COVID-19 and gastrointestinal endoscopy in Belgium : uncertainty and ambiguity

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To the Editor,

The world is currently facing a deadly COVID-19 pandemic caused by the 2019 novel coronavirus, and Belgium is no exception with a daily death rate still increasing (written April 2020) (1). Although it is considered a viral airway infection with aerosol droplet transmission, gastrointestinal involvement with faecal-oral transmission is also possible (2). Therefore, all endoscopic procedures in both upper and lower gastrointestinal tract carry an increased risk of viral transmission from infected patients to all personnel in the endoscopy room (endoscopist, endoscopy nurse, trainee, anaesthesiologist, anaesthesiology nurse,…). The risk of viral transmission due to endoscopy being rapidly recognized, has led to the swift development of position statements and guidelines on protective measures world-wide in order to control viral transmission by gastrointestinal endoscopy (3). As of 18 March 2020 the European Society of Gastrointestinal Endoscopy (ESGE) released a position statement with safety guidelines to prevent COVID-19 transmission in endoscopy units (4).

Although of importance and well-meant, these guidelines are not always reflected in real life situations in Belgian endoscopy units. In general, all position statements suggest to postpone non-urgent endoscopic procedures and proclaim the use of personal protection equipment (PPE) based on the patient's risk stratification for COVID-19 transmission (3). In case of high risk or COVID-19 positive patients, specific filtering facepiece respirators FFP2/3 should be used by the endoscopy personnel, since the conventional surgical mask does not protect against viral transmission (4). Ideally, only strictly urgent endoscopy should be performed based on stringent indications, and with optimal PPE for all personnel involved. All non-urgent or elective endoscopic procedures should be postponed to a later (but not yet defined) date. In theory, these guidelines seem logical and realistic. However, reality tells us something completely different…

How is urgent endoscopy defined ? Besides well-known endoscopic emergencies like overt gastrointestinal bleeding, food bolus impaction or foreign body ingestion and obstructive cholangitis, what to do with occult bleeding or chronic anaemia and the endoscopic work-up of potentially malignant abdominal lesions ? Mortality-wise the latter indications are not considered as urgent. However, it is clear that mid-term and long-term mortality increases with delayed endoscopic diagnosis and/or treatment. Moreover, restricting endoscopy indications to emergencies only, reduces the number of endoscopic procedures by 90%, which dramatically impacts the financial revenue of endoscopy units and hospitals. Broadening urgent indications to occult bleeding and work-up of abdominal lesions may increase the number of endoscopic procedures to up to 20-30% of the normal volume, still leaving an important financial deficit. Because of the vague definition of what urgent endoscopy stands for, and because of the increasing economic pressure with ongoing time of reduced endoscopic activity, endoscopic units may be tempted to ignore the restrictive measures imposed by the national ministry of health.

A second aspect of uncertainty is the availability and use of correct PPE. Ideally, all patients undergoing endoscopy during the COVID-19 pandemic are considered as potentially infected, and all endoscopy personnel is maximally protected wearing FFP2/3 masks and physical barriers like gloves, hairnets, goggles, face shields and gowns. However, single-use PPE is expensive, and national stocks are far too limited to protect all medical and paramedical personnel correctly, resulting in a priority list made by the national ministry of health (5). The shortage of PPE stocks puts the government under pressure to search desperately on the international market, with variable success and drawbacks because of increasing PPE prices and decreasing PPE quality. Therefore, several hospitals have taken initiatives to investigate the disinfection and reuse of PPE (masks, gowns and protective eye-wear) (6). Also in endoscopy units all over the country, shortage of PPE forces them to take specific measures. In some units, sufficient PPE is still available allowing the use of FFP2/3 masks for all endoscopic procedures, whereas in other units personnel is only allowed to wear (cheaper and non-protective) surgical masks because of local PPE shortage. To overcome this potentially hazardous situation, pre-emptive COVID-19 screening of all patients scheduled for endoscopy is considered in order to select correct PPE based on patients' COVID-19 carrier status (7). Although

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this strategy seems logical, it faces several difficulties. Screening for COVID-19 infection with nasopharyngeal swabs and rRT-PCR takes 3 to 24 hours or even 72 hours, depending on the laboratory performances, which may impact on the urgency of endoscopic procedures. Moreover, sensitivity of these screening tests is very variable, resulting in many false negative results and thus incorrect PPE use (8).

Finally, with the reduced professional activity in endoscopy units, their medical and paramedical personnel is actively solicited to be temporary employed in the hospital COVID-19 units, or to replace the infected personnel of these units. Solidarity between different medical specialities is understandable and admirable, but may come with a human cost. Endoscopy nurses may not be trained to serve in hospital units with patients in severe respiratory distress. The same holds true for endoscopists being relocated to intensive care units with critically ill and mechanically ventilated patients. Rapid and intense training of relocated (para-)medical personnel is mandatory to guard optimal clinical care of COVID-19 patients with all degrees of disease severity.

Belgium is currently facing its share of the worldwide COVID-19 pandemic with never seen morbidity and mortality in recent medical history. The viral infection is spreading rapidly, forcing the Belgian government to take swift action, which is well-meant but with the continuous risk of running behind facts or taking the wrong turn. This crisis has a tremendous deleterious impact on all levels of our society, and also in the microcosm of an endoscopy unit. An impact that will only become clear in the months or even years to come.

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