Analysis of 206 oncohematological patients admitted to the Intensive Care Unit.

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Background

The critical care unit (ICU) provides support to a diverse population that includes oncohematology (OH) patients. There is a tendency to delay admission of OH patients to the ICU. Currently, advances in the diagnosis and treatment of OH diseases; advances in the molecular biology of specific mutations; advances in stem cell transplant and immunotherapy have produced a change in the prognosis of patients.

Objective

1.To assess mortality at 60 days in the ICU.

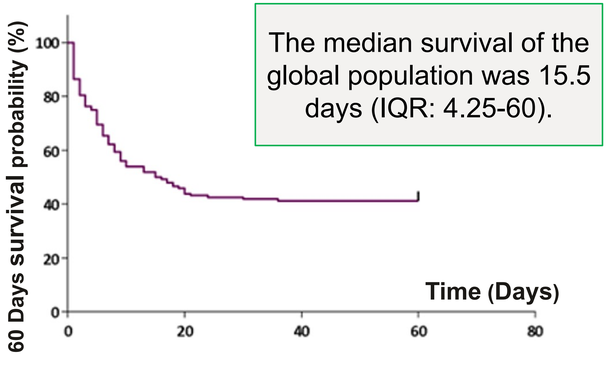
2.To evaluate the association between clinical features such as hemodynamic, respiratory, and hemodialysis support requirements and their associations with mortality in the ICU.

Materials & Methods

A descriptive, retrospective cohort study was carried out in the population of adult patients with OH diseases who were admitted to the ICU, In the period from January 2009 to February 2021 to evaluate mortality in the ICU and associations between epidemiological, clinical variables and others related to the OH situation and mortality in the ICU.

Results

In this study were included 206 patients with OH diseases. The median age was 59 years (IQR: 46-68), with male predominance of 113 patients (54%). The median on days of hospitalization was 15 (IQR: 8-28) whilst the median of days in the ICU was 5 (IQR: 3-8). Half of the patients were admitted with neutropenia 103 (50%) to the ICU. Mortality was evaluated at the time of discharge from the ICU, reaching 45% (93 patients), 47% at 30 days and 49% at 60 days.



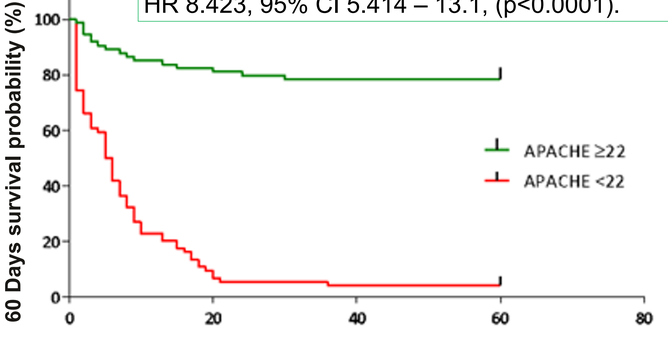
The median survival of the global population was 15.5 days (IQR: 4.25-60).

A statistically significant relationship was found in the multivariate analysis for mortality with the APACHE II variables (p = 0.0001) and the requirement for mechanical ventilation (MV) (p = 0.021). The median APACHE II scored 22 points (IQR: 15-25).

Variable	Odds ratio (adjusted)	95% CI	p value
APACHE II score	1,33	1,21-1,47	**0,0001**
MV Assistance	2,91	1,17-7,17	**0,021**
Neutropenia at admission	2,21	0,98-5,31	0,061
Use of inotropes	0,975	0,73-1,11	0,121
Hemodialysis	2,68	0,66-10,88	0,167
Bacteremia	1,16	0,32-3,74	0,791
Age	0,98	0,96-1,01	0,149

Using the ROC curve method, the APACHE II score value of 22 was the point of greatest statistical significance. The log rank test method was used to compare patients with a value greater or less than 22.

The Median survival in days was (IQR): NR 5.5. vs HR 8.423, 95% CI 5.414 – 13.1, (p<0.0001).



Conclusions

The value of 22 points scored on APACHE II and the requirement for mechanical ventilation served to discriminate between two groups of patients with different prognosis. This variables may have prognostic utility with respect to mortality.

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