Antidiabetic treatment in frail patients with type II diabetes admitted to the emergency department for altered glycaemia


Background and importance Depressed glycaemia is one of the main causes of emergency department (ED) visits among diabetic patients. However, information about antidiabetic treatment and risk factors associated with elderly diabetic patients revisiting the ED is scarce.

Aim and objectives To describe the oral antidiabetic treatment and glycated haemoglobin (%HbA1c) value in frail patients with type II diabetes admitted to an ED due to hyperglycaemia or hypoglycaemia and to evaluate the risk factors associated with 30 day revisits.

Material and methods This was a retrospective observational study (2017–2019). Frail patients with type II diabetes treated with oral antidiabetics admitted to an ED due to hyperglycaemia or hypoglycaemia were included. To evaluate the risk factors associated with 30 day revisits, a multivariate analysis was performed in which comorbidities and treatments risk factors with a p value <0.200 were included.

Results 48 patients were included (mean age 83 (±7.7) years; 23 (48%) were admitted for hyperglycaemia and 25 (52.1%) for hypoglycaemia. Six (12.5%) patients were being treated with insulin only, 27 (56.3%) with oral antidiabetics only and 15 (31.2%) with oral antidiabetics and insulin. The most frequent oral antidiabetic prescribed was metformin, used as monotherapy in 11 (38%) patients, combined with a sulphonylurea in 6 (20.6%) patients, with gliptins in 6 (20.6%) patients and with repaglinide in 3 (10.3%) patients.

38 (79.1%) patients presented a %HbA1c value during the year before the ED visit; in 11 patients (29.8%) between 7.5% and 8.5%, in 18 patients (47.3%) <7.5% and in 9 patients (23.7%) >8.5%. At discharge from the ED, treatment was modified in 14 patients (30.4%); none of them revisited the ED after 30 days. Of the 32 patients (69.6%) in whom the medication was not modified, 10 (21.7%) revisited the ED after 30 days due to alterations in glycaemia, 4 (40%) for hypoglycaemia and 6 (60%) for hyperglycaemia.

Conclusion and relevance In the univariate analysis, chronic heart failure and treatment modification at discharge were associated with a greater risk of 30 day revisit. In the multivariate analysis, a significant association between chronic heart failure and the risk of revisits was found (OR 4.12 (1.02–14.21)).

Conflict of interest No conflict of interest

Comparison of the number of parental nutrition prescriptions in 2020 during the COVID-19 pandemic with the same time period in 2019


Background and importance The pharmacy service (PS) is a cornerstone of the nutritional support of patients, especially those with special needs. For this reason, it is necessary to create individualised nutrition following recommendations from scientific organisations, such as the European Society for Clinical Nutrition and Metabolism (ESPEN).

Aim and objectives To analyse prescriptions of parental nutrition (PN) during the pandemic and compare them with those from the same time period in 2019.

Material and methods This was a retrospective descriptive observational analysis of data from a secondary care hospital during March and April, both in 2019 and 2020. Demographic (age and sex) and clinical (length of PN and diagnosis) data were collected from medical records.

Results There were 157 patients with PN during the period of study in 2020, 106 (67.5%) men with a median age of 67 years (IQR 14.5 years). In 2019, 64 patients received PN, 38 (59.4%) were men with a median age of 70 years (IQR 17). In 2020, 48.8% of patients with PN were under the critical care service (CCS), 30.6% internal medicine service (IMS) and 18.5% surgical service (SS); 108 (68.8%) were diagnosed with COVID-19, in 2019, 15.6% of patients were under CCS, 25% IMS and 56.4% SS. In 2020, 85 patients (54.1%) terminated PN due to health improvement and 60 (38.2%) died; in 2019, 54 (84.4%) improved and 9 (14.1%) died. In 2020, the median age of deceased patients was 67 years (IQR 12.5 years) and in 2019 it was 77 years (IQR 9.5 years). The total number of PN prescribed during the periods of the study was 2121 in 2020 and 876 in 2019.

Conflict of interest In the context of the SARS-CoV-2 pandemic, nearly half of all PN were prepared for CCS treatment.
patients. This increase in CCS patients in 2020 seems to explain the 10 year reduction in the median age of death and the increase in mortality. In 2020, the number of PN prepared by the PS nearly tripled in comparison with the same period in 2019. They were individually adapted to each patient’s requirements, which led to a substantial increase in the care load and the preparation of the PN.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CP-220 PATIENT SATISFACTION WITH PHARMACIST EDUCATION ON ORAL ANTICOAGULANT MEDICATION

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Background and importance Oral anticoagulants are internationally recognised as high risk medications that can cause significant patient harm when used in error.1 High patient adherence to oral anticoagulant treatment is essential to avoid thrombosis or stroke. The pharmacy department has prioritised the provision of medicines education to all inpatients newly started on an oral anticoagulant. Both verbal education and a warfarin or direct acting oral anticoagulant (DOAC) booklet are provided to all patients. A DOAC booklet was developed and introduced in 2017.

Aim and objectives To assess patient satisfaction with oral anticoagulant education provided by pharmacists and to obtain feedback on the new DOAC booklet.

Material and methods The study took place over a 6 week period (February to April 2018). All patients provided with pharmacist education on an oral anticoagulant were requested to complete a patient satisfaction survey after the education session. Patients had the option to decline participation in the study. The survey assessed if the patient found the information useful, the quantity of information discussed and the medium of communication considered most beneficial.

Results 30 patients were involved in this study. 40% (n=11) of patients were prescribed warfarin, with the remaining 56% (n=17) prescribed a DOAC (apixaban n=12, rivaroxaban n=4, dabigatran n=1). All patients reported that the verbal and written information was useful and that they were happy with the amount of information discussed. 97% of patients (n=29) reported that they understood the information discussed. When asked which format of communication was most beneficial, the majority (n=16) of respondents answered both verbal and written communication. All patients (n=16) who had read the DOAC booklet reported that it was helpful.

Conclusion and relevance The results of this study demonstrated patient satisfaction with pharmacist education on newly commenced oral anticoagulants. Most education sessions were for DOACs, reflecting the change in prescribing practices and the trend away from warfarin. The preferred medium of education varied between patients. The results suggested that pharmacists should continue to use both verbal and written education to account for patient preference and understanding. Patients reported that they found the new DOAC booklet helpful.

REFERENCES AND/OR ACKNOWLEDGEMENTS


Conflict of interest No conflict of interest

4CP-221 EFFECT OF SARS-COV-2 PANDEMIC ON DIRECT ORAL ANTICOAGULANT USE IN THE PRIMARY CARE SETTING

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Background and importance Direct oral anticoagulants (DOAC) were moderately used in the primary care (PC) setting due to their associated risks in elderly and their high cost. In contrast, acenocumarol was much more common in Catalonia, even though it requires intense monitoring. During the SARS-CoV-2 pandemic, the use of DOAC has been encouraged to reduce patient medical visits.

Aim and objectives To analyse the change in DOAC use in our area and to evaluate prescription appropriateness.

Material and methods This cross sectional study analysed the use of DOAC in a PC population in Barcelona in September 2020. The results were compared with historical data from December 2018. Demographic variables (age, gender), pharmacotherapeutic data (drugs, dose, frequency) and clinical data (glomerular filtration (GF), international normalised ratio (INR), CHA2DS2-VASc score) were obtained from the electronic medical record (September 2020). Prescription appropriateness was evaluated according to the drugs’ summary of product characteristics.

Results The study included 351 732 patients in 2018 and 364 350 in 2020; 9194 (2.65%) and 10 017 (2.75%) of the patients were treated with oral anticoagulants (OA), respectively.

Prevalence of OA use:

- 2018: acenocumarol 5734 (62.4%), warfarin 133 (2.3%), apixaban 1006 (10.9%), edoxaban 309 (3.4%), dabigatran 532 (5.8%) and rivaroxaban 1480 (16.1%).
- 2020: acenocumarol 3804 (38.0%), warfarin 157 (1.6%), apixaban 1875 (18.7%), edoxaban 959 (9.6%), dabigatran 712 (7.1%) and rivaroxaban 2510 (25.1%).

Comparison of prevalence between 2018 and 2020:

- Decrease in acenocumarol (62.4% vs 38.0%, p<0.0001).
- No change in warfarin (1.45% vs 1.6%, p<0.05).
- Increase in DOAC (36.2% vs 60.5%, p<0.0001), specifically: increase in edoxaban (9.3% vs 15.8%, p<0.0001), no change in apixaban (30.2% vs 31.0%, p<0.05) and decrease in dabigatran and rivaroxaban (16.0% vs 11.8% and 44.5% vs 41.5%, respectively, p<0.05).

DOAC prescription appropriateness in 2020 (among 6056 patients):

- The main indication was atrial fibrillation (5881 patients, 97.1%).
- 373 men had CHA2DS2–VASc ≤2 and 240 women had CHA2DS2–VASc <3.