



Switch from oral anticoagulants to parenteral heparin in SARS-CoV-2 hospitalized patients: comment

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Dear Editor,

We read with great interest the article by Testa et al. regarding the replacement of oral anticoagulant therapies (VKA and DOAC) with parenteral heparin to avoid the risk of over- or undertreatment [1]. Doubtless this is a very important issue in the management of COVID-19 patients, but can heparin be administered in all cases? As a matter of fact, thrombocytopenia has been described in a non-neglectable proportion of patients with severe COVID-19 infection, ranging between 5 and 42% in the overall COVID-19 patients and reaching up to 58% in subjects with severe disease. At the same time, thrombocytopenia has been associated with an increased risk of mortality in these subjects [2, 3]. However, whether this thrombocytopenia could be due to a septic-induced disseminate intravascular coagulation and/or platelet–viral interactions remains unknown [4]. In this regard, the administration of LMWH or UFH in patients with thrombocytopenia represents a significant issue. How could heparin be administered in a fixed therapeutic dose in these critical patients? Should we consider a dose reduction in those patients with a severe thrombocytopenia? In case of concomitant VTE could be appropriate positioning of an inferior vena cava (IVC) filter with prophylactic heparin

administration and platelet transfusion? Moreover, we must not forget the potential occurrence of heparin-induced-thrombocytopenia (HIT), which, despite being rare, poses additional clinical challenges in terms of anticoagulation management. For these reasons, ongoing research should consider also these cited relevant issues and not only assess a potential “antiviral” effect from an “in vitro” perspective. In this regard, it is would be important also to establish different anticoagulant strategies in COVID-19 patients with thrombocytopenia which is frequently observed in clinical practice.

Compliance with ethical standards

Conflict of interest All authors declare that they have no conflict of interest.

Statement of human and animal rights This article does not contain any studies with human participants performed by any of the authors.

Informed consent For this type of study, formal consent is not required.

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