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Emergency Recommendation

Practical advice for management of inflammatory bowel diseases patients during the COVID-19 pandemic: World Endoscopy Organization Statement

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COVID-19 is rapidly spreading worldwide and specific literature how to deal with inflammatory bowel diseases (IBD) patients is limited so far. Here, the World Endoscopy Organisation is providing practical advice for the management of IBD patients during the pandemic covering the diagnostic and therapeutic spectrum.

Key words: coronavirus, COVID-19, endoscopy, IBD, ulcerative colitis

INTRODUCTION

SINCE ITS INTRODUCTION in December 2019, COVID-19 is spreading worldwide resulting in massive challenges for health care systems and questions on how to deal best with the community and specifically patients who may be at higher risk, including those with inflammatory bowel diseases (IBD). To date, there are limited data on outcomes of IBD patients who develop COVID-19.[1–3] However, daily practical questions of the physicians need to be answered and addressed. Accordingly, in this document, the World Endoscopy Organisation (WEO) provides practical advice to the most common questions on the management of IBD patients. The document is based on available evidence established through extensive literature reviews, expert opinions, and other sources like personal communication to colleagues treating IBD patients with COVID-19. With the ongoing spread of COVID-19, physicians will also continue to learn more of the disease and its management, even in specific patient groups. However, despite these limitations we strongly believe that the WEO needs to provide guidance on this issue and we also advise careful reading of the recommendations by IOIBD, BSG, ECCO and other organizations, as they become available.

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QUESTION 1: WHAT TO DO IN CASE OF SUSPICIOUS NEWLY DIAGNOSED IBD?

WHEN THERE IS suspicion of newly diagnosed IBD and the patient is only presenting with mild and non-progressive symptoms, we recommend postponing further diagnosis including colonoscopy until the pandemic is over.[4–7] Colonoscopies or Esophagogastroduodenoscopy (EGD) for chronic diarrhea, and chronic abdominal pain should not be performed unless they are needed for time-sensitive evaluation or decision making.

When the patient is presenting with more severe symptoms and requires medical therapy, we advise first exclusion of COVID-19. Recent reports have highlighted that up to 50% of hospitalized patients with COVID-19 will present with GI symptoms, including diarrhea.[8,9] In almost all of these cases, fever and respiratory symptoms occur concurrently. If COVID-19 is confirmed, we do not recommend colonoscopy but to wait 14 days until the course of the disease is clarified. When symptoms are severe and persisting after this period, we advise timely colonoscopy as described under Question No 9.

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QUESTION 2: WHAT THERAPY SHOULD BE USED IN NEWLY DIAGNOSED IBD?

FOR MILDLY ACTIVE disease in Crohn's Disease (CD) and ulcerative colitis (UC), 5-ASA (oral and/or rectal application) and/or oral budesonide are reasonable.[10] In general, steroids should be avoided in COVID-19 as they might prolong the disease.[11] When a patient is requiring steroid treatment we advise strict social distancing and precautions for the period of the treatment until the pandemic is under control.

For moderately to severely active disease, when induction with steroid is required, we advise strict social distancing and precautions for the period of the treatment until the pandemic is under control. Early and immediate starting with biological therapies to limit steroid exposure also seems reasonable and appropriate, as evidence suggests that steroid therapy might be associated with increased mortality and secondary infection rates, at least in influenza virus infections (data on COVID-19 is limited so far). It is reasonable to consider subcutaneous therapies rather than intravenous therapies to limit patient travel outside the home. In severe cases or in fistulizing CD without abscess, infliximab therapy should be given the first choice. Home-based infusions are not recommended, given the lack of control of exposure of the nurse provider. Since thiopurines and methotrexate require steroid induction and tofacitinib in the U.S. is positioned after anti-TNF therapies, these drugs would not be used during the acute phase of induction in a newly diagnosed patient.[12,13]

QUESTION 3: WHAT ANTIBIOTICS SHOULD BE USED IN IBD?

