
Management of Patients with Inflammatory Diseases during the COVID-19 Pandemic

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ABSTRACT

Patients with various inflammatory diseases of the gastrointestinal tract, skin, liver, kidneys, and musculoskeletal system-connective tissues, often undergo different anti-inflammatory therapies to maintain remission and avoid serious and/or life-threatening complications. Available data so far show an increased rate of hospitalization in such patients during the COVID19 pandemic. The key points of our position statement are summarized below:

- Patients with inflammatory diseases who receive moderate or high-risk anti-inflammatory therapies might be considered as an increased risk group for severe COVID-19 and appropriate measures should be taken in order to protect them.
- Initiation of immuno-suppressive/modulatory therapies should be done with caution, taking into account the severity of the underlying inflammatory disease, the type of anti-inflammatory treatment, and the risk of exposure to the SARS-CoV-2 virus.
- Discontinuation of anti-inflammatory therapies in patients who have not been exposed to or infected with the SARS-CoV-2 virus is not recommended.
- In patients who become infected with SARS-CoV-2, anti-inflammatory therapies should be discontinued, except in special cases.

- Specialty physicians should actively participate in the Interdisciplinary Teams caring for patients with inflammatory diseases during COVID19 infection.

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PURPOSE OF THIS POSITION STATEMENT

The pandemic of the novel SARS-CoV-2 coronavirus has created a number of practical day-to-day problems in patients with inflammatory diseases undergoing treatment with different anti-inflammatory agents. These include

patients with inflammatory diseases of the gastrointestinal tract (inflammatory bowel disease, IBD), liver (autoimmune hepatitis), skin (psoriasis, blistering skin disorders), kidneys (glomerulonephritis, glomerulopathies), and musculoskeletal-connective tissues diseases (rheumatoid arthritis, systemic rheumatic diseases such as Systemic Lupus Ery-

thematosis, vasculitis, myositis, scleroderma, Sjögren's Syndrome, etc.).

The purpose of this joint position statement is to provide up-to-date guidance for better management of patients with inflammatory diseases during the COVID19 pandemic. This text does not include recommendations for transplanted patients (kidney, liver) for whom there are special instructions from the Greek National Organization of Public Health (EODY).¹

For the development of this joint position statement, the general recommendations of EODY¹ as well as the most recent Specific Recommendations/Guidelines of the respective Greek²⁻⁴ and International⁵⁻¹⁵ Scientific Societies were taken into account. These statements do not replace the individual diagnostic and therapeutic decisions of treating physicians, and may be modified over time with the emergence of new scientific data.

A. GENERAL STATEMENTS

1. Patients with inflammatory diseases (whether receiving immuno-suppressive/modulatory therapies or not) should follow the updated Guidelines and Recommendations of the National Organization of Public Health (EODY).
2. Up to date, there is no data to suggest that patients with inflammatory diseases are at higher risk of COVID-19 infection compared to the general population.
3. Although data on the course of COVID19 disease in patients with inflammatory diseases are still limited, recent findings from international databases of patients with IBD¹⁶ and rheumatic diseases¹⁷ show an increased hospitalization rate of these patients (31-46%), especially those receiving glucocorticoids. Based on these data and the recent Guidelines/Recommendations of International Health Organizations¹⁸⁻¹⁹ and Academic Hospitals,²⁰⁻²¹ patients with inflammatory diseases undergoing moderate to high risk anti-inflammatory treatment (see Annex) might be considered as an increased risk group for severe COVID-19 and appropriate measures should be taken in order to protect them.
4. Most specifically, regarding:
 - A. The home isolation of working patients and/or
 - B. The continuation, temporary or permanent discontinuation of their therapies, the following factors should be taken into account:
 - the severity of the underlying inflammatory disease (mild, moderate, severe, vital organ- and/or life-threatening) - patients' comorbidities (age > 65 years, chronic respiratory or cardiovascular disease, chronic kidney or liver disease, diabetes mellitus)
 - the risk of exposure to SARS-CoV-2 (working-home environment, administration of IV therapies in a hospital setting)

apies in a hospital setting)

- the type of their anti-inflammatory therapies (see C and D, Annex)

5. In the Interdisciplinary Teams caring for patients with inflammatory diseases (who receive or not immuno-suppressive/modulatory therapies) who develop COVID19 infection, the inclusion of the respective specialists (gastroenterologists, dermatologists, hepatologists, nephrologists, rheumatologists) is mandatory.

