

Ellagic acid can possibly be an adjuvant treatment for COVID-19

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Dear Editor,

Ellagic acid (2,3,7,8-tetrahydroxy-chromeno[5,4,3-cde]chromene-5,10-dione) is a polyphenol found in several fruits. We hypothesize that it may be effective in the treatment of COVID-19.

This agent possesses antiviral effects that have been documented against the following viruses: influenza A (H3N2), three rhinoviruses (HRV-2, HRV-3, and HRV-4), Ebola, HIV-1, HSV-1, and noroviruses¹⁻⁸. It has anti-oxidant, anti-inflammatory and anti-allergic effects. Interestingly, this phenol has a synergistic effect with antimalarial drugs, which are currently considered in the treatment protocol of COVID-19⁹.

Ellagic acid provides protection against lung damage by modulating antioxidant activities, preventing apoptosis, and inhibiting inflammatory mediators¹⁰. In a study on mice with acute lung injuries, ellagic acid showed anti-inflammatory effects as it decreased COX-2 inhibitor levels. Ellagic acid was also found to reduce vascular permeability alterations and neutrophil recruitment in bronchoalveolar fluid. It led to a fall in IL-6 levels but augmented the concentration of IL-10 in the bronchoalveolar fluid¹¹.

As a result, ellagic acid can potentially be a novel and safe adjuvant drug for the treatment of COVID-19.

Conflict of interest: None declared.

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