IN GENERAL WE advise to follow the regional recommendations of antibiotic treatment for the individual diseases requiring antibiotic treatment, which is primarily in the setting of perianal CD.[14,15] The use of antibiotics as primary therapy for IBD is of interest, but unproven. Nonetheless, there are intriguing data on teicoplanin and azithromycin that suggest benefit against COVID-19.[16,17]

QUESTION 4: WHAT TO DO IN CASE OF RELAPSING IBD?

WE FIRST ADVISE careful evaluation of the underlying cause of the flare. Important questions include if the flare is associated with change of the medical therapy, stress, co-infection, mechanistic escape or immunogenicity. Treatment should be focused on the underlying course but colonoscopy should be avoided unless absolutely necessary.[1,2,5] We recommend use of non-invasive methods to objectively assess the disease activity, which include C-reactive protein (CRP) and fecal calprotectin or lactoferrin, as well as usual lab testing and assessment of serum concentrations of the drugs used and the presence or absence of neutralizing anti-drug antibodies. Lymphopenia has been present in many patients with COVID-19, and infection can elevate both the CRP and stool markers, so careful review is necessary.[18] In order to rule out infectious causes, we advise following the general recommendations but to keep in mind that COVID-19 may present with such symptoms, too.

QUESTION 5: WHAT TO DO WHEN THE PATIENT HAS COVID-19?

FOCUS SHOULD RELY on supportive care for COVID-19 instead of changing the IBD therapies. Holding the IBD therapy or delaying scheduled injections or infusions for the course of the COVID-19 seems prudent, but probably does not change much given the half-lives of most of our therapies.[1] Therapeutic options should be carefully discussed with the patient in order to find a mutual consensus.

It is a common question whether an immunosuppressive or immunomodulating therapy with biologicals should be continued or stopped. It should be noted that, even if the medication is discontinued, the immunosuppressive effect of the immunosuppressant therapy would continue for a long time anyway.

Steroids are an exception to this rule as they might be associated with a significant increased mortality and an increased secondary infection rate, at least in influenza virus infections (specific literature on COVID-19 is limited so far). For this reason, steroids should be discontinued if possible.

It remains important to note, that the prevention of a new relapse is the primary goal, since the immune system would be affected much more permanently by inflammatory activity than by an ongoing immunosuppressive therapy in a remission phase. Therefore, IBD patients should continue with the unmodified therapy as long as possible.

QUESTION 6: WHAT TO DO WHEN SURGERY IS NEEDED?

BOWEL OBSTRUCTION, ABSCESS, fulminant colitis and concern for malignancy are indications in which surgery would still be necessary, but this will require careful discussion by institution-specific boards and multi-disciplinary teams.[19,20] In addition, we recommend testing of

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every patient for COVID-19 before surgery is performed. One recent report highlighted an increased mortality even for relatively short surgical procedures in case of COVID-19 infection.[21]

QUESTION 7: HOW TO STAY IN TOUCH AND MONITOR YOUR PATIENT?

WE ADVISE ONLINE (video) consultancy or phone interviews. If laboratory testing cannot be performed, alternatives including home faecal test for calprotectin or lactoferrin is advised. Endoscopic surveillance should be postponed until the outbreak is under control. In general, although we do not yet have data, IBD patients receiving immunosuppressant therapy might be at higher risk for severe COVID-19. Therefore, until more is understood, patients should follow the rules of strict social distancing and protection as much as possible.

QUESTION 8: HOW TO DEAL WITH IBD PATIENTS IN CLINICAL TRIALS?

WE ADVISE TO postpone new enrollment and screening whenever possible in order to reduce interpersonal contacts. This should be done in close collaboration with the sponsor of the trial. For patients in existing trials, in most cases these should continue, but with close collaboration with sponsors and regulatory agencies. No data is yet available on the effect of new drugs and possible interaction with COVID-19.

QUESTION 9: HOW TO DEAL WITH INFUSION VISITS?

