Abstract

Background and objective: An inadequate fluid therapy can worsen the outcomes of surgical patients, but there are no data in medical patients. The aim of this study was to determine the adequacy of fluid therapy in hospitalised patients of medical wards, and its influence on outcomes. Methods: Cross-sectional study including nil-per-os patients admitted in medical wards of the Complejo Asistencial Universitario de León. The administered fluid therapy was compared with the standardised requirements. Nutritional status was evaluated with Subjective Global Assessment. Fasting was considered inappropriate if it lasted > 7 days in well-nourished, and > 5 days in malnourished patients if nutritional support had not been provided. Results: Fluid therapy lasted 4 (IQR = 2) days, and fasting was inadequately maintained in 27% of patients. Fluid requirements were correctly fulfilled, but patients received an excess of sodium (+58.4%) and chloride (+62.2%), and potassium administration was insufficient (-35.1%). Glucose supply was 68.8 (29.2) g/d, and 99% received < 130 g/d. Patients with an inadequate duration of fasting had a longer hospital stay after adjusting for sex, age, nutritional status, infused volume, electrolytes, glucose and diseases. Only malnutrition predicted mortality during hospitalisation (OR 10.5; 95% CI 1.3 to 83.2), when multivariate analysis was performed. Conclusions: Fasting medical patients receive an inadequate supply of glucose and electrolytes. Prolonged fluid therapy and malnutrition may worsen the outcomes of these patients, independently of other conditions like age or diseases.

Keywords

Key words, Fluid therapy, Malnutrition, Fasting, Subjective Global Assessment.