EFFECTIVENESS OF ANTIEMETIC THERAPY DURING CHEMOTHERAPY IN A REGIONAL HOSPITAL

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Background and importance Chemotherapy induced nausea and vomiting (CINV) remains an important adverse effect as it affects the quality of life of patients, implies chemotherapy dose reductions and compromises adherence.

Aim and objectives To evaluate the effectiveness of antiemetic therapy in the control of CINV, comparing groups of patients with adequate and inadequate patterns, according to clinical practice guidelines.

Material and methods This was a longitudinal retrospective study for population characterisation and non-intervention. Patients receiving intravenous chemotherapeutic treatment from April to July 2018 were included. Independent variables: demographics (age and sex), and adequacy of the guidelines. Dependent variables: chemotherapy induced nausea (CIN), quantified by adding the scores obtained through a self-administered questionnaire based on the CTCAE scale, for the three phases (anticipated+acute+delayed); and chemotherapy induced vomiting (CIV), similarly quantified.

Data are expressed as mean (SD) for continuous variables and absolute and relative frequency for categorical variables. Multivariable logistic regression models were used to study the association of adequacy and effectiveness. Statistical analyses were performed with the R software (V3.4.3). A p value \(<0.05\) was considered statistically significant.

Results A total of 797 chemotherapy cycles were administered to 148 patients during the study period. Of these, 133 patients aged 62.26 (11.13) years and 70 (52.63%) were women. They were divided into three groups, according to the adequacy of the guidelines: sufficient (75), excessive (38) and insufficient (20).

The excess deviations (OR=0.311 (0.038, 1.535), p=0.197) or insufficient adequacy (OR=0.388 (0.057, 1.878), p=0.278) were not predictors of nausea. In contrast, insufficient adequacy was a predictor of vomiting (OR=17.907 (2.078, 148.042), p=0.015), while the excess deviation was not (OR=1.799 (0.064, 37.415), p=0.688).

Conclusion and relevance For all CINV anticipated, acute and delayed phases considered together, an insufficient antiemetic pattern was associated with worse control of vomiting, but not nausea. In future studies, separate assessment of the influence of the adequacy of the antiemetic pattern on each of the CINV phases deserves further investigation.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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ADEQUACY OF ANTIEMETIC TREATMENT DURING CHEMOTHERAPY IN A REGIONAL HOSPITAL

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Background and importance Despite the availability of international guidelines for antiemetic treatment in chemotherapy, their implementation during daily clinical practice is not optimal.

Aim and objectives To assess adaptation of the antiemetic pattern to the degree of chemotherapy emetogenicity in a regional hospital, according to the clinical practice guidelines of MASCC/ESMO, ASCO and NCCN.

Material and methods A longitudinal retrospective study was conducted for population characterisation and non-intervention. Patients receiving intravenous chemotherapeutic treatment from April to July 2018 were included. Demographic variables (age and sex), indication for chemotherapy, scheme, cycle, administration of 5-HT3 antagonists, NK-R antagonists, dexamethasone, and other antiemetics, and adaptation of the antiemetic treatment to guidelines were collected.

Data are expressed by mean (SD) for continuous variables and by absolute and relative frequency for categorical variables. Statistical analysis was performed with R software (V3.4.3).

Results The sample included 133 patients, aged 62.26 (11.13) years and 70 (52.63%) were women. They received chemotherapy for 12 different indications, with 45 different schemes, 66.92% undergoing their first cycle, and 33.08% their second or later. No patient was included at different cycles of his/her treatment.

On the day of chemotherapy, 121 (90.98%) patients received antiemetic monotherapy or polytherapy. A total of 112 (84.21%) patients received a 5-HT3 antagonist, 69 (51.88%) an NK-R antagonist and 112 (84.21%) dexamethasone. In the following days, 58 (43.61%) patients received monotherapy or polytherapy. Mainly, 34 (25.36%) were given dexamethasone, 10 (7.52%) a metoclopramide fixed schedule, 5 (3.76%) metoclopramide on demand and 5 (3.76%) a 5-HT3 antagonist.

Adequacy of the recommendations of the guidelines was sufficient in 75 (56.39%) patients, while the remaining presented an excessive pattern (38 (28.57%) patients) or insufficient pattern (20 (15.04%) patients). The proportion of sufficient adequacy in the hospital population was estimated at 0.56 (0.47–0.64).

Conclusion and relevance Only slightly more than half of the patients received an antiemetic pattern in accordance with the internationally agreed clinical guidelines, so there is ample room for improvement. Among those with a non-consistent pattern, an excessive pattern was much more frequent.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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ANALYSIS OF THE ADEQUACY OF VITAMIN D PRESCRIPTIONS

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Background and importance In recent years, a considerable increase in vitamin D determinations and supplementation has been observed, although there is uncertainty about its clinical benefit in situations other than osteomalacia and rickets. In addition, according to the Spanish Agency for Medicines and
Healthcare Products, serious cases of hypercalcaemia have been reported in children and adults associated with the use of cholecalciferol.