B. INITIATING THERAPY IN PATIENTS WITH ACTIVE INFLAMMATORY DISEASES WHO HAVE NOT BEEN EXPOSED TO OR INFECTED WITH SARS-CoV-2 VIRUS

1. For patients with active disease, the choice of initiating anti-inflammatory therapy should be based primarily on the severity of the underlying disease (mild, moderate, severe, vital organ- and/or life-threatening)
2. Therapeutic decisions should take into account:
 - the type of treatment (low vs. moderate - high risk, see Annex) and
 - the risk of exposure to SARS-CoV-2 in patients receiving such treatment (IV treatment in a hospital setting vs. pos/subcutaneous treatment at home, potential virus exposure at work or home)

C. THERAPY OF PATIENTS WHO HAVE NOT BEEN EXPOSED TO OR INFECTED WITH SARS-CoV-2 VIRUS

1. Glucocorticoids

Glucocorticoids should not be discontinued abruptly but caution must be taken to taper their dose to the lowest possible one that achieves adequate control of the underlying inflammatory disease.

2. Non-biologics/biologics/targeted-synthetic agents
In the absence of SARS-CoV-2 exposure or COVID-19 infection, discontinuation of non-biologics, biologics or targeted-synthetic agents (see Annex) is not recommended.

D. THERAPY OF PATIENTS WHO HAVE BEEN EXPOSED TO OR INFECTED WITH SARS-CoV-2 VIRUS

1. Glucocorticoids

- a. It is recommended to taper glucocorticoids to the minimum possible dose required to control the inflammatory activity of the underlying disease.
- b. In special cases, following a decision from the Interdisciplinary Team, glucocorticoids can be administered as treatment for the COVID19 infection.
- c. In patients with mild to moderate IBD, conventional glucocorticoids may be substituted by budesonide (controlled ileal-release or multimatrix extended-release) to control the underlying inflam-

matory disease.

2. Non-biologics

- a. It is recommended to stop or postpone their administration until patients are asymptomatic from COVID19 infection and the molecular viral tests become negative.
- b. An exception is the administration of 5- Aminosalicylic acid (5-ASA, in patients with IBD) to control the underlying inflammatory disease which can be used safely, if necessary, at the maximum permitted dose and in all forms (orally and/or rectally).
- c. In special cases, following a decision of the Interdisciplinary Team, hydroxychloroquine (in patients with systemic lupus erythematosus or rheumatoid arthritis) could be continued.

3. Biologics/targeted-synthetic agents

- a. It is recommended to stop or postpone their administration until patients are asymptomatic from COVID19 infection and the molecular viral tests become negative.
- b. In special cases, following a decision of the Interdisciplinary Team, the following agents may be continued:
 - Vedolizumab (in patients with active IBD) to control the underlying inflammatory disease and if necessary
 - Tocilizumab, for the control of their underlying inflammatory disease (in patients with rheumatoid arthritis or giant cell arteritis) and/or the treatment of COVID19 disease (according to existing National Guidelines for the treatment of COVID-19).

CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

1. Guidelines from the Greek National Organization of Public Health (EODY). Accessed at: <https://eody.gov.gr/neos-koronaios-covid-19/>
2. Hellenic Dermatological and Venereological Society (HDVS): Recommendations in patients with Dermatological diseases under systematic treatment. Accessed at: http://www.edae.gr/pdf/covid19_odigies.pdf
3. The Greek Rheumatology Society and Professional Association of Rheumatologists (ERE-EPERE): Recommendations Regarding COVID19 Infection in Rheumatic Patients in Greece. *Mediterranean Journal of Rheumatology* 2020;31:6-7.
4. Recommendations of the Hellenic Study Group regarding the management of patients with IBD during the course of the COVID-19 pandemic (EOMIFNE). http://eomifne.gr/New/images/2020/COVID_19_2020_03_26.pdf
5. ERA-EDTA: Information for nephrologists and other professionals on prevention and treatment of COVID-19 infections in kidney patients. Accessed at: <https://www.era-edta.org/en/covid-19-news-and-information/>
6. American Association for the Study of Liver Diseases (AASLD): Clinical insights for hepatology and liver transplant providers during the COVID-19 pandemic. Accessed at: <https://www.aasld.org/sites/default/files/2020-04/AASLD-COVID19-ClinicalInsights-4.07.2020-Final.pdf>
7. European Association for the Study of the Liver (EASL): Care of patients with liver disease during the COVID-19 pandemic: EASL-ES-CMID position paper. Accessed at: <https://easl.eu/wp-content/uploads/2020/04/EASL-ESCMID-COVID-19-Position-Paper.pdf>
8. American Academy of Dermatology: Guidance on the use of biologic agents during COVID-19 outbreak. Accessed at: https://assets.ctfassets.net/1ny4yoiryqia/PicgNuD0IpYd9MSOwab47/07b614658aff5fc6ccc4c0bd910509a3/Biologics_and_COVID_19_FINAL_V2.pdf
9. American College of Rheumatology (ACR): COVID-19 Clinical Guidance for Patients with Rheumatic Diseases. <https://www.rheumatology.org/Portals/0/Files/ACR-COVID-19-Clinical-Guidance-Summary-Patients-with-Rheumatic-Diseases.pdf>
10. European League Against Rheumatism (EULAR): EULAR Guidance for patients COVID-19 outbreak. Accessed at: https://www.eular.org/eular_guidance_for_patients_covid19_outbreak.cfm
11. International Organization for the Study of Inflammatory Bowel Disease (IOIBD): Rubin DT, Abreu MT, Rai V, Siegel CA; International Organization for the Study of Inflammatory Bowel Disease. Management of Patients with Crohn's Disease and Ulcerative Colitis During the COVID-19 Pandemic: Results of an International Meeting. *Gastroenterology* 2020;159:6-13.
12. American Gastroenterology Association (AGA): Rubin DT, Feuerstein JD, Wang AY, Cohen RD, AGA Clinical Practice Update on Management of Inflammatory Bowel Disease During the COVID-19 Pandemic: Expert Commentary. *Gastroenterology*. 2020;159:350-57.
13. National Health System (NHS) -UK: Clinical guide for the management of rheumatology patients during the coronavirus pandemic (16 March 2020 Version 1). <https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/clinical-guide-rheumatology-patients-v1-19-march-2020.pdf>
14. National Institute for Health and Care Excellence (NICE) - UK: COVID-19 rapid guideline: rheumatological, autoimmune, inflammatory and metabolic bone disorders. Accessed at: <https://www.nice.org.uk/guidance/NG167#> (published April 3, 2020, updated July 2, 2020)
15. British Society for Rheumatologists (BSR): COVID-19: guidance for rheumatologists. Accessed at: <https://www.rheumatology.org.uk/news-policy/details/covid19-coronavirus-update-members> (updated July 29, 2020)
16. Surveillance Epidemiology of Coronavirus Under Research Exclusion (SECURE-IBD): Accessed at: <https://covidibd.org/>
17. COVID-19 Global Rheumatology Alliance. Accessed at: <https://rheum-covid.org/>
18. CDC: Groups at Higher Risk for Severe Illness. Accessed at: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html> (revised July 17, 2020)
19. Public Health England: Guidance on shielding and protecting people defined on medical grounds as extremely vulnerable from COVID-19. Accessed at: <https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19> (updated September 4, 2020)
20. Massachusetts General Hospital (MGH): COVID-19 Treatment Guidance. Accessed at: <https://www.massgeneral.org/assets/MGH/pdf/news/coronavirus/mass-general-COVID-19-treatment-guidance.pdf> (updated July 1, 2020)
21. Massachusetts General Hospital (MGH): Risk Factors for COVID-19 Disease Progression. Accessed at: <https://www.massgeneral.org/assets/MGH/pdf/news/coronavirus/risk-factors-for-severe-COVID-19.pdf>

ANNEX

Risk categorization of anti-inflammatory therapies for severe COVID19

ANTI-INFLAMMATORY THERAPIES
Low Risk
Glucocorticoids
Budesonide (pos/rectally)
Non-biologics
Colchicine
Hydroxychloroquine (HCQ)
5-Aminosalicylic acid (5-ASA)
Sulfasalazine (SSZ)
Biologics
Anti-integrin (Vedolizumab)
Moderate-High Risk
Glucocorticoids
Prednisolone - Methylprednisolone (pos/IV)
Non-biologics
Azathioprine (AZA)
Cyclophosphamide (CYC)
Cyclosporine (CsA)
Leflunomide (LEF)
Methotrexate (MTX)
6-mercaptopurine (6-MP)
Mycophenolate acid (MPA)
Mycophenolate mofetil (MMF)
Tacrolimus
Biologics
Abatacept
Anti-IL1 (Anakinra, Canakinumab)
Anti-IL5 (Mepolizumab)
Anti-IL6 (Tocilizumab)
Anti-IL12/23 (Ustekinumab)
Anti-IL17 (Brodalumab, Secukinumab)
Anti-TNFs (Adalimumab, Certolizumab pegol, Etanercept, Golimumab, Infliximab)
Belimumab
Anti- B cell (Rituximab)
Targeted synthetic agents
Apremilast
JAK Inhibitors (Tofacitinib, Baricitinib)