

**EDITORIAL COMMENT**

Expert Article Analysis for:

[Consequences of canceling elective invasive cardiac procedures during Covid-19 outbreak](#)

# Postponing cardiac procedures during the pandemic: The balance between elective and selective!

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**Key Points**

- What the article teaches:  
Postponing elective cardiac procedures may have an adverse impact on short-term outcomes.
- How it will impact practice:  
Elective patients scheduled for cardiac procedures have different risk profiles and the decision for postponing should take into consideration the chances of complications related to the deferral.
- What new research would help answer the question:  
Better validate tools to identify which subsets are more prone to early complications in case a scheduled invasive procedure is suspended.

The ongoing COVID-19 pandemic led to a public health crisis of unmatched global proportions, with over 118 million infected people and 2.6 million deaths so far.<sup>1</sup> Healthcare systems all around the

world were overwhelmed with a meteoric flow of patients in dire need of medical care, conducting to a peak in emergency room visits and frequently cascading into jammed hospital beds.<sup>2</sup> Ultimately, the system collapsed in many places, creating a never-seen shortage of resources even in highly developed countries. Facing such a challenging scenario, healthcare providers had to make the difficult choice of prioritizing hospital admissions.<sup>2</sup> In that scenario, elective procedures had to be either canceled or delayed in most hospitals worldwide.

The hazards of deferring or withdrawing “elective” cardiac interventions is largely unknown. In this issue of CCI, Moreno and colleagues add valuable and interesting new information on the matter. During the COVID-19 outbreak in Spain, which was hardly hit by the pandemic, all but urgent cardiac procedures were suspended. The authors collected data from 37 hospitals and 2,158 patients who had their scheduling aborted, for percutaneous coronary intervention, structural heart interventions, or other invasive cardiac treatments. After a follow-up period of only 45 days, an impressive proportion of 9.8% had either died or needed an urgent procedure. Peripheral artery disease, diabetes, symptomatic status, and age were independently related to the chances of adverse events.

Chronic coronary artery disease is recurrently regarded as a relatively benign condition, for which percutaneous coronary intervention has little or null prognostic impact. For instance, in the recent ISCHEMIA trial, the incidence of complications was not different among stable coronary patients undergoing invasive management when compared to those in the conservative-strategy group.<sup>3</sup> As another example, the COURAGE trial also failed to demonstrate the benefit of coronary angioplasty.<sup>4</sup> Noticeably, however, the risk of events in patients in the ISCHEMIA and in the COURAGE randomized trials seemed much lower than that seen by Moreno et al. In ISCHEMIA, 5.3% of patients in the invasive-strategy group had cardiovascular death, myocardial infarction, or unplanned hospitalization in 6 months, while in Moreno et al., 9.3% of patients pending on diagnostic procedures and/or coronary angioplasty underwent urgent procedures due to clinical destabilization in 1.5 month. In the COURAGE trial,<sup>4</sup> the median time to subsequent revascularization was ~10 months in both intervention and conservative groups, which contrasts with the rapid need (within 45 days) for unplanned procedures in the study of Moreno et al.<sup>5</sup> One may wonder whether coronary artery disease in real life is as benevolent a disease, compared to the highly selected population included in randomized clinical trials.

Over the last months, the world may have witnessed a major, though hardly unrecognizable, effect of adjourning cardiac procedures, or of postponing cardiovascular counseling. It is possible that refraining from seeking cardiovascular attention (either voluntarily or otherwise) by the population during the pandemic has elevated the risk of out-of-hospital cardiac events, potentially related to the lack of early treatment in many cases.<sup>6</sup> A similar situation was also experienced by cancer patients, a group in which delays in delivering adequate treatment can render curable tumors untreatable.

The decision of whether or not an elective cardiac procedure should be performed at the present COVID-19 time is far from being straightforward. Nonetheless, it is possible that, in certain patients at higher risk, the trade-off might favor the intervention. One may also ponder that treating the underlying cardiovascular condition should improve the chances of surviving, might a COVID infection occur. While vaccination is still underway, and life is a far cry from what it used to be, choosing wisely with and for our patients is of paramount importance.

#### CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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