

Category :**Sepsis/septic shock: management**

**A240 - Corticosteroids versus covid-19 patients admitted to the intensive care unit(icu): real decrease in in-hospital mortality?**

**F Righetti<sup>1</sup> ; E Colombaroli<sup>2</sup>**

<sup>1</sup>*Intensive Care Unit, Emergency Department, San Bonifacio, Verona, Italy,* <sup>2</sup>*Intensive Care Unit, San bonifacio, verona, Italy*

### **Introduction:**

The use of corticosteroids in the treatment of COVID-19 patients is a matter of debate. The available evidence is uncertain and knowledge on the subject is evolving [1]. The purpose of our observational retrospective study is to evaluate the association between corticosteroid therapy and hospital mortality in COVID-19 positive ICU patients after balancing for possible confounding factors.

### **Methods:**

164 COVID-19 positive patients admitted to ICU were included, divided into two groups: 110 patients (Group A) received corticosteroid therapy while 54 (Group B) did not. The daily dose was 8mg of dexamethasone for a duration of 7 days subsequently reduced until discontinuation.

### **Results:**

In group A 28 patients (25%) died while in group B 15 patients (27%). In-hospital mortality was similar between the two groups after adjustment for possible confounding factors (ORadj 1.09, 95% CI 0.78-1.46, p = 0.69). However, corticosteroid exposure was not associated with in-hospital mortality after balancing with the overlapping weight propensity score (adjusted p = 0.2).

### **Conclusion:**

Corticosteroid treatment did not affect hospital mortality in ICU patients admitted to COVID-19 after balancing confounders. A possible advantage of corticosteroid therapy could be that of reducing ICU admissions when administered to all COVID-19 positive patients with respiratory failure who access the emergency room.

### **References:**

[1]Yang, X. *et al.* Clinical course and outcomes of critically ill patients with SARS-CoV-2 pneumonia in Wuhan, China: a single-centered, retrospective, observational study. *Lancet Respir. Med.* **8**, 475–481 (2020).