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COVID-19 and venous thromboembolism: part of a multisystem disease

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Dear Editor,

We read with great interest recent scientific letters addressing abdominal aspects of COVID-19^{1, 2}. Like Martín-Falquina IC *et al.*¹ regarding the thrombotic nature of acute pancreatitis (AP) in a patient with COVID-19, our patient with AP³ was previously anticoagulated. The association in the medical literature between viral infections (such as those caused by the human immunodeficiency viruses, hepatitis C and influenza) and venous thromboembolism (VTE) has again become evidence in the scientific community whether in 2017 in the epidemic of Chikungunya and Zika or more recently in the current COVID-19 pandemic^{4, 5}.

With this, several standards have emerged around the world addressing the prophylaxis and treatment of VTE in this context. Low molecular weight heparin, in addition to its anticoagulant and anti-inflammatory effects, seems to act as an

endothelial protector, antagonizing the histones that cause endothelial injury (microcirculatory) and an antiviral effect due to competition with viruses for the cell surface binding site⁴.

In a recent document about the use of anticoagulants in patients with COVID-19, the authors suggest that the hospitalized patient should be categorized as to the risk of VTE to then receive the best prophylaxis for each specific case⁵. Although there has not yet been enough time for all the clarifications about the disease in multicenter and randomized clinical trials, the best approach to the patient has been adequately based on the validated and current guidelines, as well stated by Martín-Falquina IC *et al.*³. We also highlight the individualization of each patient's attentive approach and the potential risk-benefit specific to each situation, in addition to the general protocols. The knowledge of the response and medical approach of patients has been renewed day by day, and the need for the medical team to act in its most comprehensive form in this context is evident.

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