

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. recommended in highly suspected or confirmed cases), and 43% recommended that the endoscopy team must be trained in wearing and removing PPE (Table 1). There was not any mention of using preexposure or postexposure prophylaxis for HCW. All international societies recommended following a standardized reprocessing procedure for flexible endoscopes.

In summary, we validated the recommendations for endoscopy during the COVID-19 pandemic described by our colleagues based on an extensive and updated review of statements of international and national societies of gastroenterology and GI endoscopy worldwide. The situation is rapidly evolving, and this guidance may be updated regularly.

DISCLOSURE

All authors disclosed no financial relationships. This work was supported by funding from INI-FIOCRUZ (Programa de Incentivo à Jovens Pesquisadores for HP grant number INI-003-FIO-19-2-5) and from University Estacio de Sa (UNESA) [Programa Pesquisa e Produtividade for GP. This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (CAPES) (Finance Code 001 for ECCF). The funders had no role in study design, data collection and analysis, decision to publisb, or preparation of the manuscript.

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https://doi.org/10.1016/j.gie.2020.03.3854

Preventing the spread of COVID-19 in digestive endoscopy during the resuming period: meticulous execution of screening procedures

To the Editor:

The experience in management of the endoscopy unit during the COVID-19 pandemic shared by Thompson et al,¹ Repici et al,² and Soetikno et al³ deserves recognition. Identifying the risk of fecal–oral transmission⁴ and subsequently preventing potential nosocomial infections caused by digestive endoscopy are urgent issues.

Faced with the situation of the reduced number of new domestic cases for the past month and the mounting number of imported cases in South China, our center has restored nonemergency service and executed a strict protocol (Fig. 1) since March 2, 2020. Patients who seek endoscopy examinations or treatment must undergo triage and make appointments beforehand. For those with fever or respiratory symptoms, chest CT scans and routine blood tests are further required. Patients from overseas who are still in 14-day quarantine but have no infectious symptoms also undergo triage in the emergency department. For those released from quarantine, an official releasing document issued by the health authority is required, and they must register before making endoscopy appointments. After appointments are made, throat swabs must be collected and used for COVID-19 nucleic acid polymerase chain reaction testing. Emergency patients undergo 3-hour rapid testing on the day of endoscopy, whereas nonemergency patients can choose either the 3-hour self-paying test or the 24-hour free test, within 3 days before endoscopy. After getting the COVID-19 test result, patients scan the quick responce code provided by the Chinese government to report possible history of exposure for the previous 14 days. They are also asked to complete screening questionnaires, which include questions regarding body temperature, travel history, and nucleic acid polymerase chain reaction testing results within 3 days. Only after complete evaluation are patients admitted to the endoscopy center. During the endoscopy examination, medical workers are required to wear hierarchal personal protective equipment including surgical masks, face shields or goggles, disposable hats and shoe covers, gowns, and gloves.

For the past 19 work days at this writing, the number of endoscopic cases in our center has increased gradually and reached 70 cases per day, which is 35% of our full capacity, with a total case number of 1361 since March 2, 2020. More





Figure 1. Flow chart for diagnosis and treatment in endoscopy center during resuming period. Based on our clinical experience, the flow chart describes the medical procedure in our endoscopy center, including initial screening, endoscopic operation, medical precautions for medical workers, cleaning and disinfection after examination, and patient follow-up. For discharged COVID-19 patients, we perform endoscopy if necessary and issue relevant certification materials. *Blood RT*, Blood routine test; *PCR*, polymerase chain reaction; *QR Code*, quick responce code.

importantly, no endoscopy-related COVID-19 nosocomial infections have been reported because of the strict execution of screening protocols in our center. Our experience demonstrates that strict screening procedures may prevent the spread of COVID-19 during digestive endoscopy during the resuming period.

DISCLOSURE

All authors disclosed no financial relationships.

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https://doi.org/10.1016/j.gie.2020.03.3855

Resource-sparing urgent endoscopies by a mobile on-call team in the Paris area during the COVID-19 outbreak

To the Editor:

We have read with interest the article by Repici et al.¹ Our institution, Assistance Publique—Hôpitaux de Paris (APHP), brings together 39 university hospitals in the Greater Paris area, comprising 16 endoscopy units. In the context of the COVID-19 outbreak, only urgent endoscopy acts are performed, whereby COVID-19–dedi-



Figure 1. Endoscopic setup in the critical care unit: 7-kg portable processor, gastroscope, 3-kg portable power source with blue foot pedal for bipolar electrocoagulation.

cated medical and critical care units are mobilized. We report herein on how a mobile Parisian on-call endoscopy team (POET) performs urgent endoscopy acts outside regular hours, by means of portable equipment, in a dense urban area (6.7 million inhabitants within 762 km²), thereby allowing the most effective use of manpower where and when needed.

There are 3 such on-call teams operating in Paris and its suburbs. We decided to extend the outreach of POET (usually within the Paris city limits) to the whole Greater Paris area. POET is based in the Saint-Antoine Hospital in Paris, where reprocessing and equipment storage take place. The team comprises, for each round of interventions, a senior physician and a paramedic, both specialized in endoscopy. These caregivers are used in one of the APHP hospitals, and they have clearance to perform urgent procedures in all the critical care units of these hospitals. Therefore, patients from outside hospitals or clinics in the greater Paris area are transferred for endoscopy to one of these APHP sites. The mobile team is equipped with a 7-kg portable processor (Telepack X GI, Karl Storz, Tuttlingen, Germany), 3 endoscopes (GI Silver Scope Series, Karl Storz), a 4-kg portable power source (Vio 100C, Erbe, Tuebingen, Germany), and ancillary tools (Fig. 1), carried on a foldable moving cart (Fig. 2). POET relies on transportation by taxicab from each hospital to the next