Abstract

Background & aim: To assess the nutritional status of hospitalised trauma patients and the repercussion on the clinical follow up.

Methods: In a prospective way 161 adult patients admitted to the units of Intensive Care (ICU), General Surgery, Maxillofacial Surgery and Orthopedics of the Centro de Emergencias Médicas in Asunción, Paraguay, from March 2002 to March 2004 were evaluated at admission by using the Subjective Global Assessment (SGA). Patients were followed to determine length of hospital stay, complications and in-hospital mortality.

Results: From the trauma patients median age was 27 (14-92) years and 94% were males. Most patients (74%) were from the countryside. The most frequent anatomic sites of trauma were: head 25%, thorax 16.6%, limbs 15.4%, abdomen 14%. The median Injury Severity Score (ISS) was 20 (1-39). From this population of patients, 40% were malnourished or at risk of malnutrition according to the SGA. Multivariate analysis identified as significant risk factors for mortality: malnutrition according to the SGA \( p = 0.04, \text{RR} = 4 (1-15) \), and admission to the ICU \( p = 0.0001, \text{RR} = 53 (12-234) \). Risk factors for complications were malnutrition according to the SGA \( p = 0.003, \text{RR} = 2.9 (1.4-5.8) \) and ISS over 20 \( p = 0.001, \text{RR} = 8.4 (2.3-29.9) \). The risk factors for length of stay were malnutrition according to the Subjective Global Assessment \( p = 0.01, \text{RR} = 2.3 (1.2-4.7) \) and Injury Severity Score over 20, \( p = 0.03, \text{RR} = 2.8 (1-7.3) \).

Conclusions: In the conditions of this study, malnutrition is frequent on admission in trauma patients, and is an independent risk factor for morbidity, mortality, and prolongs the length of hospitalisation. Efforts should be made to quickly assess the nutritional status of these patients and early start nutritional intervention.

Keywords

Nutritional Assessment, Malnutrition, Trauma, Mortality, Outcome.