

Can we use noninvasive respiratory therapies in COVID-19 pandemic?*



¿Podemos usar terapias respiratorias no invasivas en la pandemia COVID-19?

Dear Editor,

It is well known that non-invasive respiratory therapies (NITs) have transformed the management of patients with acute respiratory failure of various causes. Techniques such as non-invasive mechanical ventilation, continuous positive airway pressure through a nasal mask, or more recently, high-flow therapy have shown to be effective in reducing the rate of intubation and mortality in patients with hypoxemic and hypercapnic failure, in the absence of intubation criteria. NITs allow an early start of treatment, combine different techniques of ventilatory support, improve patient tolerance and well-being, save time for medical treatment to take effect and, ultimately, decrease the need for intubation and admission to intensive care. In addition, they allow the continuity of treatment in those patients who are discharged from these units and persist with respiratory failure in the ward.¹

The COVID-19 pandemic has called into question the therapeutic potential of NITs, by giving greater emphasis to the risk of pathogenic agent spread which, on the other hand, is a problem that has been known for years.² Based on this, NITs have been considered high risk procedures in COVID-19 and there is a school of thought recommending not to use them.³ The technical document on the clinical management of patients with COVID-19 disease, published by the Spanish Ministry of Health on 3rd March 2020, recommended that they should be avoided.

The application of these criteria has the risk of posing a therapeutic dilemma where clinicians have to choose between administering invasive ventilatory support or giving conventional oxygen therapy to a patient. Patients may not receive adequate treatment until it is time to be intubated and connected to invasive mechanical ventilation, missing the opportunity for non-invasive treatment, and increasing the risk of complications and clinical deterioration. On the other hand, there are patients discharged from critical care units still in need of respiratory support, who are deprived of non-invasive therapies in the hospital ward. Furthermore, TNIs are the only option in those patients with orders not to

intubate and in circumstances in which there is no possibility of admission to critical care units due to overcrowding. Given the risk of pathogen spread, many of these patients are being deprived of NITs.

TNIs have been widely used to treat patients with COVID-19 in China and have been shown to reduce intubation in patients with severe acute respiratory failure.⁴ A panel of experts from 12 countries has recently published some guidelines that support the use of these therapies in COVID-19.⁵ The available data tells us that TNIs should not be avoided, but rather applied in strict compliance with 3 requirements: (1) Do not delay intubation when necessary; (2) intensify protective measures, using the appropriate personal protection equipment and minimizing the aerosolization of particles by means of a specific assembly of masks and ventilation circuits; and (3) closely monitor these patients. We cannot afford to do without TNIs in the COVID-19 pandemic.

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Acute pancreatitis in a patient with COVID-19 infection*



Pancreatitis aguda en paciente con infección por COVID-19

Dear Editor,

Since the first cases of the SARS-CoV-2 coronavirus infection appeared in the city of Wuhan, the disease has taken on pandemic

characteristics. In Spain, according to the 14th May 2020 update from the Ministry of Health, there have been 228,540 cases, with a total of 27,321 deaths.

Although the severity of the infection is mainly determined by the development of severe pneumonia and acute respiratory distress, other conditions have been described in different organs and systems. Vomiting, diarrhoea and abdominal pain are common digestive system-related symptoms.¹ Liver involvement is also common.² We report a case of acute pancreatitis that could be related to COVID-19 infection.

A 76 year-old woman, ex-smoker, with low-risk alcohol consumption (10 g of pure alcohol, one day a week). Personal history of hypercholesterolemia and gastroesophageal reflux. Chronic

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