Shorter wait between COVID-19 and elective surgery possible

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Kaiser Permanente researchers have good news for patients, surgeons, anesthesiologists, and hospital administrators who have had to put off elective surgery because of a positive COVID-19 test. Among fully
vaccinated patients, there may not be an elevated risk with surgery soon after COVID-19.

Their study was published July 15 in *Annals of Surgery* and found no greater risk of post-surgery complications for these patients in the weeks and months after a COVID-19 illness than in surgery patients who didn't have a history of COVID-19.

"Current guidelines recommend avoiding elective surgery until 7 weeks after a COVID-19 illness, even if a patient has an asymptomatic infection," said lead author Sidney Le, MD, a former Clinical Informatics and Delivery Science research fellow with the Kaiser Permanente Division of Research and surgeon with the Department of Surgery at the University of California, San Francisco.

"But as the pandemic continues, there is concern that delaying surgeries could cause more harm than benefit to some patients," Dr. Le added. "If we are able to identify certain patients who can proceed with surgery despite a recent coronavirus infection, that would be a big relief to health systems and their patients."

The news could return a welcome sense of predictability for hospitals that have had to make last-minute accommodations if a scheduled surgery patient tests positive for COVID-19, even if that person is asymptomatic, said co-author Bradley Cohn, MD, an anesthesiologist, intensivist, and chair of Perioperative Medicine for The Permanente Medical Group. "We have been delaying up to 10% of our surgeries, or canceling them on short notice, because previous evidence suggested we could be putting patients at increased risk from the stress of surgery in combination with COVID-19 illness," he said.

During the pandemic, surgery and anesthesia guidelines have relied on studies carried out before COVID-19 vaccines were widely available,
Dr. Cohn said. "There was a tremendous gap in the literature on what the risk to patients might be in the current environment, in the context of an increasingly vaccinated population. This is the first study that I'm aware of that demonstrates vaccination mitigates the risk of harm in a patient who has recently had COVID-19 and has recovered by the time of their surgery."

The findings could have an immediate impact on Kaiser Permanente's perioperative guidelines in Northern California and may influence national and international professional guidelines as well, Dr. Cohn said.

The study is an example of Kaiser Permanente's ability to identify key medical and operational questions and apply data and research resources to them quickly, said Smita Rouillard, MD, associate executive director of The Permanente Medical Group. "Our findings underscore the importance of continuous learning during this unprecedented time of the pandemic," Dr. Rouillard said.

**Comparing complication rates**

The researchers analyzed records for 228,913 Kaiser Permanente scheduled surgeries in Northern California between January 2020 and February 2022, 4.8% of which involved a confirmed case of COVID-19 in the weeks before or just after surgery. They compared complication rates for patients who had COVID-19 prior to surgery with control groups of patients who did not.

The rate of postoperative complications was about 5% and, overall, there was not a higher rate of complications between fully vaccinated patients who had COVID-19 within 4 weeks prior to surgery and those who did not.

The study authors said guidelines for elective surgery could be loosened,
particularly for patients with previous asymptomatic or mild COVID-19, taking into account vaccination status and whether general anesthesia is being used. Longer delays for elective surgery could still be warranted for patients with previously severe infections or persistent symptoms, Dr. Le said, though this study did not specifically investigate this population.

Researchers will need to revisit the topic as conditions evolve, Dr. Le said.

"We are proud to bring current data to critically important questions that inform the delivery of surgical care, though we recognize that the pandemic is a scientific roller coaster: the virus itself, the context in which it is spread, and treatments all changing. These questions will need to be revisited over and over again with contemporary data and rapid analysis."


Provided by Kaiser Permanente


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