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Haematological patients admitted to icu: Differences between survivors and non-survivors

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Intr

Patients with haematological malignancies admitted to ICU have high mortality. Reticence of intensive care providers to admit and treat these patients is well described in literature.

Objectives

To evaluate differences between survivors and non-survivors and provide possible independent risk factors for ICU mortality.

Methods

Single centre observational retrospective study in a 14-bed Intensive Care Unit of a University Hospital. All haematological patients admitted between January-2009 and December-2014 were enrolled. Data acquired included: demographics characteristics, haematological diagnosis, reason of ICU admission, severity-of-illness scores (APACHE and SOFA) and intensive care therapy (mechanical ventilation (VM), extrarenal therapy depuration (ETD) and vasopressor support (VS)).

Results

We included 38 patients in the study,15(39,47%) were survivors and 23(60,52%) were non-survivors. Median age of 50,47 ± 13,98 vs 59,78 ± 14,73 ($p > 0,05$) and predominance of males in both groups (60% vs 73,9%, $p > 0,05$), respectively. In both groups non-Hodgkin lymphoma was the most frequent haematological malignancy, 53% and 30,4 %, survivors and non-survivors respectively and acute respiratory failure was the most frequent reason for ICU admission(66% and 39,1%, respectively). Intergroup comparisons revealed statistically significant differences in APACHE (19,73 ± 8,05 vs 26,48 ± 8,74, $p < 0,05$) and SOFA (9 ± 3,4 vs 11,83 ± 3,23, $p < 0.05$). During the first 24h of ICU admission, 60% of the survivors patients had 2 or more organ failures, and 73,9% in non-survivors group. During evolution in ICU, survivors patients required VM and VS in 80% and 66,7%, respectively. None of them needed EDT. Non-survivors required VM and VS in 91% and 95,7% respectively, and 17,4% needed EDT. There were no statistically significant differences in ICU support therapies between survivors and non-survivors. No independent risk factors for mortality were found by logistic regression analysis.

Conclusions

Mortality in patients with haematological malignancies remains high. There were significant differences in severity-of-illness scores during the first twenty-four hours of ICU admission between survivors and non-survivors. No significant differences in intensive care therapy were found between groups during ICU hospitalization.

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