Reviewer 3 v.1

Comments to the Author

Relationship between obesity and outcome of Covid-19 infected patients is an important question which was already frequently studied, even with large cohorts (Docherty AM et al. BMJ 2020; Kim L et al. Clin Infect Dis 2020, Czernichow S et al. Obesity 2020 for example). This study confirms previously reported results: obese patients are frequently admitted in ICU but impact of obesity on mechanical ventilation need and mortality remains unclear.

As stated by the authors, their study had some weaknesses, mainly monocentric design and small sample size which preclude solid conclusion.

Some additional data could help to better understand their results and possibly to try to generalize their conclusion:

we need more information about studied population: time period study, are all admitted patients included ? what about non admitted (or non included patients) ? what is the percentage of Covid-19 patients admitted among total admitted patients ...

What are mechanical ventilation indications in your ICU ? Patients severity indexes (APACHE, SOFA, SAPS ...) should be reported in order to better described your patients (I was surprised that "only" 50 % of your patients were mechanically ventilated whereas in my institution more than 80 % of the Covid-patients admitted in ICUs (100 beds) were intubated). Among ventilated patients, how many patients fulfilled moderate to severe ARDS criteria according to Berlin definition (JAMA 2012) ,

What are your guidelines about ventilator settings, particularly for ARDS patients. Use of higher PEEP levels in obese patients is not surprising but other data would be interesting: driving pressure, use of trans pulmonary pressure to adjust PEEP level ...