Personal Protective Equipment Works: A Letter From Portugal

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The first human cases of coronavirus disease 2019 (COVID-19) were reported in China in December 2019 (1). Rapidly, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) spreads around the world and causes a serious threat to the global public health. Our Gastroenterology Department, a major referral center where dozens of professionals work every day, immediately established strategies to protect both patients and healthcare workers. Herein, we describe the measures implemented by the Department and present the results of staff members’ immune status at the end of the lockdown period.

The protocol was implemented in the Gastroenterology and Hepatology Department, Centro Hospitalar e Universitário de São João, from March 18, to May 2, 2020. In addition, we conducted blood sampling from healthcare workers for SARS-CoV-2 serologic testing on May 4. Anti-SARS-CoV-2 immunoglobulin G enzyme-linked immunosorbent assay was performed using a commercial assay kit (EUROIMMUN Medizinische Labordiagnostika AG, Germany) according to the manufacturer’s instructions. Reagent wells of the assay were coated with the recombinant structural protein (S1 domain) of SARS-CoV-2.

We strictly regulated entry and exit into the endoscopic unit. Thus, the minimum staff level (strictly necessary to perform urgent or unpostponable procedures) attended the Department. All conferences, congresses, and presentational team meetings were suspended. Staff personnel had to wear a surgical mask inside the hospital, and they were evaluated daily before they walk in to the Department with a symptom questionnaire and temperature measurement. In case of any suggestive information, they were referred to the occupational medicine service. All healthcare professionals received training on proper donning and doffing of personal protective equipment and basic infection prevention tenets (3). Healthcare professionals always used personal protective equipment during endoscopic procedures.

There are 52 healthcare professionals in our Department: 25 physicians, 16 nurses, 9 operations assistants, and 2 secretaries. Most individuals were women (57.4%) with a median age of 43 years (interquartile range 34–51 years). Five residents and 3 attending physicians, as well as 2 nurses worked for 1 month in COVID-19 wards. The remaining staff members follow their daily schedule in our Department. One of our staff members was in prophylactic isolation because of a high-risk exposure. Moreover, 10 professionals went to the occupational medicine service due to the presence of symptoms or high-risk exposures. No healthcare professionals were tested positive for SARS-CoV-2 immunoglobulin G antibodies at the end of the lockdown period.

During the state of emergency, our Department continued to perform dozens of endoscopic procedures, some of them were on COVID-19 patients, and some high-risk exposures were reported. However, as pointed out by the serological test results, there were no documented cases of SARS-CoV-2 infection. The safety of healthcare workers can be achieved if vigilance is maintained through ongoing surveillance and preventive measures have been implemented early in the Department. In addition, given that all healthcare professionals are potentially at risk, surveillance needs to be extended to all staff, not just to those who are predominantly ward-based. Serological tests may play a key role in ongoing deconfinement, namely to form new workgroups, redefine clinical activities for the faculty, and modify the workloads of healthcare workers.

CONFLICTS OF INTEREST
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REFERENCES
1. Wuhan City Health Committee (WCHC). Wuhan Municipal Health and Health Commission’s briefing on the current pneumonia epidemic situation in our city 2019. (http://wjw.wuhan.gov.cn/front/web/showDetail/2019123108989). Accessed June 25, 2020.
2. British Society of Gastroenterology (BSG). Endoscopy activity and COVID-19: BSG and JAG guidance—update 22.03.20. (https://www.bsg.org.uk/covid-19-advice/endoscopy-activity-and-covid-19-bsg-and-jag-guidance/) (2020). Accessed June 25, 2020.
3. Sultan S, Lim JK, Altayar O, et al. AGA institute rapid recommendations for gastrointestinal procedures during the COVID-19 pandemic. Gastroenterology. 2020. doi: 10.1053/j.gastro.2020.03.072.

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