Abstract

Background & aims: Malnutrition is very common in patients when admitted to the hospital. The aim of the present study was: a) to determine the prevalence of malnutrition at admission in a tertiary care hospital and identify risk factors for malnutrition, and b) to test the sensitivity and specificity of different screening tests for malnutrition compared to subjective global assessment (SGA).

Methods: We conducted a prospective study at 24h of admission in order to assess malnutrition in 537 adult subjects (56.4% males, mean age of 61.3±17.7 years) using 4 different screening tools: mininutritional assessment short form (MNA-SF), nutritional risk screening 2002 (NRS2002), malnutrition universal screening tool (MUST), and SGA. Anthropometrics and co-morbidities were registered. Results: The overall rate of undernutrition was 47.3%. Specific rates were 54.2% in patients > 65y vs. 40.7% < 65y (p = 0.002) and 63.4% in medical vs. 34.0% surgical department (p < 0.001). Identified risk factors of malnutrition at admission were: the presence of heart disease (OR 1.74 CI 95% 1.16-2.60 p = 0.007) for MNA-SF (AUC 0.62); liver disease (OR 4.45 CI 95% 1.9410.22 p < 0.001), > 65y (OR 2.10 CI 95% 1.19-3.93 p = 0.011), medicine department (OR 3.58 CI 95% 1.93-6.62 p < 0.001) for SGA (AUC 0.96); lung disease (OR 3.34 CI 95% 1.45-7.73 p = 0.005), medicine department (OR 2.55 CI 95%1.09-5.98 p = 0.032) for NRS 2002 (AUC 0.97). Recent unintentional weight loss was a common factor. Conclusions: Undernourishment at hospital admission is frequent. Comorbidities may contribute to the presence of undernutrition at admission. Nonetheless, SGA, NRS2002, MNA-SF or MUST can be used in our setting. (Nutr Hosp. 2014;29:674-680) DOI:10.3305/nh.2014.29.3.7120

Keywords