or radiotherapy sequelae. Notable inflammatory–infectious aetiologies reported include endometriosis and pelvic inflammatory disease in women,[1,4] diverticular disease (especially of the small intestine), Crohn's disease, and abdominal tuberculosis in endemic areas. Abdominal and pelvic radiotherapy in the treatment of gynaecological, prostatic, rectal and lymphoproliferative neoplasms may also cause adhesions. Their severity depends on the extent of the treated area, the degree of fractionation of the dose, and the total dose of radiation.[4] In addition, post-inflammatory adhesions have been detected on autopsy in up to 28% of cases of patients with no history of abdominal surgery.[2] In the case reported, a colonoscopy and a gastroscopy were performed to rule out inflammatory bowel disease. A tuberculin test was also done to rule out prior exposure to the tuberculosis bacillus. The results were negative. All other causes were ruled out given the patient's sex and personal history and the histopathology examination of the resected bowel.

Congenital adhesions form during embryonic development,[2] and are an extremely uncommon cause of bowel obstruction in adults.[5] They are most often located between the terminal ileum or its mesentery and the ascending colon, ligament of Treitz, right liver lobe or bladder. In most cases, they consist of connective tissue containing vessels and nerves.[5] In the case reported, a congenital aetiology was ruled out in light of the patient's age and because he had multiple adhesions that contained neither blood vessels nor nerves and were not located in the typical locations described above.

With all acquired and congenital aetiologies having been ruled out, the patient's adhesions were deemed to be of idiopathic origin. In conclusion, idiopathic adhesions should be borne in mind in the differential diagnosis of bowel obstruction in patients with no prior abdominal surgery, especially where radiological testing does not show any responsible lesion.

Conflicts of interest

We declare that there are no matters in relation to funding or of any other nature that might create any conflict of interest.

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Endoscopy activity in a covid-19 high-risk area (Barcelona): Moving forward (or backwards) according to the necessary resources available

Reinicio de la actividad endoscópica en un área de alto riesgo de covid-19 (Barcelona): progresión (o regresión) según los recursos necesarios disponibles endoscopy

Dear Editor:

Endoscopy activity has been dramatically reduced to minimum due to COVID-19 outbreak consequences. Endoscopy Units are experiencing shortages in staff, personal protective equipment (PPE), medical equipment as respiratory ventilators and monitors, beds or even physical space. Moreover, cleaning rooms have gained a new role of PPE (i.e. goggles, or face shield) disinfection from different hospital areas. For this reason, it is convenient to be prepared on how to resume non-urgent and non-delayable endoscopy activity and adapt to the natural evolution of pandemic.

We recommend to progress to an adapted activity in a three-phase system.

For that, some minimum requirements are necessary to move forward on endoscopy activity, grouped in 3 basic needs: Workforce trained in endoscopic procedures, PPE availability and testing capacity for COVID-19 [Fig. 1]. The movement between the phases could be bidirectional depending on pandemic situation. So, the phases will be dynamic returning to a previous phase or progressing to an advanced phase.

With only one team available in the unit, it will be very risky planning to do semi-urgent endoscopy on a regular basis, considering the quarantine likelihood if health care workers get infected. On the other hand, to start assuming more schedule of procedures, it is necessary to expand the number of rooms depending on the capacity of the endoscopy unit. This may imply bringing personnel back from COVID-19 tasks.

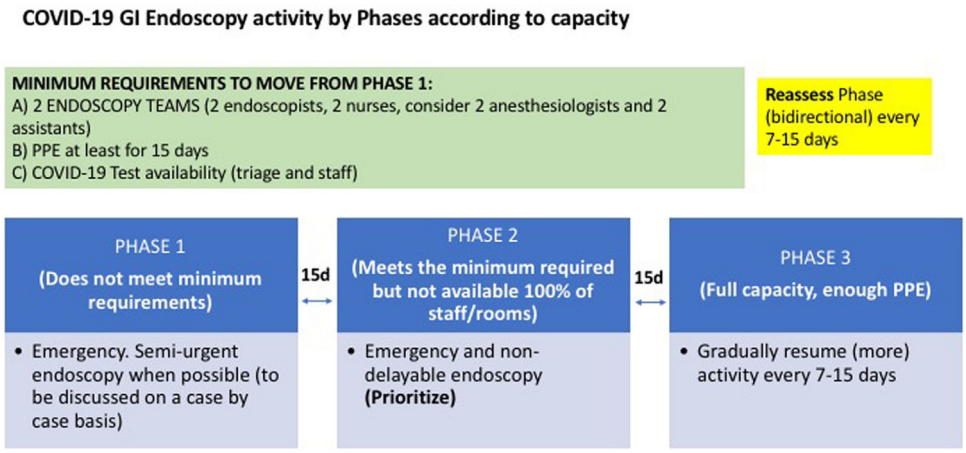

Figure 1 Dynamic phases of endoscopy activity in a high-risk area during covid-19 pandemic according to workforce, PPE availability and screening test capacity.

Additionally, we are suffering shortages in PPE availability. PPEs are necessary for the COVID-19 era,[1–3] and they should be used for every gastrointestinal endoscopy specially in high-risk areas. As its availability for a long time may be difficult to predict, we suggest that supplies should be guaranteed for at least 2 weeks before resuming more activity.

Another concern is the screening of staff and patients. Testing capacity is not widely available right now, but it is recommended to test healthcare workers and patients. As circuits may differ on COVID-19 status, testing might be necessary to detect asymptomatic positive cases and prevent patient-to-patient, staff-to-staff, patient-to-staff and staff-to-patient transmission, taking into account the possible false positives and false negatives due to the variability of the tests.

Once those minimum requirements are met, we could move forward to a second phase, doing priority endoscopic procedures on a regular basis according to a case-by-case management and high/low priority as it has been recommended by ESGE,[1] SEED, SEPD, AEG[4,5] and other societies. Depending on the pandemic evolution, the adaptation of endoscopy staff to second phase, and the endoscopy unit is reaching a full capacity with enough PPE, it will be possible to gradually assume more activity.

Because epidemiology and sociopolitical measures are continuously changing, we should reassess every 1 or 2 weeks (suspected incubation period[6]) our local status. And we should be prepared to move not only forward but backwards when needed.

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