

Category : **Respiratory: monitoring**

A269 - Oxygenation parameters that affect the outcome in icu patients with critical covid - 19 infection.

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Introduction:

COVID - 19 pandemic continues to affect millions worldwide, while the critical form of the disease requires ICU hospitalization to manage mainly respiratory failure. Our retrospective observational study aimed to test the hypothesis that there is a difference in mean values of oxygenation parameters on ICU admission day, like oxygenation index ($\text{PaO}_2 / \text{FiO}_2$) and oxygenation index over respiratory rate, among patients with confirmed critical COVID - 19 infection who died and patients who survived ICU.

Methods:

During late 2020 to 2021, 69 patients indicated with the diagnosis of critical COVID 19 disease admitted to ICU served to our community hospital. Mean age 66.14 years, length of stay 10.75 days, days under mechanical ventilation 9.97. The patients separated into two groups. Group A involved all patients who survived ICU (17 pts) and group B all patients who died in ICU (52 pts). We looked for statistically significant differences between the medians values of two groups according to oxygenation parameters on the ICU admission day, performing unpaired t - test or Mann-Whitney Test according equal S.D.s assumption.

Results:

Table

Conclusion:

According to our data, there was a strong statistically significant difference detected between the mean values of two groups according to oxygenation parameters we measured, while the oxygenation index over respiratory rate proved to be the stronger. Our data suggest that the oxygenation disorder was not only the main impact of COVID - 19 infection on the ICU admission day, but was so important that affected the ICU outcome as well.

Table:

Group A / B	Mean	Max	Min	p value
PaO ₂ / FiO ₂	111.5 / 76.4	299 / 189	44 / 33	0.0068
PaO ₂ / FiO ₂ / RR	5.3 / 3.7	13.5 / 9.4	2.2 / 1.2	0.0047

Results