Inflammatory Bowel Disease and COVID-19

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There are a number of key questions that immediately come to mind for both patients with IBD and their contacts and the scientific community as a whole.

Readers are advised that as the understanding of the novel coronavirus progresses, IBD-specific issues and recommendations may change as well.
Are Patients With Inflammatory Bowel Disease at Increased Risk for Infection With SARS-CoV-2 or Development of COVID-19?

Despite the potential for increased exposure to SARS-CoV-2, the limited available data and expert opinion suggest that patients with IBD do not appear to have a baseline increased risk of infection with SARS-CoV-2 or development of COVID-19.
Does the Presence of Inflammation of the Bowel Impact the Clinical Course of Patients With COVID-19?

- Although viral RNA has been identified in stool samples in roughly one-half of patients with COVID-19, persisting in many even after respiratory samples turned negative, there has not been a clear association with GI symptoms and the presence of viral RNA in the stool.

- Patients who develop new digestive symptoms but do not have fever or respiratory symptoms can be monitored for the progression of symptoms that might guide timing of testing for SARS-CoV-2 and, in patients with IBD, trigger additional treatment adjustments.
What Are the Outcomes if a Patient With Inflammatory Bowel Disease Develops COVID-19?

- There are limited data.
- It is too early to make definitive conclusions.
Do Inflammatory Bowel Disease Therapies Impact the Risk of Infection With SARS-CoV-2?

- Limited data
- British Society of Gastroenterology
- International Organization for the Study of Inflammatory Bowel Disease (IOIBD).
We divide the considerations for therapy management in IBD into the following categories:

- Patient with IBD who is not infected with SARS-CoV-2

- Patient with IBD who is infected with SARS-CoV-2 and asymptomatic

- Patient with IBD who has confirmed COVID19, with or without active bowel inflammation or other digestive symptoms.
Patients with IBD are not at higher risk of infection with SARS-CoV-2.

General recommendation is to stay on IBD therapies with a goal of sustaining remission, both clinical remission and endoscopic improvement and normalized laboratory values.

Patients should be advised to maintain their current regimens and to avoid relapse due to nonadherence.

Negative consequences: relapse, need steroid therapy, necessitate hospitalization.
Similar to the recommendations to the general population, patients with IBD should practice strict social distancing, work from home, have meticulous hand hygiene, and separate themselves from known infected individuals.
Concerns of infusion therapy and infusion centers

- Elective switching to injectable therapies is not recommended.

- Switching to home infusions is not recommended.

- Protocoles: fever checks at the door, adequate spacing, masks and gloves used by providers and patients, adequate deep cleaning after patient departure.
Patient With IBD Who Is Infected With SARS-CoV-2 but Without Manifestations of COVID-19

- In this scenario, patients should be actively moved to lower doses of prednisone (<20mg) or transition to budesonide when feasible.
- Thiopurines, methotrexate, and tofacitinib should be held temporarily.
- Monoclonal antibody therapies (anti-TNF therapies, ustekinumab, vedolizumab) should have their dosing delayed for 2 weeks while monitoring for development of COVID-19.
Restarting therapy after 2 weeks if the patient has not developed manifestations of COVID-19 is reasonable.

Disappearance of IgM and development of IgG antibodies.

Clinical significance of stool testing for SARS-CoV-2 in this setting remains to be seen.
Patient With IBD Who Has Confirmed COVID-19 With or Without Bowel Inflammation:

- This is the most challenging, as there are implications for management of the IBD as well as management of COVID-19.

- For the patient with COVID-19, adjustment of the medical therapy for IBD is appropriate.
1. Consider the patient with IBD in remission:

- Aminosalicylates, topical rectal therapy, dietary management, and antibiotics are considered safe and may be continued.

- Oral budesonide is likely safe as well and can continue if it is needed for ongoing control of the IBD.

- Systemic corticosteroids should be avoided and discontinued quickly, if possible, with appropriate caution if there is a concern for adrenal insufficiency from chronic corticosteroid use.
Thiopurines, methotrexate, and tofacitinib should be discontinued during the acute illness.

Anti-TNF therapies and ustekinumab should also be held during the viral illness.

Vedolizumab: in a patient whose IBD is stable, holding it during the time of viral illness is appropriate.
2. Consider the IBD patient has covid-19 and digestive symptoms

- **First**, exclude known enteric infections, such as C. difficile or other GI pathogens.

- **Second**, confirm active inflammation with nonendoscopic approaches, including CRP, fecal calprotectin, or cross-sectional imaging, although these tests should be interpreted with caution, as they may be abnormal due to COVID-19.

- If the results suggest relapsing IBD, treatment of the IBD should be based on the activity of the inflammation and severity of the IBD.
In this setting, the risks and benefits of escalating IBD therapy must be carefully weighed against the severity of the COVID-19.

For hospitalized patients with severe COVID-19 and risks of poor outcomes, IBD therapy likely will take a back seat, but choice of therapies for COVID-19 should take into account the co-existing IBD, if feasible.

Limiting IV steroids to 3 days

Surgical consultation is advised, as per standard clinical practice, although the desire to minimize surgical interventions during the pandemic is reasonable.
Mild COVID-19: Not hospitalized, or hospitalized with SpO2 > 94% and no evidence of pneumonia

- Taper corticosteroids/ switch to budesonide
- Continue 5-ASA, budesonide, rectal therapies, enteral nutrition
- Hold thiopurines, methotrexate, and tofacitinib
- Delay biologics 2 weeks to see if COVID-19 resolves or convalescent titers of SARS-COV-2 develop, if not continue to hold biologics.
Moderate to Severe COVID-19: Hospitalized patient with hypoxia, or patient requiring mechanical ventilation

- Taper corticosteroids/switch to budesonide
- Continue 5-ASA, budesonide, rectal therapies, enteral nutrition
- Hold thiopurines, methotrexate, and tofacitinib
- Delay biologics 2 weeks to see if COVID-19 resolves or covalescent titers of SARS-COV-2 develop, if not continue to hold biologics
- Focus on life support and treatment of COVID-19 with anti-inflammatory, anti-cytokine and/or anti-viral therapies
Endoscopic procedures during the COVID-19 pandemic in IBD patients

- Only urgent and emergent should be performed.

- Clinical scenarios prompt endoscopy during this pandemic:
  
  - Obtain biopsies to diagnose new severe IBD
  
  - Exclude CMV if noninvasive tests are equivocal
  
  - Severe disease or suspected cancer where mucosal inspection might direct surgical intervention.
Take-Home Points

1. COVID-19 is the disease caused by the SARS-CoV-2 virus, but patients with IBD do not appear to be at a higher risk for infection with SARS-CoV-2 or development of COVID-19.

2. Patients with IBD who do not have infection with SARS-CoV-2 should not discontinue their IBD therapies and should continue infusion schedules at appropriate infusion centers.

3. Patients with IBD who have known SARS-CoV-2 but have not developed COVID-19 should hold thiopurines, methotrexate, and tofacitinib. Dosing of biological therapies should be delayed for 2 weeks of monitoring for symptoms of COVID-19.
4. Patients with IBD who develop COVID-19 should hold thiopurines, methotrexate, tofacitinib, and biological therapies during the viral illness. These can be restarted after complete symptom resolution or, if available, when follow-up viral testing is negative or serologic tests demonstrate the convalescent stage of illness.

5. The severity of the COVID-19 and the severity of the IBD should result in careful risk–benefit assessments regarding treatments for COVID-19 and escalating treatments for IBD.
IBD & COVID-19

Thank you for your attention