COVID-19: Gastroenterology-related Bulletin

On March 11, 2020 the World Health Organization (WHO) declared a COVID-19 pandemic. It stated that in the past two weeks, the number of cases of COVID-19 outside China has increased 13-fold, and the number of affected countries has tripled. As of March 11, there are more than 118,000 cases in 114 countries, with 4,291 fatalities. “In the days and weeks ahead, we expect to see the number of cases, the number of deaths, and the number of affected countries climb even higher,” according to the WHO.¹

On March 12, President Rodrigo Duterte approved a resolution by the Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID) to raise the COVID-19 alert to code red sublevel 2, which imposed a 30-day “community quarantine” on Metro Manila and other measures to prevent the spread of the coronavirus.

As of 3pm of March 12, the Department of Health (DOH) has confirmed 52 COVID-19 cases in the Philippines, with the test results of 33 cases still pending and 632 cases testing negative. A total of 674 patients under investigation (PUIs) have been discharged while 68 PUIs are still admitted in hospital.² As of March 12, the DOH has reported five fatalities due to COVID-19.

COVID-19 symptoms are usually mild and begin gradually. The most common symptoms are fever, tiredness, and dry cough. Some patients may experience aches and pains, nasal congestion, runny nose, sore throat or diarrhea. According to the WHO, studies to date suggest that the 2019-nCoV virus that causes COVID-19 is mainly transmitted through contact with respiratory droplets.³

Emerging evidence on GI tract as potential route of COVID-19 transmission

However, several studies have shown that the gastrointestinal tract can serve as an alternative route of COVID-19 infection. A study by Xiao et al from the Fifth Affiliated Hospital in Guangzhou, China found that 2019-nCoV can potentially be transmitted through feces. The researchers followed up on a previous finding of 2019-nCoV RNA in a patient’s stool. They conducted polymerase chain reaction (PCR) testing in 71 patients hospitalized at their institution for COVID-19 from February 1-14, 2020. They also studied esophageal, gastric, duodenal and rectal biopsies taken from one of the patients who also underwent endoscopy. The researchers found that 53.4% of patients had 2019-nCoV RNA in their stool and 23% of patients tested positive in their stool despite testing negative for the virus in respiratory samples.⁴

Based on their findings, Xiao et al reported that “viral gastrointestinal infection and the potential fecal–oral transmission can last even after viral clearance in [the] respiratory tract” and strongly recommended that “rRT [real-time reverse transcription]-PCR testing for 2019-nCoV from feces should be performed routinely in COVID-19 patients, and Transmission-Based Precautions for hospitalized COVID-19 patients should continue if feces tests positive by rRT-PCR testing.”⁴
A study by Gu et al noted that the first patient in the United States diagnosed with COVID-19 reported two days of nausea and vomiting before presenting to the hospital, and had loose bowel movements while in the hospital. Both stool and respiratory specimens from the patient tested positive for 2019-nCoV, according to the authors who are from the Department of Transplantation at Xinhua Hospital Affiliated to Shanghai Jiao Tong University School of Medicine in Shanghai, China.5

Gu et al stressed that the small but growing body of clinical evidence indicates the digestive system may serve as an alternative route of 2019-nCoV infection in addition to the respiratory tract, and that “clinicians should be careful to promptly identify the patients with initial gastrointestinal symptoms… for early detection, early diagnosis, early isolation and early intervention.” They also noted that some COVID-19 patients have also experienced mild to moderate liver injury, and that recent data from two independent cohorts also suggest 2019-nCoV infection can directly damage intrahepatic bile ducts.5

COVID-19 Management and Infection Control Guidelines – Resources
Please refer to the following available online resources for guidance on managing COVID-19 patients:

Philippine Society of Digestive Endoscopy (PSDE) Covid-19 Clinical and Procedural Guidance for the GI Endoscopy Unit and team:

DOH Interim Guidelines for 2019-nCoV ARD Response in Hospitals and Other Health Facilities:

Joint DOH and Philippine Society for Microbiology and Infectious Diseases (PSMID) Triage Algorithm for COVID-19:
https://twitter.com/DOHgovph/status/1237581691461369862/photo/1

The PSG will continue to closely monitor the situation and provide regular updates on the COVID-19 pandemic.

References: