included. All patients treated with more than one drug were taking a beta-blocker. Four (30.8%) patients with dual therapy were taking flecainide concomitantly, four (30.8%) digoxin, three (23.1%) amiodarone and two (15.4%) diltiazem. 7.3% of the patients received the drug as a single dose, 9.8% started treatment the week before, 2.4% the month before and 12.2% in the last 3 months. Ten (24.4%) presented altered creatinine clearance and 17 (41.5%) had chronic renal failure.

In 14 (34.1%) patients one drug was suspended, in five (12.2%) two were suspended, in five (12.2%) the drug was changed, in seven (17.1%) the dose was decreased and in 10 (24.4%) treatment was not changed. Pacemakers were placed in 11 (26.8%) patients. 12 (29.3%) patients revisited the EU 30 days after discharge and 6 (50%) were admitted. Four (9.8%) patients consulted for an episode related to the previous one: 1 due to vasovagal syndrome after implantation of pacemaker without changes in treatment, 1 due to bradycardia after suspending bisoprolol but continuing with amiodarone and 2 due to AF after suspending any drug.

Conclusion and relevance Beta-blocker drugs were the main cause of pharmacological bradycardia, being used in most of the episodes as monotherapy and to treat atrial fibrillation. This group of patients presented with a high frequency of revisits at 30 days even after previous intervention. This is a potential group that could benefit from pharmacist follow-up after discharge.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-356 COST MINIMISATION ANALYSIS OF THE USE OF NIVOLUBAM AND PEMBROLIZUMAB

Background and importance Different studies have shown the equivalence of the dosage regimen for pembrolizumab adjusted to the patient’s body weight (DPC: 2 mg/kg/3 week) and the fixed dose (DF: 200 mg/3 weeks), and the equivalence between nivolumab’s DF (240 mg/2 weeks) and its DPC (3 mg/kg/2 weeks).

Aim and objectives To estimate the savings achieved by using DPC up to maximum doses of 200 mg for pembrolizumab, and 240 mg for nivolumab, in a medical oncology service of a third level hospital.

Material and methods A mathematical model was developed that included the cost of pembrolizumab/nivolumab (based on the laboratory’s sales price), as well as the anthropometric characteristics of the patients, to estimate the economic impact using a cost minimisation analysis, on administration of DF versus DPC for oncological patients. All patients who received pembrolizumab for 2 years (2018–2020) and nivolumab for 3 years (2017–2020) were included in the study.

Results A total of 84 individuals were included:

- 65.5% (n=55) received nivolumab for the treatment of melanoma, (34.5%); non–small cell lung cancer (NSCLC) (23.6%); head–neck carcinoma (23.6%); and other types of carcinomas (18.2%).
- 34.5% (n=29) received pembrolizumab for the treatment of NSCLC (89.6%) and urothelial carcinoma (10.3%).

The mean number of cycles received was 14.1(2–72) for nivolumab and 11.5(2–32) for pembrolizumab.

During the study period, the use of nivolumab administered as DF would have cost a total of 3 515 760C (1 171 920C/year; 63 923C/patient). However, the DPC would have cost 2 994 296C (998 099C/year; 54 442C/patient), which means an annual saving of 173 821C. The total cost of treatment with pembrolizumab as DF for this study period was 2 374 956C (1 187 478C/year; 81 895C/patient), while DPC would have had a total cost of 1 625 739C (812 869C/year; 56 059C/patient), which means an annual saving of 374 608C.

Conclusion and relevance The introduction of immunotherapy in the oncological field has supposed an improvement in the survival of patients, but with a relevant economic impact. The search for strategies of this type can help optimise health resources without compromising the effectiveness of treatments. With the present study, we wanted to show one of these strategies that would allow a saving of 23% (548 429C/year) in the expenditure associated with pembrolizumab and nivolumab.

References and/or acknowledgements

Conflict of interest No conflict of interest

4CPS-357 CLINICAL CHARACTERISTICS AND MORTALITY OF COVID-19 IN A LONG TERM CARE FACILITY

Background and importance Older patients living in long term care facilities (LTCFs) were the most vulnerable population during the pandemic caused by SARS-CoV2. It has been estimated that as many as half of all deaths from COVID-19 in Europe occurred in care homes.

Aim and objectives To describe a coordinated programme in response to a COVID-19 outbreak in an LTCF, the clinical and epidemiological characteristics, and the mortality rate.

Material and methods The study was performed from 20 March to 30 June 2020 in a single 264 bed LTCF in Spain. In response to the COVID-19 outbreak, we created a multidisciplinary team to implement a coordinated programme to avoid high risk contagion with 12 interventions: (1) training on infection prevention and control, (2) screening of all staff members for symptoms, (3) communal activities and visit restrictions, (4) locating a clean room for equipment, (5) providing personal protective equipment, (6) resident cohorting, (7) assessment of all residents for symptoms and implementation of communication tools with families, (8) strengthening the workforce, (9) provision of equipment, materials and drugs s with a minimum of supplies, (10) establishment of a consultation circuit with the local hospital, (11) compliance of protocols and (12) laboratory testing.
Demographic, clinical and pharmacological data were retrospectively collected from residents with confirmed SARS-CoV-2 infection: comorbidities, signs and symptoms, outcome (recovery or death), therapy received for COVID-19 and concomitant antibiotic.

