

Residual disability in critically ill patients 6 months after ICU discharge

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Argomento: Altro

Background

Critically ill patients develop cognitive, psychiatric and physical disabilities up to five years after discharge[1][2]. In particular ARDS (Acute Respiratory Distress Syndrome) is related with persistent pulmonary dysfunction[3]. We hypothesized that the decrease in morbidity and mortality due to the advances in critical care medicine could improve long-term outcomes.

In our follow-up programme, we evaluated prospectively pulmonary function and recovery of daily living activity (ADL) six months after discharge from ICU, investigating the differences between ARDS and non-ARDS patients.

Methods

We screened adult patients admitted to our ICU during the first semester of 2018, with ICU stay >4 days, mechanically ventilated >48 hours and/or requiring vasopressors, without pre-existing psychiatric diagnosis. We evaluated survivors six months after ICU discharge. At each visit, patients were interviewed and underwent pulmonary function test and 6-minute walking test (6MWT) in outpatient's clinic. Analysis were performed in the total population and in ARDS and non-ARDS subgroups.

Results

51 patients were screened and 31 were evaluated at six months (13 died, 7 lost at follow-up). Among them no significant pathological pulmonary function and Barthel index were measured, while 6MWT distance was slightly lower than predicted (Table 1). Focusing on the two subgroups, ARDS showed significant but not clinically relevant reduction in vital capacity compared with non-ARDS subgroup; no differences in 6MWT and Barthel index were assessed.

Conclusion

Differently as described in current literature, no residual disabilities were found in our cohort of patients at six months after ICU discharge. Increasing the sample size is necessary to confirm the results and more data are needed to describe other aspects that can determine quality of life, such as psychological disease and work performance.

References

[1] Herridge, *NEJM* 2011. [2] Desai, *Critical care medicine* 2011. [3] Chiumello, *Respiratory care* 2016.

| | ALL PATIENTS (N=31) | ARDS (N=14) | NON-ARDS (N=17) |
|-----------------------------|---------------------|--------------|-----------------|
| Meas/pred 6MWT distance (%) | 73 [59;91] | 82 [64;91] | 69 [61;77] |
| Meas/pred CV (%) | 98 [83;102] | 83 [81;99] | 101 [98;116]* |
| Meas/pred FEV1 (%) | 93 [87;104] | 91 [86;96] | 102 [95;105] |
| FEV1/CV | 82 [78;89] | 85 [79;88] | 80 [71;83] |
| Barthel Index | 100 [75;100] | 100 [80;100] | 100 [83;100] |

Table 1. Outcomes of all population and ARDS and non-ARDS subgroups at six months evaluation. Data are shown as median [25 percentile;75percentile]. FEV1= Forced Expired Volume, CV=vital capacity. Meas/pred=measured/predicted. * p-value<0.05.