

Management of Inflammatory Bowel Disease patients in Singapore during COVID-19 pandemic

The inflammatory bowel diseases (IBD), ulcerative colitis and Crohn's disease, are chronic inflammatory conditions which require long term treatment. There is no current data on whether IBD medications increase the risk of contracting SARS-CoV-2, or its complications. However, the morbidity related to undertreated IBD is important and any measures undertaken to alter the delivery of care to IBD patients should be balanced. It is important to maintain disease control during this pandemic without compromising patient safety.

GENERAL MEASURES

Social Distancing

All IBD patients should practice appropriate social distancing as advised by World Health Organisation (WHO) and the Ministry of Health (MOH). Depending on age, co-morbidities, disease severity and the type of medication a patient is on, some will be at higher risk of poor outcomes should they be infected by SARS-CoV-2. Known risk factors are thought to be

1. Age >65 years
2. Co-morbidities (eg. hypertension, diabetes mellitus, heart disease, chronic lung disease)
3. Severe IBD activity
4. Steroid dose of prednisolone \geq 20mg/day
5. Malnutrition

Patients on low dose corticosteroids, immunomodulators and/or biologics are at moderate risk of COVID19 infection. Patients at lowest risk are those who are in remission and without any of the above risk factors.

The degree of social distancing advised should be commensurate with the patient's risk profile.

Vaccinations

It is recommended that patients on steroids, immunomodulators or biologics receive up-to-date vaccinations against other respiratory infections, ie influenza and *Pneumococcus*.

Travel

In accordance with current Ministry of Health advice, all IBD patients should defer non-essential travel.

IBD SPECIFIC MEASURES

Follow up of IBD patients

At times when there is significant community transmission of SARS-CoV-2, doctors with IBD patients in remission should consider teleconsultation rather than a physical clinic visit. In this case, a system must be in place to deliver drugs to the patient.

Patients with poor or suboptimal control of disease, where a face to face consult may have an impact on management decisions, are not suitable candidates for teleconsultation. They should continue to attend clinic with the appropriate pre-visit screening in accordance with the latest MOH guidelines.

Medication for patients with IBD

IBD patients who are in remission should continue on the current treatment and should not stop or reduce medication without consulting his/her physician. We strongly recommend that continuation and access to treatment should be maintained.

Among the IBD medicines, mesalazine does not increase the risk of any known infection and should be continued.

Use of corticosteroids should be minimised. For patients who need to be started on corticosteroids or who are already on them, the dose should be tapered as quickly as disease activity will permit. Oral budesonide for ulcerative colitis and small bowel or ileocaecal Crohn's disease should be considered as an alternative to systemic corticosteroids such as prednisolone.

Azathioprine may cause leukopenia and lymphopenia which may impair one's viral immunity. Patients who are already on thiopurines should continue on the drug if they are well controlled. In patients on azathioprine who are not well controlled, the managing physician may want to consider using a biologic rather than to use corticosteroids.

Considering the known efficacy of azathioprine in IBD, physicians should consider starting patients on a biologic rather than on azathioprine in steroid dependent and steroid refractory patients during the SARS-CoV-2 pandemic.

Patients already on a biologic and in remission should continue on the current drug and dose. In Singapore, a patient should not be switched from an intravenous biologic to a subcutaneous biologic simply to reduce hospital / clinic visits if he/she is responding well to the drug. There is currently no evidence that any particular class of biologics is safer against SARS-CoV-2 infection.

Patients who wish to stop biologics during this period should be assessed thoroughly, as they would have been before the emergence of COVID19. The patient and physician should be aware of the risk of a disease flare after cessation of a biologic. Should this happen, the induction process with some biologics may entail more frequent clinic / hospital visits, without guarantee of remission. Furthermore, changes to treatment plans should be made with the expectation that the pandemic is likely to persist beyond 2020.

Physicians should consider not using tofacitinib if suitable alternatives are available. Tofacitinib has been demonstrated to increase the risk of herpes zoster infection. Patients in remission on tofacitinib should be maintained on the lowest effective dose.

Physicians and patients may consider exclusive enteral nutrition as an option to treat active Crohn's disease. Co-management with a dietitian familiar with exclusive enteral nutrition in Crohn's disease is advisable.

Surgery and Endoscopy

IBD patients should not undergo elective endoscopies if detrimental effects are not expected in postponing these for 12 months or at such time that MOH advises resumption of elective procedures. Patients in whom endoscopic findings are anticipated to have a significant bearing on disease management in the short to medium term should proceed with endoscopic assessment in accordance with best practices

Most IBD surgeries are urgent or emergencies and generally cannot be postponed without harm to the patient. These procedures should therefore continue as clinically indicated.

IBD Multidisciplinary Team (MDT) meetings

In hospitals where IBD MDTs have been set up, MDT meetings should proceed during the period of the pandemic by teleconferencing. Diagnostic problems, and management decisions regarding medical and surgical treatment of difficult IBD patients should be addressed if resources are available to hold the meeting virtually.

Treatment of IBD patients with COVID 19

IBD patients infected with COVID 19 should stop azathioprine, tofacitinib and postpone receiving maintenance doses of biologics until full recovery is made.

Use of systemic corticosteroids in COVID 19 is controversial. IBD patients on steroids should have the dose tapered as quickly as disease activity will permit.

It has to borne in mind that SARS-CoV-2 can infect the gastrointestinal tract and a significant minority of COVID 19 patients without IBD have diarrhoea. IBD physicians should exercise clinical judgement on whether to escalate treatment in patients with an increase in diarrhoea who are known to be infected.

Experimental treatment for COVID 19 include tocilizumab and JAK inhibitors in patients with severe disease. There is no data on the potential interactions of anti IL6 and JAK inhibitors if given in a patient who is on a current IBD biologics.

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