5PSO-050 IS IT POSSIBLE TO IMPROVE THE HIPOPOTASEMIC MANAGEMENT IN THE HOSPITAL?

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Background and Importance Potassium metabolism disorders are the most frequent electrolyte alteration in clinical practice. Early detection of hypokalaemia could prevent future complications.

Aim and Objectives To know the prevalence of hypokalaemia disorders in adults admitted in a third-level hospital. Evaluate the aetiology and the corrective treatment during the following 24 hours. To identify improvement actions.

Material and Methods Descriptive observational study of three cross-sections carried out during December 2022. In each section, all the analytical determinations that included potassium determination were selected, and the medical records of patients with hypokalaemia (K <3.5 mEq/L) were reviewed.

The severity of the alteration and the corrective treatment were determined within 24 hours after the analytical determination.

Hypokalaemia was classified according to severity as: mild (3-3.49 mEg/L), moderate (2.51-2.99 mEg/L) or severe $(\le 2.5 \text{ meg/L})$ mEq/L). Possible causes were considered: hypomagnesemia, pharmacological, idiopathic or insufficient intake (nothing by mouth without potassium supplement).

Results In each section, were identified 116, 116 and 112 (344 in total) patients with potassium determination. The patients admitted each day were 327, 323 and 321, respectively. 45/344 (13%; 95% CI [9.5-16.6]) had hypokalaemia (40 mild, 4 moderate and 1 severe).

21/45 patients had a pharmacological cause (46.7%; 95% CI [32.1-61.2]), furosemide being prescribed in 15 of them. 11/45 patients presented hypomagnesemia as a probable aetiology (24.4%; 95% CI [11.9-37]). It was identified as a possible idiopathic cause in 9/45 patients (20%; 95%CI [8.3-31]) and in 4/45 (8.9%; 95%CI [6-17.2]) insufficient supply of potassium was observed (patients on an absolute diet without supplementation).

18/45 patients did not receive corrective treatment (40%; 95% CI [25.7-54.3]).

Conclusion and Relevance Hypokalaemia occurs in 13% of daily laboratory analysis in the hospital, the main cause being pharmacological. In the first 24 hours, 40% of patients do not receive corrective treatment.

The establishment of a systematised computerised extraction of patients with alterations in potassium levels would detect unidentified alterations. It could be possible to establish corrective treatment earlier, and this fact could be able to benefit more than 5,000 patients annually in our setting.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

5PSO-051

EFFECTIVENESS AND SAFETY OF NIRMATRELVIR/ RITONAVIR IN OLDER PATIENTS AT A NURSING **HOME WITH COVID-19**

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Background and Importance The use of the antiviral drug nirmatrelvir/ritonavir in nursing home patients with COVID-19 has reduced its main complications, although due to comorbidity and polypharmacy there are often problems with interactions.

Aim and Objectives To evaluate the effectiveness and safety of nirmatrelvir/ritonavir in nursing home patients with COVID-19 infection.

Material and Methods Retrospective observational study including all nursing home patients attended by a Geriatrics Liaison Unit from a hospital in Madrid between May 2022 and July 2023 and treated with nirmatrelvir/ritonavir. We collected the number of referrals to the emergency department, hospitalisations and mortality due to COVID-19 a month after treatment with nirmatrelvir/ritonavir and interactions and adverse events detected associated with the drug.

Sociodemographic, clinical and pharmacological variables were collected from the electronic medical record.

Results A total of 111 patients (76.6% women) with a median age of 89.5 years (68-102) and a Charlson index of 2 (0-5) points were included, from 18 different nursing homes. Overall, 58.6% (65) had dementia, 40.5% (45) Barthel ≤40 and 33.3% (37) impaired renal function receiving reduced doses of nirmatrelvir/ritonavir.

Clinically, 96.4% (107) had mild symptoms (cough, fever, myalgia, diarrhoea) and 0.9% (1) were asymptomatic and 53.2% of them (59) previously received four doses of vaccine. No symptoms were recorded in 2.7% (3) of the patients.

A total of 283 interactions of nirmatrelvir/ritonavir with 62 different chronic drugs were detected: trazodone (8.8%), metamizole (8.1%), quetiapine (7.4%), amlodipine (7.4%), mirtazapine (6%), atorvastatin (4.6%) were the most frequent. We observed at least one interaction in 93.8% of the patients, with a mean number of 2.6 interactions per patient. Eightytwo interactions were severe requiring discontinuation, 180 were moderate of which 81 required monitoring and 99 required drug adjustment including change of dose, frequency, regimen or substitution with another drug.

One month after treatment with nirmatrelvir/ritonavir, 2.7% (3) of patients were referred to the emergency department for Covid-19 of whom 66.7% (2) required hospital admission, while just one patient presented potential adverse reaction to treatment (dysgeusia) and no patient died during this month due to COVID-19.

Conclusion and Relevance Nirmartrelvir/ritonavir is effective and safe for the treatment of Covid-19 in nursing home patients but requires a review of clinical history and drug interactions to adjust chronic treatments during administration.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.