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

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

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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Conflict of interest No conflict of interest