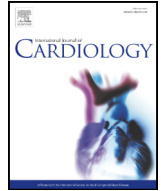
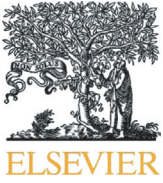




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Letter to the editor

## COVID-19 and cardiovascular injury: A role for oxidative stress and antioxidant treatment?



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Vitamin C could represent a plausible approach as it is able to scavenge reactive oxidant species and reduces Nox-2 activation when intravenously infused [4]. However, the use of vitamin C in ARDS or sepsis is still a matter of debate as data at this regard are discordant [5]. Thus, future studies should explore the clinical efficacy of antioxidants in COVID-19.

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All the authors have no conflicts of interest to disclose.

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To the Editor,

The coronavirus disease 2019 (COVID-19), seems to have a cardiovascular tropism characterized by high incidence of myocardial infarction especially for patients with severe infections recovered in intensive care units. In their letter, the Authors state that oxidative stress could play a pivotal role to determine cardiovascular complications in COVID-19. We agree about this issue. In particular, NADPH oxidase-2 (NOX-2), that it is considered one of the most important sources of superoxide anion in human [1], plays a role in systemic inflammation and pathogenesis of several RNA virus as the influenza virus [2]. Furthermore, NOX-2 is increased in patients with pneumonia and is closely associated with troponin elevation, suggesting that the activation of this enzyme could elicit the myocardial damage [3]. Thus, it could be possible to argue that COVID-19 is associated with Nox-2-derived oxidative stress but data regarding this issue are still lacking.

The question is: how to reduce oxidative stress and improve the poor outcome that characterized severe COVID-19?

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