

Category : **Respiratory: mechanical ventilation**

**A145 - When the second wave comes greater than the first one**

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### **Introduction:**

Since Feb 2020 Italy has been facing COVID-19 pandemic. After the tough but efficient first wave struggle, the Veneto Region in Italy faced a more difficult second surge.

We aimed to describe the COVID-19 critically ill pts admitted to our hospital (AOUI of Verona) during the second wave.

### **Methods:**

Prospective observational study of all COVID-19-confirmed critically ill pts, treated at our ICUs between 1 Oct 2020 to 2 Feb, 2021. Date of final follow-up was May 1, 2021. Demographic and daily clinical data were collected, including data on organ failure, management and outcome.

### **Results:**

According to our treatment protocol, all pts received dexamethasone 6 mg/day, therapeutic anticoagulation with LMWH and were supplemented with Vit C and D.

212 pts were included in the analysis, the median age was 65±11 years and 161(76%) were male. 164 (77%) had cardiovascular disorders, 43(20%) had diabetes, overall BMI was 28.7(26-31); 105(49.5%) pts received pre-hospital antibiotic therapy. 112(53%) pts were admitted from an intermediate care medical ward while 18(8.5%) were transferred from another hospital ICU. APACHE II and SOFA scores were 17±8 and 9.4±3.1; 171(80.7%) pts had only respiratory failure, while 17.3% of them were on vasopressors upon ICU admission. CRP was 105±43 mg/L, PCT was 1.6 ±0.2 ng/mL; total CPK, LDH and D-Dimer were 290±20 U/L, 376±20 U/L and 1750 ± 555, respectively; lactate level was 1.3(1-1.7) mmol/L. P/F upon ICU admission was 121(99-170), 177 (83.5%) pts needed tracheal intubation and 15(7.1%) needed ECMO. 116(54.7%) pts resulted MDR positive during their hospital stay.

28 day mortality was 21.2% and this was related to age and BMI (p<0.05); global ICU mortality was 30.2(p<0.05 for age and sex) and hospital mortality was 34.4%(p<0.05 for age, sex and BMI). ICU and hospital LOS were (6-25) 31(18-45) days; this latter was significantly related to BMI. Patients' outcome was significantly related to peak lymphocyte, lactate, fibrinogen and D-Dimer.

### **Conclusion:**

Our 2nd hit was tougher with higher morbidity and mortality.