Effect of increasing doses of colchicine on the treatment of 333 COVID-19 inpatients

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March 10, 2024

Abstract

Recently we demonstrated that in 452 COVID-19 inpatients higher colchicine doses reduced the mortality about 5 times. Here we report another 333 cases of COVID-19 inpatients, treated with different doses of colchicine. There was a clear trend of reduction in the mortality of inpatients with increasing doses of colchicine between 2- and 7-fold. Colchicine loading doses of 4 mg are more effective than those with 2 mg. Despite higher than the so-called "standard doses" of colchicine, our doses are completely safe. The World Health Organization (WHO)-recommended strategy to inhibit viral replication had partial success because there is no direct link between viral load and the hyperactivation of the NLRP3 inflammasome. The neutralization of the IL-6 effects with anti-receptor antibodies and the inhibition of the tyrosine kinase JAK can be compromised if NLRP3 continues to be hyperactive and generates a cytokine storm. Our treatment strategy to inhibit the SARS-CoV-2 entry into the cell with inhaled bromhexine and the hyperactivated NLRP3 inflammasome with higher doses of colchicine, as the source of the cytokine storm practically solves the problem of treating COVID-19. The timing of initiation of treatment is critical.

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