Conclusion and relevance The hospital pharmacist's role is fundamental in ensuring the correct use of these therapies and identifying patients whose ART could be improved. The impact of simplifying ART not only contributes to economic sustainability but could also reduce possible AEs from the treatment. In this case, dyslipidaemia was a common AE. Removing abacavir from the therapeutic regimen could reduce the cardiovascular risk.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-377 APPROPRIATENESS OF NUTRITIONAL SUPPORT FOR PATIENTS WITH INVASIVE MECHANICAL VENTILATION WITH COVID-19 DISEASE REQUIRING INTENSIVE CARE

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Background and importance Nutritional management in the intensive care unit (ICU) of patients with COVID-19 can influence their recovery. Several guides about nutritional support have appeared in the past few months

Aim and objectives To assess the appropriateness of nutritional management for COVID-19 patients in the ICU requiring invasive mechanical ventilation (IMV) through compliance with the recommendations of the Spanish Society for Intensive Care (SEMICYUC), the European Society for Clinical Nutrition and Metabolism (ESPEN) and the American Society for Parenteral and Enteral Nutrition (ASPEN).

Material and methods An observational retrospective study was conducted between 2 March and 13 May 2020. Patient data were taken from the clinical records. Demographic variables were age and sex; clinical variables were days until the start of artificial nutrition (AN), duration and type of enteral (EN) or parenteral nutrition (PN), body mass index (BMI), calorie intake/kg/day, protein/kg/day on the first and fifth days, increase in markers of hepatic cholestasis when duration of NP was >14 days, length of ICU stay and death.

Results 41 patients were included, 75.6% (n=31) men, and average age was 59.6±12.2 years. Median time to start of AN was 1 (0–6) day. 34.1% (n=14) of patients were obese, of whom 21% (n=3) were morbidly obese (average BMI 44.86±6.4). Average total kcal/kg/day and protein/kg/day on the first and fifth days of nutrition were 21.9±7.5 kcal/kg/day and 1.35±0.6 g protein/kg/day and 23.5±9.8 kcal/kg/day and 1.9±3.2 g protein/kg/day, respectively. Only 17% (n=7) started AN with EN, which was hypercaloric/hyperproteic (n=3) and normocaloric/normoproteic (n=4). At any time during hospital stay, 97.5% of patients had PN with a median of 14.5 (2–52) days. 20 people had PN >14 days. Alkaline phosphatase remained increased for 11 of them with a median of 13 (3–38) days. Direct bilirubin was elevated in all patients. 34 patients died and 26 remained on PN until the day they died.

Conclusion and relevance During the first day, AN accomplished the recommendations (20 kcal/kg/day and 1.2–1.3 g protein/kg/day). On the fifth day, total kilocalories did not achieve the recommended values (25 kcal/kg/day), although protein/kg/day was higher than the guidelines (1.5 kcal/kg/day). The reason might be the increasing protein request of

these patients. High doses of muscle relaxants could prevent proper functionality of digestive tube and low use of EN. It may be important to discuss the suitability of maintenance of AN for patients with a short life expectancy.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-378 ORAL THERAPY ADHERENCE AND SATISFACTION IN PATIENTS WITH MULTIPLE MYELOMA

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Background and importance The transition to oral therapies in patients with multiple myeloma (MM) offers potential benefits to patients, however they must self-manage their medications and adherence can become an issue. It has been shown that patient satisfaction with medication has a strong positive correlation with adherence in chronic diseases. To date, there is no standard method of measuring adherence.

Aim and objectives The aim of this study was to estimate the adherence rate of oral antimyeloma therapies using two indirect methods and to identify risk factors for medication non-adherence. A secondary aim was to explore patients' and caregivers' perceptions of their medications.

Material and methods We carried out a cross sectional, observational, prospective, multicentre survey based on a self-reported questionnaire. All consecutive MM patients, with at least 3 months of oral therapy prescriptions were included. The structured and validated 6 item Girerd Scale and the medication possession ratio (MPR) were used for measuring medication adherence, and the SATMED-Q questionnaire was used for measuring patient satisfaction with the medication. An analysis of risk factors for non-adherence to oral therapy was performed using univariate analysis. Patients' and caregivers' opinions about their medications were assessed with a score from 0 (no importance) to 10 (highest importance).

Results 101 of 116 analysed patients participated in the survey, giving a response rate of 87%. The prevalence of adherence to oral antimyeloma therapy was estimated at 51.5% using the questionnaire, corresponding to a high level of adherence (ie, score=6). According to the MPR, adherence was evaluated at 96%, which was also considered high (ie, MPR ≥0.80). With both methods combined, adherence was estimated at 50.5%. One risk factor for non-adherence to oral antimyeloma therapy was identified: Eastern Cooperative Oncology Group Performance Status (ECOG-PS) >2 (p value=0.007). One predictive factor for good adherence to oral antimyeloma therapy was also identified: high satisfaction with treatment (p=0.01). No statistically significant difference was observed between patients and caregivers' perceptions of their medications.

