

Category :**ICU organization**

A184 - Validation of the covid-19 decision support tool in the intensive care unit of a large non-university, teaching hospital; a retrospective analysis

JG Grietens ; XW Willaert ; DM Mesotten ; TF Fivez

Ziekenhuis Oost-Limburg, Anesthesiology and intensive care, Genk, Belgium

Introduction:

In early spring, Belgium was struck hard by the COVID-19 pandemic, reporting one of the highest mortality rates in the world(1). Our hospital, *Ziekenhuis Oost-Limburg (ZOL)*, is situated in Limburg, which was the epicenter of the COVID crisis in Belgium, reporting the highest infection rate of all Belgian provinces(2). National guidelines concerning admission criteria on ICU of patients with a COVID-19 pneumoniae were lacking.

This is a single center retrospective analysis of patients that would be have been excluded from ICU according to the NHS COVID-19 decision support tool. All patients admitted to the ICU with a confirmed COVID-19 pneumonitis from March to June 2020 were included in the analysis.

Methods:

Categorical data were represented as numbers and percentages. The distribution of continuous data was analyzed and represented as either mean +/- SD or median and IQR. No data imputation was done as for all variables the missings were less than 15%. All P-values were 2-sided and considered significant when < 0.05. All analyses were performed with JMP software version 15.0.0(SAS Institute, Cary, NC, USA).

Results:

97 patients were admitted to the ICU. Mean APACHE III was 67(n16), with a predicted ICU mortality of 30%. The ICU mortality rate was 20.6%(n20). 44%(n44) patients would not be admitted to the ICU according to the NHS guidelines. The mortality in this group was significantly higher 38%(17).

Conclusion:

Although mortality is significantly higher; 28% of our population (27) wouldn't be admitted to the ICU according to the NHS COVID-19 decision support tool; although they did survive. Follow-up of these patients is planned.

References:

1. How well have OECD countries responded to the coronavirus crisis?The Economist Intelligence Unit, @TheEIU, June 17,2020
2. Epidemiological situation of the coronavirus in Belgium:daily report of national and international situation. Sciensano. Accessed June 21, 2020.
3. National Institute for Health and Care Excellence.*COVID-19 Rapid Guideline: Critical Care* 2020.