COVID-19 e IBD

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How did COVID-19 affect IBD patients?

COVID-19 risk in IBD patients

COVID-19 vaccination

Management of IBD patients

COVID-19 RISK in IBD patients

Patients with IBD do NOT appear to be at a higher risk for infection with SARS-CoV-2 or development of COVID-19.

May be a small risk for patients with ACTIVE disease → **important to keep disease under control**

Little, in any. risk signal to date with drugs for IBD therapy

Exception: corticosteroids

Allocca M, et al. Clin Gastroenterol Hepatol, 2000
Bezzio C., et al. Gut 2020
Rubin T, et al. Gastroenterol. 2020

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Alimentary Tract

Risk of COVID 19 in patients with inflammatory bowel diseases compared to a control population

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- Multicentre case-control study (in Lombardy)
  - **1810 patients** (64%) responded to the questionnaire
  - 941 IBD vs 869 controls (non IBD gastroenterology patients)
- Highly **probable** COVID-19 on the basis of symptoms and signs was less frequent in the IBD group (**3.8% vs 6.3%**; OR:0.45, 95%CI 0.28–0.75)
- IBD patients had a lower rate of nasopharyngeal swab-PCR confirmed diagnosis (**0.2% vs 1.2%**; OR:0.14, 95%CI 0.03–0.67).

Lower incidence of COVID-19 in Patients with Inflammatory bowel disease treated with non-gut selective biologic therapy

Ardizzone S, Ferretti F, et al. 2021 (submitted)

Observational retrospective study

- 1816 IBD patients on biologic therapy
- Regular follow up at 11 IBD referral Units in Lombardy

Main endpoints:

- Cumulative incidence of COVID-19
- Outcome (hospitalization/deaths)
- Comparison among different biologic agents

IBD patients on biologic therapy are **not** exposed to a higher risk of COVID-19

	IBD Patients	General population	RR (95%CI)	ρ
Incidence/1000	3.9	8.5	0.45 (0.2-0.9)	< 0.05
Outcome (%) Hospitalization Case-fatality rate	 57 29	 50 18	 1.1 (0.6-2.1) 1.6 (0.5-5)	 ns ns

COVID-19 OUTCOME AND IBD THERAPIES

Therapy with **biologics and IS** did NOT associate with worse COVID-19 prognosis.
A trend toward worse prognosis was found for corticosteroids use.

Bezzio C., et al. Gut. 2020

Thiopurines and anti-TNFs were not associated with a significant increased risk of Covid-19.

Khan N., et al. Gastroenterology. 2020

Risk factors for severe Covid-19 included **systemic corticosteroids and 5-aminosalicylate use,** while anti-TNFs were not associated with severe Covid-19.

Brenner E.J., et al. Gastroenterology. 2020

Combination therapy and thiopurines may be associated with an increased risk of severe COVID-19. No significant differences were observed when comparing classes of biologicals.

Ungaro RC, et al. Gut. 2020

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Cytokine blockers are associated with a **lower incidence** of symptomatic infection, supporting the decision of maintaining the ongoing treatment.

	Non-gut-selective agents	Gut-selective agents	OR (95%CI)	*p*
COVID-19 cases, %	0.1	1.3	0.13 (0.02-0.74)	< 0.01
COVID-19 symptoms, %	6	10	0.6 (0.37-0.98)	0.04
Outcome (%) Hospitalization Death	 0.1 0	 0.7 0.5	 0.09 (0.01-0.9) 0.06 (0.01-1.2)	 0.04 ns

COVID-19 and IBD therapies

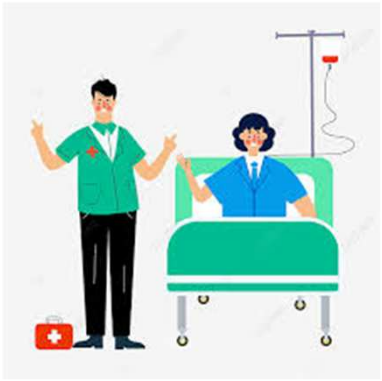
- IBD management should remain largely unchanged
- Treat patients' disease flares in a timely manner
- IBD patients should continue infusion schedules at appropriate infusion centers
- Minimize corticosteroid exposure

BUT Patients with IBD who develop COVID-19 should discontinue immunosuppressants until fully recovered

Rubin T, et al. Gastroenterol. 2020

OUTPATIENTS' CARE

- ★ Telemedicine
- ★ Face-to-face consultations for major changes



INFUSION CLINIC

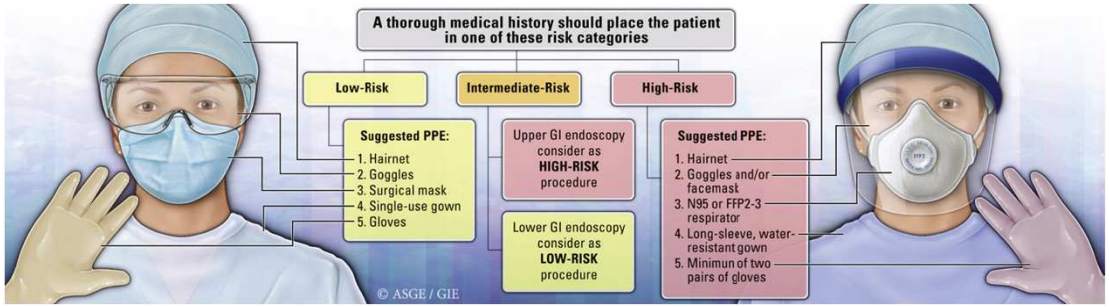
- ★ Screening by phone and on arrival
- ★ Social distancing and preventive measures
- ★ Prefer SC to IV drugs when appropriate

Sarzi-Puttini P, et al. Autoimmun Rev. 2020
Ben-Horin S, et al. J Crohn's Colitis 2020

ENDOSCOPY UNIT

- ★ Triage patients according to risk of COVID-19 infection
- ★ Triage in terms of urgency and risk/benefit ratio
  - ■ High priority procedures
    - ● endoscopic assessment of clinically m… severe IBD reactivation
    - ● endoscopic dilations of CD strictures i… tic patients
    - ● screening and follow up within clinical t… ive IBD patients
  - ■ No or low priority → postpone, faecal calprotectin to monitor disease activity

★ Adequate PPE based on patient and procedure risk



Iacucci M, et al. Lancet Gastro Hepatol. 2020
Repici A, et al. Gastroenterology 2020

COVID-19 VACCINATION and IBD

How to manage COVID-19 vaccination in immune-mediated inflammatory diseases: an expert opinion by IMIDs Study Group

We suggest that IBD patients undergo COVID-19 vaccination and continue to utilize preventive measures such as hand-washing, wearing masks and social distancing.

Ferretti F. & IMIDs Study Group, 2021 (submitted)

IBD patients on biologic therapy (gut-selective) or immunosuppressants (AZA) or active IBD	+++
IBD patients on biologic therapy (non-gut-selective)	++
Non-immunosuppressed inactive IBD patients (untreated or mesalamine-treated)	+
Recent high-dose steroid therapy	+/-

We strongly support SARS-CoV-2 vaccination in patients with IBD.
Protective immune responses to SARS-CoV-2 vaccination may be diminished in some patients with IBD, such as those taking anti-TNF drugs.

BSG IBD section and IBD Clinical Research Group. Lancet Gastroenterol Hepatol. 2021

We can reassure our patients that the major candidate vaccine mechanisms seem safe for most, if not all, patient populations, but that further clarity may be needed among those who are immunosuppressed.
Melmed et al., Gastroenterology 2020

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