

Gastrointestinal manifestations of COVID-19 and their association with disease severity and death in the Dominican Republic

DEPARTMENT OF MEDICINE COLLEGE OF MEDICINE

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Background

- The COVID-19 pandemic has strained healthcare systems worldwide.
- The disease spectrum of COVID-19 is wide, ranging from asymptomatic to respiratory distress and critical illness.
- A wide range of associated symptoms have been described, including gastrointestinal manifestations.
- Defining clinical characteristics that can help identify and triage cases towards COVID-19 treatment pathways early in low-and-middle income countries is of priority.

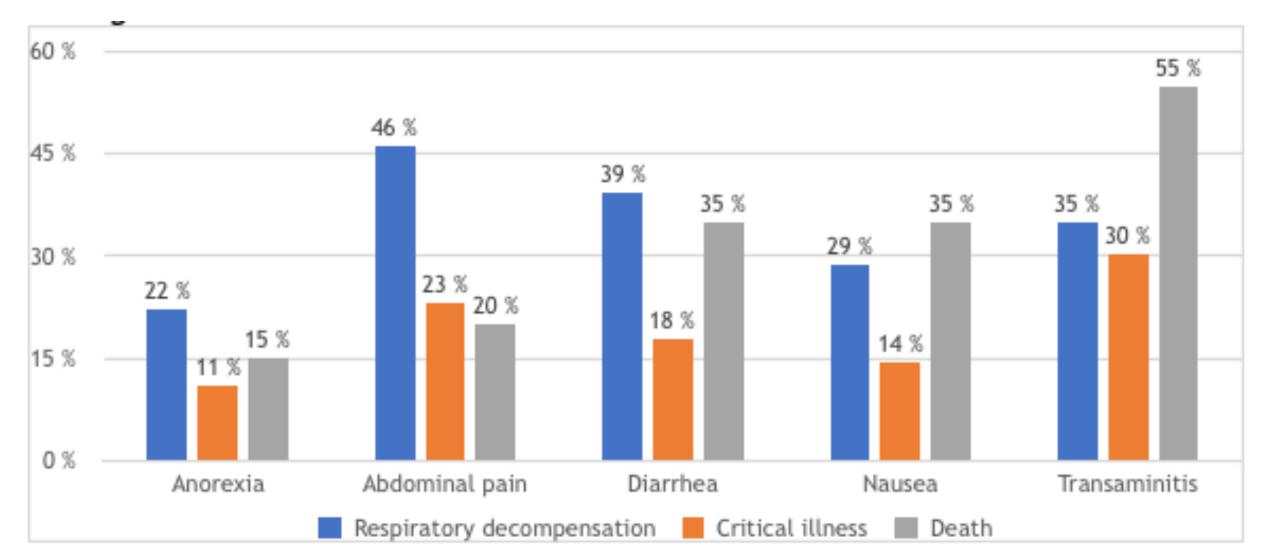
Methods

- Single center retrospective review of cases admitted to a tertiary center with COVID-19 and gastrointestinal symptoms between March, 2020 November 2021.
- Inclusion criteria was defined as molecular diagnosis of SARS-CoV-2 with symptomatic gastrointestinal disease.
- Demographic and clinical characteristics were tabulated, and statistics of association and mortality were performed.

Results

- A total of 95 cases admitted with SARS-COV2 pneumonia met the inclusion criteria.
- Cases were predominantly male (65.3%).
- Age distribution was 48.4% >61 years, followed by 51-60 (17.9%), 31-40 (15.8%) and 41-50 years (13.7%).
- The gastrointestinal findings associated with COVID-19 were transaminitis (48.4%), nausea and diarrhea (29.5%), anorexia (28.4%) and abdominal pain (13.7%).
- Patients with abdominal pain had 46% with respiratory decompensation and 23% critical illness (Figure 1) compared to 39% and 17.9% in patients with diarrhea.
- Transaminitis was associated with highest association with progression to critical illness (30%) and death (55%).

Figure 1. Respiratory decompensation, critical illness and death by gastrointestinal findings



Conclusions

- Gastrointestinal symptoms in COVID-19 have a wide range of clinical presentation and can be associated with severity of illness and decompensation.
- Transaminitis had the highest association with severe disease and death.
- These associations, if confirmed in larger studies, can help guide triage and prognostication in resource limited settings.
- Further studies are needed to validate these findings.



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