

EDITORIAL COMMENT

Expert Article Analysis for:

[Invasive strategy for COVID patients presenting with acute coronary syndrome: The first multicenter Italian experience](#)

Percutaneous coronary intervention in patients with COVID-19 and acute coronary syndrome: What if the old normal became the new normal?

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Email: espogiov@unina.it**Key Points**

- The management of COVID-19 patients with acute coronary syndrome (ACS) remains challenging.
- This initial experience supports the safety and efficacy of invasive assessment in patients with COVID-19 and ACS as well as the safety of the procedure for healthcare personnel.
- The study findings raise the question of whether we should continue to follow “COVID-19 guidelines” suggesting a more conservative approach to ACS patients with COVID-19 or rather go back to a more unrestricted use of invasive angiography and revascularization.

severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has at least two major consequences for patients with acute coronary syndrome (ACS). First, a decline in hospital admissions for ACS has been observed globally as probable consequence of the fear of exposure to in-hospital infection.¹ Second, the implementation of percutaneous coronary intervention (PCI), which represents the principal revascularization modality in the setting of ACS, has been particularly challenged during the COVID-19 pandemic.

In this issue of the Journal, Secco and colleagues reported a multi-center experience including 31 patients with SARS-CoV-2 and ACS across five Italian hospitals.² Obstructive coronary artery disease with thrombotic lesions was found in the majority of patients undergoing coronary angiography. However, a noticeable proportion of COVID-19 patients had a normal angiogram with a final diagnosis of Takotsubo syndrome ($N = 3$) or myocarditis ($N = 2$). With the exception of one patient who died, clinical follow-up was uneventful in the remaining cases.

Despite the very small numbers, this pilot study provides relevant insights for the management of COVID-19 patients with ACS. In particular, it shows that coronary angiography in patients with ACS and COVID-19 is safe for both patients and Cath-Lab personnel. Hitherto, none of the staff involved during the procedures acquired COVID-19. A more conservative approach has been advocated during the COVID-19 pandemic for both non-ST-elevation (medical therapy) and ST-elevation ACS (fibrinolysis).³ However, the study findings challenge this paradigm. Given the fact that we have to live with COVID-19 for a while longer, should we switch to a new normal (i.e., routine invasive management)? And, is the new normal nothing more than the old normal? At the beginning of this pandemic, we witnessed a shortage of personal protective equipment (PPE) and very few were familiar with donning and removing PPE to manage COVID-19 patients. Contrariwise, when the second wave of infection unfolded, the invasive cardiology community has not been caught unprepared. Early access to vaccine against COVID-19 is becoming a top priority for healthcare personnel in almost all countries. Therefore, with the healthcare professionals provided with full equipment and acquired immunity against COVID-19, a conservative management of ACS in patients with COVID-19 will become more difficult to justify.

We know that fibrinolysis is inferior to primary PCI in terms of safety and efficacy and that a conservative management in patients with non-ST-elevation ACS is inferior to a routine invasive strategy in terms of reinfarction and refractory angina. Consequently, as long as invasive assessment can be safely and timely performed,⁴ we should go back to the “normal” guidelines supporting primary PCI and early invasive strategy for the majority of patients with ST-elevation and

Coronavirus disease 2019 (COVID-19) remains a global pandemic by affecting more than 88 million persons worldwide with 2 million deaths as of January 2021. The spread of the infection caused by

non-ST-elevation ACS, respectively. Data suggest that patients with concomitant coronary artery disease and COVID-19 have a threefold higher risk of mortality,⁵ which is mainly explained by the burden of comorbidities. Hence, invasive angiography with the possibility of revascularization not only should not be withheld in COVID-19 patients with ACS, but rather supported as the authors brilliantly did.

Recent preliminary data from the US Centers for Disease Control and Prevention indicate that COVID-19 was likely the third leading cause of death in the United States in 2020. Confirmed or not, cardiovascular diseases will remain the number 1 cause of death. As such, we should commit to deliver the most safe and effective therapies to patients with ACS irrespective of their COVID-19 status.

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