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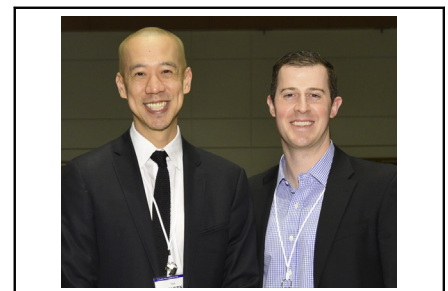


Commentary: Coronary artery bypass grafting during COVID: Safe for some, but where are the rest?

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We congratulate Parcha and colleagues¹ on their article examining the safety of coronary artery bypass grafting (CABG) among propensity-matched groups treated before and during the coronavirus disease-2019 (COVID-19) pandemic. After compiling data from healthcare systems that contribute to a research network, the authors assessed volume trends as well as short-term postoperative outcomes among patients undergoing CABG before and during the COVID-19 pandemic using standard International Statistical Classification of Diseases and Health-Related Problems, Tenth Revision (ICD-10) codes. Among contributing sites, CABG volumes declined by 35.5% in January to September 2020 compared with the same time span in 2019. However, the authors found no increased odds of postoperative stroke, acute respiratory distress syndrome, prolonged ventilation, acute kidney injury, or 30-day mortality during the pandemic.

The first COVID-19 surge has changed the world as we know it, including all aspects of healthcare delivery. The authors demonstrate that despite these unprecedented times, safe coronary revascularization can be accomplished on a regional scale for those patients able to reach the operating room. Notably, among contributing sites, CABG volume, including both elective and nonelective cases, decreased



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CENTRAL MESSAGE

Coronary artery bypass grafting can be done safely during the COVID-19 pandemic, and the hospital is ultimately still a safe place, but the COVID-19-related patient deficit remains concerning.

by nearly 36% during the study period. There is also no indication of a return of CABG case volumes to at or above baseline levels to account for this COVID-19-related patient deficit.

Although patient selection may play some role in determining in which patients elective coronary revascularization can be most safely deferred, there remains a well-described rate of attrition among patients awaiting CABG.² One possible consideration for the patient deficit may include directing those with less complex coronary disease to percutaneous coronary interventions rather than CABG, especially early in the COVID-19 pandemic. However, emerging data from regions impacted by early COVID-19 surges actually demonstrate reduced rates of percutaneous coronary interventions and show that in some instances, these reduced rates occurred regardless of local COVID-19 infection rates.^{3,4}

Collectively, these considerations raise concerns that the COVID-19-related patient deficit represents a combination of patient attrition while awaiting surgery and a higher rate of later presentation in the course of disease. Anecdotally, this is supported by increased rates of mechanical complications of myocardial infarction, namely ventricular septal rupture and left ventricular aneurysm, since the pandemic began.⁵⁻⁷ The root of this

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as-yet-unmeasured COVID-19–related patient deficit likely involves a combination of patients inappropriately selected for delayed CABG or presenting in a delayed fashion owing to concerns related to contracting COVID-19 while hospitalized and further stressing an already strained healthcare system.

With these factors in mind, and in light of the safe short-term outcomes reported by Parcha and colleagues, the importance of seeking healthcare during the pandemic warrants emphasis. As cardiothoracic surgeons, we should continue to be champions for patient education, follow-up, resource allocation, and empowerment as we dig our heels in to address this concerning COVID-19–related patient deficit. Ultimately, the hospital is still a safe place.

According to Parcha and colleagues, it appears that CABG during COVID-19 can be done safely, but the question remains: where are the rest of our patients?

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