FOR THE MOST part, infusions should continue as scheduled to avoid risks of loss of response or relapses. There are some data that may inform safe delays of therapy, but this should be done in the context of COVID-19 infection and be accompanied by appropriate disease monitoring.[13,14] Subcutaneous application of infliximab has already received approval for rheumatology in Europe early in this year. We advise careful discussion with the patient before switching infliximab to subcutaneous application, (with appropriate pre-switch disease assessment non-invasively) and pre- and post- serum concentrations of drug, which might be a feasible approach in the current situation of the COVID-19 outbreak. Intentional switch from infliximab to adalimumab in Crohn's patients is not advised, given the results of a previous prospective trial that revealed a high rate of relapse.[22]

QUESTION 10: HOW TO MANAGE THE PATIENT IN THE ENDOSCOPY ROOM?

IN GENERAL, WE strongly recommend against routine endoscopy during the COVID-19 outbreak.[4,5] One has to consider that infection can be transmitted via droplets, aerosolized viral particles and possibly via stool. Therefore, both EGD and colonoscopy are considered higher risk of exposure for endoscopy staff. When endoscopy is indicated, we advise careful risk assessment according to the following protocol[23]:

Day before procedure

- Call the patient and ask for symptoms including cough, fever, diarrhea.
- Family members or contact persons with above mentioned symptoms.
- Contacts to confirmed COVID-19 patients.

If any of the above mentioned questions is positively answered, the patient goes to the high-risk group (Table 1).

At the day of the procedure

- Patient needs to wear a surgical mask.
- Patient is again asked for symptoms including cough, fever, diarrhea.
- Family members or contact persons with above mentioned symptoms.
- Contacts to confirmed COVID-19 patients.
- Temperature of the patient is measured and documented.

If any of the above mentioned questions is positively answered or the temperature measured is >38°C, the patient goes to the high-risk group (Table 1).

In the procedure room

- Only the minimum number of endoscopy staff should be in the room.
- Every staff member wears personal protective equipment according to the risk group of the patient (Table 1).
- The procedure is performed in standard way.
- After the procedure, the room is ventilated for 30–45 min and all surfaces are disinfected following the standard disinfection protocols of the unit.

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Table1. 1 Risk stratification of COVID-19 in the endoscopy department

Risk group	Definition	Action
Low risk	• No symptoms[†] • No contact to COVID-19	• Surgical mask[‡] • Gloves • Hair net • Protective glasses • Waterproofed disposable suit
High risk[§]	• COVID-19 infection and/or • Symptoms and/or • Contact to COVID-19 and/or	• FFP3 mask • Double gloves • Hair net • Protective glasses • Waterproofed disposable suit

In general, one should always consider to postpone endoscopy procedures in the COVID-19 pandemic.

[†]We want to emphasize, that there seems to be a high group of asymptomatic COVID-19 carriers, who can infect others. Following strict hygienic protocols is therefore advised for symptomatic and asymptomatic patients.

[‡]In general, most societies are already recommending filtering face piece (FFP3) masks for all type of endoscopy procedures regardless of any previous risk stratification of the patient. As FFP3 masks however are not widely available at the time of writing this practical advice, at least not for community physicians, we advise at least wearing of surgical masks.

[§]If available, procedures should be performed in a negative pressure room.

7 days and 14 days after the procedure

- Call the patient and ask for symptoms including cough, fever, diarrhea.
- Family members or contact persons with above mentioned symptoms.

CONCLUSION

THE CURRENT COVID -19 outbreak is by far the largest pandemic human mankind has to face since the third plague pandemic in 1896 and the Spanish flu in 1918. As physicians in these challenging times, we have to take care of our patients, our families and ourselves. With the ongoing spread of COVID-19 we are constantly learning more of the disease and we will adapt our behaviors accordingly. The World Endoscopy Organization (www.worldendo.org) is trying to support as much as possible by sharing knowledge and providing practical advice to our colleagues. #StrongTogether

CONFLICT OF INTERESTS

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