CP- 077

EVALUATION OF GLUTAMINE SUPPLEMENTATION IN PARENTERAL NUTRITION IN A GENERAL HOSPITAL

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BACKGROUND: The administration of glutamine (GLU) intravenously as part of protein intake in patients who parenteral nutrition (PN) is given, is associated with decreased infectious complications, hospital stay and, possibly, reduced mortality in critically ill patients.

PURPOSE: This work aims to study the use of GLU in clinical practice as a supplementation to PN according to the product information and position of the European Society for Clinical Nutrition and Metabolism (ESPEN).

STUDY DESIGN: This is a descriptive observational study which includes patients who have received PN GLU supplementation from January 2012 to June 2012. The following data were collected from electronic medical records and from MedicalOne®Parenteral software: prescribing service, indication, weight, GLU dose, creatinine clearance (CrCl), liver disease and duration of treatment with GLU.

RESULTS: Of the 282 patients who received PN, 36 (12.8%) received GLU. The indication for the prescription of GLU is shown in the Chart 1. Weight was recorded in 22 of the 36 patients, range 45 to 108 kg (median 60). 100 ml of alanylglutamine was administered to all of them (82 mg alanine + 134.6 mg glutamine); 7 patients were underdosed (31.8%) considering that the recommended dose is 1.5-2.5 ml/kg. 2 patients (5.5%) had severe renal dysfunction (CrCl <25 ml / min) and 2 (5.5%) severe liver disease, situations in which the administration of GLU is contraindicated. The time range GLU administration was 1-28 days (median: 6). The using experience for more than 9 days is limited; yet, the product information indicates that the duration of treatment should not exceed 21 days. In 11 patients treatment duration was increased to 9 days, and in 1 patient over 21 days.

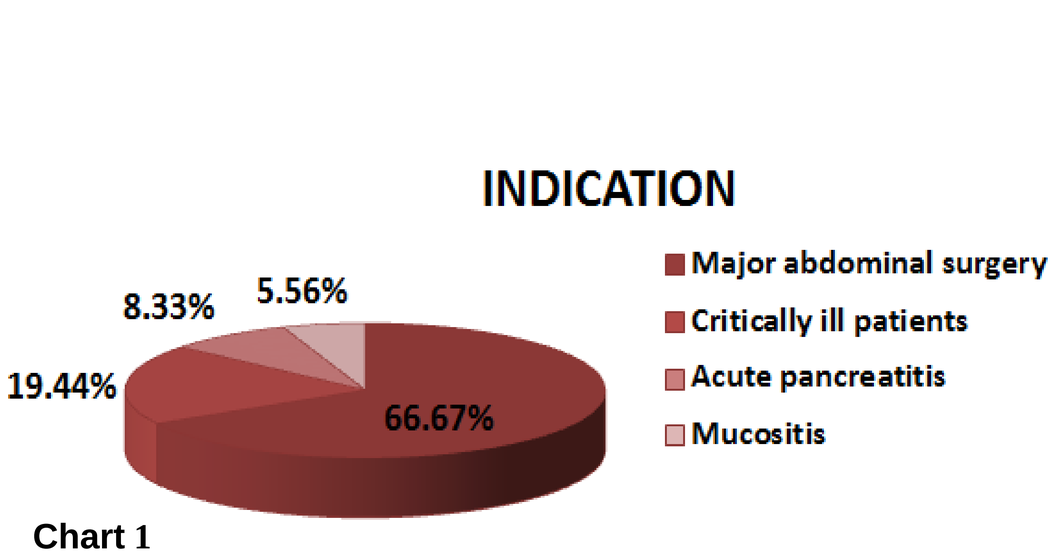
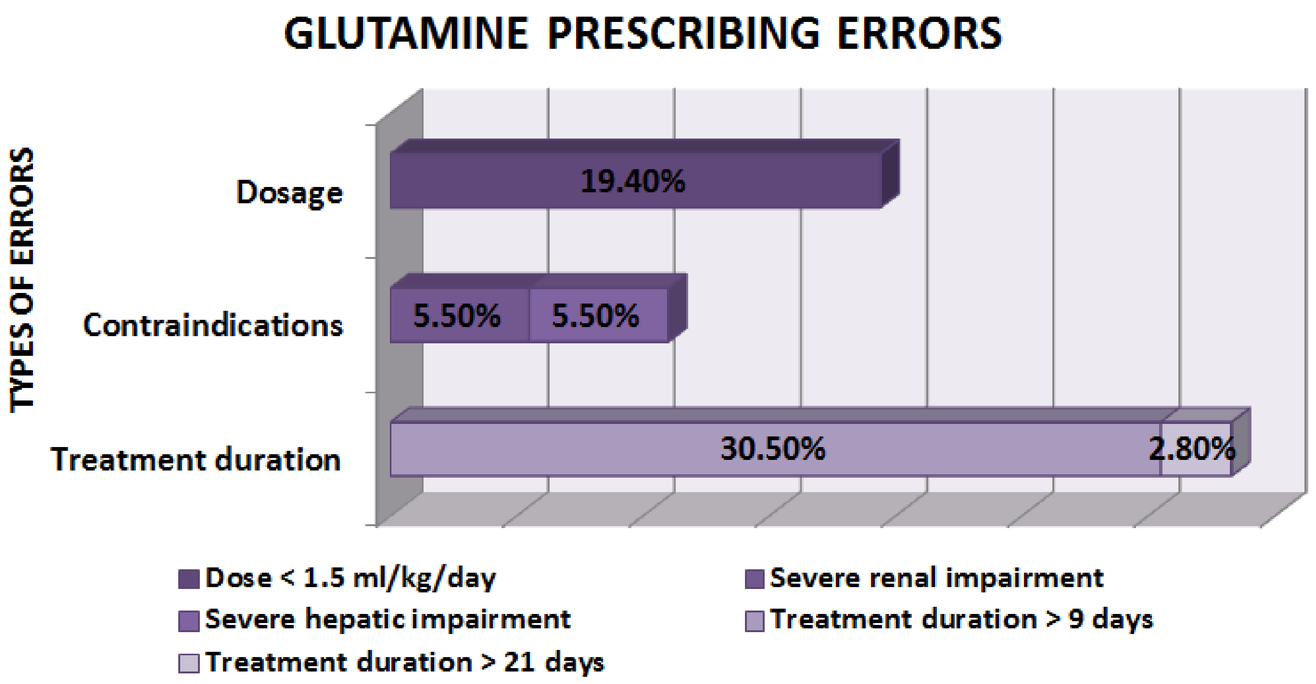


Chart 1



CONCLUSIONS: The use of GLU meets the recommendations of the product information and ESPEN in terms of indication. Instead, we have found some errors in terms of dosage, contraindications and duration of treatment. The pharmacist, using clinical monitoring of patients and prescription validation of PN, is key to alert the doctor about these GLU prescription and administration errors in critically ill patients.