Conclusion and relevance Determining risk factors that influence adherence could be helpful to better identify patients at

a higher risk for non-adherence, to personalise therapeutic information and education, and to improve the quality of healthcare overall.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-379 PARENTERAL NUTRITION MANAGEMENT IN CORONAVIRUS CRITICAL PATIENTS: CASE REPORT

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Background and importance Parenteral nutritional (PN) support in critically ill patients with SARS-CoV-2 infection is a currently unknown field of study with little published literature to generate scientific evidence.

Aim and objectives To carry out a descriptive study of all patients with SARS-CoV-2 infection admitted to the ICU and resuscitation unit with invasive mechanical ventilation and central PN between March and June 2020 by the nutrition unit of the pharmacy service.

Material and methods A retrospective longitudinal study was carried out in a tertiary hospital. The clinical situation was reviewed, and the contributions of the artificial nutrition preparations were studied. Energetic requirements were calculated with the Harris-Benedict equation corrected for stress factor and protein requirements with weight adjusted by protein factor. Categorical variables are presented as percentages and continuous variables as mean (SD) or median (IQR).

Results 11 patients were included, with a mean age of 58.5 ± 9.9 years, 72.7% men. 54.5% were admitted to the ICU and 45.5% to resuscitation, with a stay of 48 ± 26 days and a mortality of 36.4%. The number of comorbidities was 3.1 ± 1.9, highlighting arterial hypertension (63.6%), dyslipidaemia and diabetes mellitus (both 27.3%). All analytical parameters evaluated at admission were altered (IL-6, D-dimer, LDH, CRP and lymphocytes).

BMI was 27.6 ± 5.2 kg/m², with 54.6% of patients with excess weight. Duration of PN was 6 ± 3 days and in 81.8% enteral nutrition was co-administered by nasogastric tube. Estimated total energy expenditure was 2162 ± 244 kcal/day with protein requirements of 117 ± 14 g/day. With artificial nutritional support, 2166 ± 427 kcal/day and 117 ± 18 g protein/day were administered.

PN provided 1169 ± 256 kcal, 70 ± 12 g protein, 129 ± 31 g glucose and 39 ± 16 g lipids. The non-protein energy/g nitrogen ratio was 77 ± 14 kcal/g, the glucose:lipid ratio was 61:39 ± 15%, volume was 1152 ± 162 mL and osmolarity was 1425 ± 111 mosmol/L. Regarding micronutrients, sodium (74 (IQR 32) mEq), potassium (59 (IQR 45) mEq), magnesium (10, (IQR 3) mEq), calcium (9 (IQR 0) mEq), chloride (48 (IQR 37) mEq) and phosphorus (12 (IQR 7) mmol) were included, in addition to mixtures of vitamins and trace elements.

Conclusion and relevance Artificial nutritional support was the only food source for intubated coronavirus infected patients, so it is essential that it meets nutritional requirements, as in this study, so that it contributes to the recovery of the patient.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-380 AN INTEGRATED PHARMACIST LED MEDICATION REVIEW SERVICE FOR ELECTIVE SURGERY PATIENTS AT THE PRE-ANAESTHESIA OUTPATIENT CLINIC

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Background and importance Drug related problems (DRPs) (eg, untreated indication, drug-drug interactions (DDIs) and contraindicated medicines) significantly contribute to patient harm. Especially in surgical departments, DRPs often represent a significant threat to patient safety. Therefore, an integrated pharmacist led medication review service was initiated at the pre-anaesthesia outpatient clinic of a 1700 bed tertiary care centre.

Aim and objectives The aim was to evaluate the impact of medication reviews prior to elective surgery, quantitatively and qualitatively, by describing DRPs, pharmaceutical interventions and their acceptance rate.

Material and methods During the 5 month study period, patients undergoing elective surgery were prioritised by age and anaesthesia risk score, after their preoperative evaluation. Their medication regimens and further relevant data (eg, laboratory values, comorbidities) were reviewed. In the case of inconsistencies, patients were called to amend and verify their current regimens. Identified DRPs and corresponding interventions were suggested in written form to the respective surgical department. A follow-up of interventions was performed by retrospective analysis of patients' discharge letters.

Results Medication reviews were performed in 1281 patients (51% women, 64 ± 18 years of age). A total of 1742 DRPs were identified in 700 (54.6%) patients, accounting for an average of 2.5 DRPs per patient. The three most common DRPs, apart from the need for specific medication information (27% of patients), were potential DDIs (7.1%), non-conformity to therapeutic guidelines (5.6%) and untreated indications (5.5%). The three most common interventions were the provision of medication related information (49.7%), the recommendation of additional medicines (11.1%) and patient monitoring (10%). 52% of interventions were accepted, while a high proportion of interventions were lost to follow-up.

Conclusion and relevance The study results showed that pharmacist led medication reviews prior to surgery significantly contributed to the prevention of DRPs. Inappropriate and incomplete information in the medical record was commonly encountered as a barrier to the interventions. The moderate acceptance rate needs to be analysed further (eg, acceptance rate per intervention categories) and strategies to optimise approval of recommendations need to be discussed with different surgery departments.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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