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DOI: 10.17235/reed.2021.7857/2021

Link: [PubMed \(Epub ahead of print\)](#)

**Please cite this article as:**

Pérez Naranjo Paula, Moya Sánchez Elena, Fernández Navarro Laura. Pneumatosis intestinalis as an incidental finding in a patient with COVID-19 infection.. Rev Esp Enferm Dig 2021. doi: 10.17235/reed.2021.7857/2021.



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## **Pneumatosis intestinalis as an incidental finding in a patient with COVID-19 infection**

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*Keywords: COVID-19. Pneumatosis intestinalis. CT.*

*Conflict of interest: the authors declare no conflict of interest.*

*Dear Editor,*

In reference to the article by *Láinez Ramos-Bossini AJ et al.* recently published (in the press), we are delighted to provide our experience in relation to the probable causal association between pneumoperitoneum and pneumatosis intestinalis in patients affected by COVID-19 infection (1).

### **CASE REPORT**

A 42-year-old female with metastatic epidermoid carcinoma of the tongue and receiving immunotherapy, presented to the Emergency Department due to non-specific fever. Her blood test was suggestive of COVID-19 infection so a computed tomography (CT) scan of the chest was requested, which confirmed severe bilateral pulmonary involvement. In addition, a small amount of subdiaphragmatic pneumoperitoneum was incidentally observed and, thus, the CT scan was extended throughout the abdominal region. In that CT scan, a large amount of gas was detected within the transverse and ascending colon wall, compatible with pneumatosis intestinalis with no additional findings.

Since the patient denied gastrointestinal symptoms, the Surgery Team recommended conservative treatment with antibiotics.

## DISCUSSION

Pneumatosis intestinalis is defined by the presence of gas within the bowel wall and its etiopathogenesis remains unclear. It may be related to multiple causes that may range from benign to life-threatening for the patient (2).

Although gastrointestinal symptoms have been reported since the beginning of the pandemic, to date, evidence of the causal relationship between COVID-19 and pneumatosis intestinalis is lacking (3).

However, it is known that the SARS-CoV-2 may invade the cells of the gastrointestinal tract, causing potential damage to the integrity of the bowel wall (4), as well as lung cells, facilitated by the expression of ACE-2 receptors (5).

In this case, after the possible causes of intestinal pneumatosis and pneumoperitoneum were excluded, the findings suggest a likely clinical manifestation of COVID-19 infection should be considered in daily practice.

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Accepted