective study analysing the impact of developing an antiparkinsonian medication reconciliation programme. All the patients who were hospitalised and had, at least, one active prescription containing an antiparkinsonian drug at hospital admission were included. The medication reconciliation was performed by following a three-phased check: inpatient electronic prescription validation after assessing the outpatient medication schedule, review of the latest clinical report emitted by the Neurology Department, and pharmacist-driven interview of the patient and/or caregiver to confirm the information regarding medication gathered.

Results 171 admission episodes from 132 patients were registered between February 1, 2021, and January 31, 2022. Of 224 prescription lines involving antiparkinsonian drugs, 179 contained, at least, one medication error (59.8%). Commission errors (91.62%) were more frequent than omitted drugs (8.38%). The most common medication errors were related to timing (41.90%), frequency (21.23%), and dosing (19.55%). The implementation of the medication reconciliation programme prevented the erroneous administration of 2716 antiparkinsonian doses, 60% of the total number of doses prescribed during this period. Interestingly, a significant relationship between the number of medication errors and having levodopa prescribed was evidenced ($p < 0.05$). A contraindicated drug was prescribed in almost one-third of the episodes (29.82%).

Conclusion and Relevance Clinical pharmacists' implementation of an antiparkinsonian medication reconciliation programme sharply reduced medication errors, and contraindicated drugs prescription, thus improving therapeutics and drug safety.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-257 PREOPERATIVE INTRAVENOUS IRON TO TREAT ANAEMIA BEFORE MAJOR ORTHOPEDIC SURGERY

S Asenjo Segovia*, M Sarobe Carricas, M Noceda Urarte. *Hospital Universitario de Navarra, Pharmacy, Pamplona, Spain*

10.1136/ejhp-2023-eahp.225

Background and Importance Preoperative anaemia, is a risk factor for poor outcome in patients undergoing surgery. Sufficient data exist to support intravenous iron as efficacious and safe if surgery is planned for $< 2-3$ weeks after the diagnosis of iron deficiency. Treatment of preoperative iron deficiency anaemia should be implemented as early as possible before the scheduled surgical procedure, most major surgery is elective.

Aim and Objectives The purpose of this study is to review the clinical effectiveness of IVI administered preoperatively for iron deficient in adult patients undergoing elective orthopedic surgery

Material and Methods Retrospective Observational study conducted between January 2021 and December 2021

Eligible participants, identified in preoperative hospital visit were older than 18 years of age and had haemoglobin less than 13 g/dL for men and 12 g/dL for women.

Preoperative assessment visit scheduled 1-2 weeks before surgery, able to receive infusion at least 7 days before the planned operation date.