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Mortality and in-stent thrombosis in COVID-19 patients with STEMI: More work ahead

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To the Editor,

We read with great interest the elegant analysis by De Luca et al. [1] regarding the impact of SARS-CoV-2 positivity on clinical outcome among STEMI patients undergoing percutaneous coronary intervention (PCI) [1]. The authors reported that comparing 62 SARS-CoV-2 positive patients with a matched population of 310 STEMI subjects, among the former the culprit lesion was more often located in the RCA and the viral infection was associated with a remarkably higher in-hospital mortality, in-stent thrombosis (IST) and heart failure. However, these results hide some dark issues: firstly, both the complexity of the procedure and location of culprit lesion/s in specific anatomical locations, such as left main body shaft (no cases observed) or LM bifurcation, must be considered as potential confounding factors being these sites associated with higher mortality rate, due to the large amount of subtended myocardium and IST incidence [2,3]. Secondly, data regarding the need for inotropic, mechanical or ventilatory support, which are required in the more severe form of STEMI with concomitant cardiogenic shock and per se associated with a worst prognosis, have not been presented by the authors [4]. Thirdly, the duration of the procedure, the length of stented vessel/s, the presence of calcifications and the use of rotational atherectomy may represent other confounding factors that require a careful attention, especially when assessing the IST rate [5]. Therefore, because SARS-CoV-2 patients undergoing PCI would potentially be at a different risk of IST and short-term mortality than expected from the result of this study, further analysis is required to assess the real correlation between STEMI revascularization and in-hospital mortality and/or IST in COVID-19 patients.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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