**Aim and objectives** To analyse the adequacy of cholecalciferol prescriptions in inpatients to detect medication errors.

**Material and methods** A retrospective observational study was conducted from January 2018 to July 2019 in a second level hospital, which included patients who had prescriptions of cholecalciferol during their hospital admission.

The following variables were recorded sex, age, pathology, indication, prescribed dose, vitamin D levels to define the degree of deficit, medication error (yes/no) and type of error, and prescribing service.

Data were obtained from the electronic clinical records (Diraya) and electronic prescribing software (Prisma).

**Results** Forty-six patients (56.5% women) were included, with a median age of 71.5 years (range 23–87). The most frequent pathologies presented by the patients were: renal insufficiency (26%), digestive pathologies (19.6%), thyroid disorders (13%) and joint pathology (10.9%).

Cholecalciferol was prescribed for vitamin D deficiency in 38 (82.6%) patients and as a prevention in 8 (17.4%). In 28 (60.9%) patients the dose of cholecalciferol was prescribed according to the summary of product characteristics, with a median of 400 IU. In 38 (82.6%) patients serum levels of vitamin D were available at hospital admission: 22 (57.9%) had levels within the range, 8 (21.7%) and 7 (18.5%) had levels below and above the range, respectively.

Out of range analytical determinations were observed in 41 patients (67%); 65.5% only had alteration (9.7%) and 34.5% had alteration and medication errors detected, the most frequent was overdose (13.2%). Eighteen (39.1%) medications were detected, the most frequent was overdose (50%), non-indication (33.3%) and administration frequency (16.7%).

**Conclusion and relevance** The causes of non-adequacy of prescriptions in our patients corresponded to cholecalciferol overdose and incorrect indication. An area of improvement in the prescription of cholecalciferol has been detected. We will carry out an interdisciplinary protocol for the use of cholecalciferol with the services involved. In addition, prescriptions with medication errors will be communicated to the physicians (through telephone calls or messages) to avoid serious cases of hypercalcaemia and inadequate supplementation.

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**5PSQ-006 PARENTERAL NUTRITION IN A NEONATOLOGY INTENSIVE CARE UNIT: DURATION AND COMPLICATIONS**

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**Background and importance** Parenteral nutrition (PN) can be used in any malnourished child or anyone at risk of malnutrition. In preterm newborns, it should be started in the first hours of life, although this artificial technique is not exempt from a series of complications related to its use.

**Aim and objectives** To analyse the use, prescription time and incidence of complications of PN in a neonatology intensive care unit (ICU).

**Material and methods** A retrospective descriptive study on the use of PN in the neonatology ICU in our hospital was performed in 2018. Demographic data, birth weight, prescription/reason for suspension, total number of PN days, total number of PN developed, type of nutrition, number of prescription days, metabolic complications (MC) (out of range glucose and triglyceride levels) and electrolytic complications (EC) (out of range ions) were collected from the electronic medical records and PN software.

**Results** Sixty-one patients (56% male, 44% female) were included in the study: 497 PN were prescribed, all central, and motivated by prematurity (97%), sepsis (1.5%) and oesophageal atresia (1.5%). Causes of cessation were transition to enteral nutrition (79%), oral nutrition via a nasogastric tube (8%), enteral nutrition via a nasogastric tube (6.5%), death (5%) or loss of central venous line (1.5%).

The number of days PN was given was <3 (n=7), 4–7 (n=21), 8–11 (n=18), 12–15 (n=8) and >15 (n=7). Mean duration in preterm infants by weight was 9.5 days (±1.5 kg, n=31) and 8 days (>1.5 kg, n=28).

Out of range analytical determinations were observed in 116 cases. The average altered parameters in premature infants according to weight were: 2 (±1.5 kg) and 0.9 (>1.5 kg). The average alterations according to duration were: 0.5 (±5 days), 1.5 (5–10 days) and 3 (10 days).

Alterations were detected in 41 patients (67%); 65.5% only developed EC and 36% only MC. The most frequent were hypernatraemia (31%) in EC and hyperglycaemia (24.5%) in MC (also being the earliest).

**Conclusion and relevance** The main reason for prescription of PN in neonates was prematurity. The main reason for cessation was a switch to enteral nutrition. Usage time was slightly longer in those with a lower birth weight. For alterations, the most frequent was hypernatraemia and the earliest hyperglycaemia.

**REFERENCES AND/OR ACKNOWLEDGEMENTS**

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