



ACMT, AACT and AAPCC Joint Statement of Caution Regarding the Use of Colchicine for Treatment of COVID-19

March 1, 2021

The American College of Medical Toxicology, The American Academy of Clinical Toxicology, and The American Association of Poison Control Centers have issued the following joint statement in response to recent discussions proposing use of colchicine as a potential treatment for COVID-19:

As physicians, pharmacists, and experts in pharmacology and poisoning, we recommend caution in the use of colchicine to treat COVID-19. This drug should only be used under medical supervision. For the management of COVID-19, at the present time, colchicine should only be used as part of clinical research.

Colchicine is a medication derived from two plants of the Liliaceae family. Colchicine blocks cell structures called microtubules, interfering with cell division and transport. Colchicine has been used medically for hundreds of years and is FDA-approved for gout and familial Mediterranean fever [1].

If colchicine accumulates in the body, it is capable of causing symptoms ranging from nausea and vomiting to kidney failure, pancytopenia (decrease in blood cells), and death. In 2019, the American Association of Poison Control Centers reported several hundred exposures, with more than 10% resulting in moderate toxicity, major toxicity, or death [2]. About half of these cases were unintentional, as small dosing errors can cause significant illness. People with kidney failure or other illnesses can accumulate toxic levels of the drug even if they take a standard dose. In children, small doses can be life-threatening.

Recent research has suggested that colchicine may reduce hospitalizations and deaths in certain patients with COVID-19 [3,4]. We are hopeful that these results are confirmed with further research. At this time, we recommend that colchicine only be administered for COVID-19 under close medical supervision, preferably as part of clinical research. There is no role for this drug as a preventative medication for COVID-19.

As physicians, scientists, and citizens, we share the desire for effective treatments for the prevention and treatment of COVID-19. However, colchicine has a long history of significant toxicity and we are concerned that a sudden increase in inadequately supervised use could have unforeseen consequences. Colchicine should only be taken under medical direction

and should never be shared with friends or family. People with suspected colchicine toxicity should be managed in consultation with a medical toxicologist, clinical toxicologist, or poison center. Patients and clinicians can reach their regional poison center at 1-800-222-1222, 24 hours/7 days a week/365 days a year.

We recommend caution in the use of colchicine for management of COVID-19. We support the investigation of this drug in rigorous, medically supervised clinical research with regulatory oversight.

Sincerely,

American College of Medical Toxicology, Board of Directors

American Academy of Clinical Toxicology

American Association of Poison Control Centers

- 1) U.S. FDA. [Colchicine prescribing information.]

https://www.accessdata.fda.gov/drugsatfda_docs/label/2014/022352s017lbl.pdf

Accessed February 27, 2021.

- 2) Gummin DD, Mowry JB, Beuhler MC, Spyker DA, Brooks DE, Dibert KW, Rivers LJ, Pham NPT, Ryan ML. 2019 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 37th Annual Report. *Clin Toxicol (Phila)*. 2020 Dec;58(12):1360-1541. doi: 10.1080/15563650.2020.1834219. PMID: 33305966.
- 3) Tardif J, Bouabdallaoui N, L'Allier PL et al. Efficacy of Colchicine in Non-Hospitalized Patients with COVID-19. <https://www.medrxiv.org/content/10.1101/2021.01.26.21250494v1>

Accessed February 27, 2021

- 4) Deftereos SG, Giannopoulos G, Vrachatis DA, et al. Effect of Colchicine vs Standard Care on Cardiac and Inflammatory Biomarkers and Clinical Outcomes in Patients Hospitalized With Coronavirus Disease 2019: The GRECCO-19 Randomized Clinical Trial. *JAMA Netw Open*. 2020;3(6):e2013136.doi:10.1001/jamanetworkopen.2020.13136