Results Of the 231 residents who lived in the LTCF when the first resident with confirmed COVID-19 was tested, 29.4% tested positive for SARS-CoV-2 during the study period, of whom 23.5% died. All cause mortality increased 29.4% tested positive for SARS-CoV-2 during the study period. The first resident with confirmed COVID-19 was tested, and most shared a room with another confirmed resident. A 30 day period of hospitalisation was 12.5 days (IQR 3.5–19). Most of the cases (72.1%) had symptoms, often typical symptoms (fever, cough or breathlessness). More than half received any experimental treatment for COVID-19 (58.8%). Antibiotics were prescribed in 52.9%, with an increase of 47.2% in consumption compared with the same period in 2019.

Conclusion and relevance We detected considerable mortality associated with COVID-19, highlighting the challenges of the implementation of a coordinated programme to control SARS-CoV2 outbreaks in LTCFs reducing hospital referral rates.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CP-358 POINT PREVALENCE REVIEW OF MEDICINES RECONCILIATION FOLLOW-UP BY MEDICAL TEAMS

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Background and importance Medicines reconciliation (MR) is identified as a patient safety priority by the World Health Organization (WHO). The pharmacist led medicines reconciliation service at our institution undertakes MR in the WHO priority patient cohort; patients 65 years and over admitted through the emergency department (ED). Completed MR is documented in the general drug chart. On completion of MR, the pharmacist documents in the medical notes that MR has been undertaken. Discrepancies identified through MR are reviewed and actioned, as required, by the medical team.

Aim and objectives To determine if MR completed by pharmacists was being reviewed and actioned by the medical team.

Material and methods A 1 day hospital wide point prevalence review of MR follow-up by medical teams was undertaken. The review was completed by clinical pharmacists in February 2020. All patients who had an MR completed by a pharmacist in the current general drug chart were reviewed. Data were collected on the number of discrepancies, if the discrepancies were followed-up and the drugs involved.

Results A completed MR in the in-use general drug chart was identified for 88 (21%) inpatients. A total of 226 discrepancies were recorded. 76 patients (86%) had at least one discrepancy requiring medical review. Review and actioning of MR discrepancies was as follows (n=76):

- Followed-up in full for 67% of patients
- Partly followed-up for 18% of patients
- Not followed-up for 15% of patients

These discrepancies related to 27 individual drugs. Frequently occurring drugs included hydroxocobalamin, folic acid, cholecalciferol, denosumab, inhalers and eye drops. High risk drugs accounted for n=2 of the discrepancies not actioned. In all cases this involved a sedative drug.

Conclusion and relevance In most instances, MR undertaken by pharmacists was being reviewed and actioned by the medical teams. However, there is room for improvement. There is no international published data to benchmark this figure against. The low incidence of incomplete follow-up of high risk drugs is reassuring. A large body of literature demonstrates the benefit of MR to the patient; however, this benefit can only be realised if MR is followed-up. Identification of inhouse initiatives to ascertain barriers to follow-up is recommended.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CP-359 DEVELOPMENT AND VALIDATION OF A 30 DAY REVISIT RISK PREDICTION MODEL IN PATIENTS ADMITTED TO THE EMERGENCY DEPARTMENT DUE TO DRUG RELATED PROBLEMS

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Background and importance Drug related problems (DRPs) are an important cause of admission to the emergency department (ED), and one of the most frequently implicated drugs are those used for cardiovascular diseases. However, information regarding the risk factors associated with ED revisits is this group of patients is scarce.

Aim and objectives The aim of this study was to develop a predictive model of 30 day revisits to the ED in patients with a first visit for an episode of DRP.

Material and methods A retrospective cohort study was carried out including patients who attended an ED in 2019 due to DRPs caused by drugs classified in the ATC classification system as A, B and C. A 30 day prediction model was created in a derivation cohort using backward logistic regression. Those variables significant at p<0.100 in a multivariate analysis were assigned an integer score proportional to the regression coefficient. The model was then internally validated by k-fold cross validation and in the validation cohort.

Results 580 patients were included (mean age 80.0 (12.6) years) and 133 (22.9%) patients revisited the ED at day 30. Five independent risk factors (moderate to severe chronic kidney disease (5 points), previous ED visit within 3 months (6), high anticholinergic burden (8), DRPs related to heparin use (12) and safety DRPs (8)) were identified in the derivation cohort and were combined into an overall score. The model achieved an area under the curve–receiver operating curve of 0.71 (95% CI 0.66 to 0.75) in the derivation cohort and 0.70 (95% CI 0.65 to 0.74) in the validation cohort.