NUTRITION RISK CLASSIFICATION OF CRITICAL ONCOLOGIC PATIENTS BY NUTRIC USING SAPS 3

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Introduction: Malnutrition is a critical condition among hospitalized patients and its high prevalence occurs due to the difficulty of identifying and managing these patients at nutritional risk. Early nutritional screening is the first step to an adequate intervention. The NUTRIC Score is the first validated and specific nutritional risk assessment tool for ICU patients. One of its variables is APACHE II, a score that estimates mortality, but is already in disuse. Currently, there are more up-to-date tools with less time to measurement and with good accuracy such as SAPS 3, which justifies the substitution of this score in the nutritional risk quantification by NUTRIC.

Materials:

- Sociodemographic and clinical data;
- Nutritional risk tools;
- ICU Scores.

Objectives:

- Evaluate the sensitivity and specificity of NUTRIC Score using SAPS 3 (NUTRIC-S) in oncologic critically ill patients.
- Describing the nutritional risk for NUTRIC Score and NUTRIC-S;
- Compare nutritional risk and the need of invasive mechanical ventilation (IMV), ICU length of stay and outcomes.

Methods:

- ROC Curve
- Kappa Test
- Chi-square Test
- Mann-Whitney Test

Results

- Total of 78 patients;
- Average of 60 years;
- 66.7% surgical patients;
- 33% clinical patients;
- 41% (NUTRIC) 38% (NUTRIC-S)
- 59% (NUTRIC) 61% (NUTRIC-S)

- The area under the curve of NUTRIC-S was 0.786, NUTRIC was 0.730 (graph 1) and the agreement between the two methods to predict nutritional risk by the Kappa test was 0.54.

Graph 1 - Performance of NUTRIC-S in predicting mortality in comparison with NUTRIC of patients in an Oncologic ICU

Graph 2 - Nutritional Risk by NUTRIC and NUTRIC-S regarding the need of IMV of patients in an Oncologic ICU

Graph 3 - Nutritional risk by NUTRIC and NUTRIC-S in relation to the outcome of patients in an Oncologic ICU

CONCLUSION: NUTRIC-S has better accuracy in predicting mortality. A high nutritional risk for both tools was more associated with clinical complications and unfavorable outcomes.

Research in progress:

Nutrition risk of critical patients by NUTRIC using SAPS 3 in a general ICU.

Patients at high nutritional risk for NUTRIC and NUTRIC-S required greater use of IMV (p<0.001) (graph 2), were more days in the ICU (11.7 days - p<0.002 and 11.9 days - p<0.001) and presented higher mortality (p<0.005) and (p<0.001) respectively (graph 3) in comparison with patients with low nutritional risk.