

Munson Healthcare Guidelines: Elective Surgery/Procedure and Anesthesia for Patients Following COVID-19 Infections



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The risks of perioperative morbidity and mortality may be increased in patients with COVID-19, and for some time after recovery. Thus, the decision to perform surgery must balance this risk against the risks of delaying or avoiding the planned procedure.

Elective procedures should not be performed in patients who are symptomatic with COVID-19 or who are suspected of having COVID-19. For patients who have had COVID-19, elective procedures should ideally be delayed until the patient has recovered to baseline cardiopulmonary status and is no longer infectious.

Patients with severe COVID-19 may have significant cardiopulmonary compromise long after the acute illness. The decision to proceed with elective surgery after COVID-19 infection must be individualized, considering both the risks of complications after surgery and the risks of delaying surgery. If surgery is deemed necessary during a period of likely increased risk, those potential risks should be included in the informed consent and shared decision-making with the patient.

Any decision to proceed with surgery should consider:

1. The severity of the initial infection
2. The potential risk of ongoing symptoms
3. Comorbidities and frailty status
4. Complexity of surgery

It is recommended that patients complete a full vaccination series against COVID-19 before surgery, where feasible, owing to the markedly reduced incidence of COVID-19 infection as well as pulmonary and thrombotic complications after surgery compared with nonvaccinated counterparts. However, the following recommendations should be considered independent of the individual's vaccination status. Recently published guidelines [1] in the journal *Anaesthesia* and supported by the American Society of Anesthesiologists and the Anesthesia Patient Safety Foundation address recommended surgical delay for patients diagnosed with COVID-19 pre-operatively. These guidelines required recent revision due to less virulent circulating strains, widespread vaccination, contemporary evidence, and a need to increase access to safe surgery.

Their recommendations are:

- Test patients who develop symptoms of COVID-19 within 7 weeks of a planned surgery.
- Elective surgery should ideally not be undertaken within 2 weeks of a new diagnosis of COVID-19.
- If patients are low risk (age, comorbidities, and functional status) or are having low risk surgery, most elective surgery can proceed 2 weeks following a COVID-19 diagnosis. Examples of low-risk surgeries include eye surgery under local anesthesia, ambulatory gynecological, general, orthopedic, or urological surgery.

- If patients are not low risk or are planned to have surgery that is not low risk, surgery between 2 and 7 weeks of infection is advised with timing based on individual risk assessment. Further details on patient assessment including access to validated risk prediction tools are available within the guidelines themselves.
- There is no evidence to support delaying surgery beyond 7 weeks for patients who have fully recovered from or have had a mild COVID-19 infection.

The decision to proceed or defer urgent intervention in a patient with COVID-19 requires weighing the risk associated with perioperative COVID-19 and disease progression against the potential benefits of surgical intervention. If feasible, the procedure should be delayed until COVID-19 symptoms have resolved, and the patient is no longer transmissible. The duration of transmissibility after COVID-19 diagnosis is defined by the CDC [2].

If the procedure is deemed emergent or if procedural indication becomes emergent during the period of procedural delay, it is advisable to proceed immediately with the intervention, assuming teams observe the necessary precautions to avoid disease transmission. Exceptions apply to patients with severe COVID-19 who are considered poor candidates for emergent intervention due to the nature of their present clinical condition and potential futility of procedural intervention, which in itself confers substantial perioperative risk. Consideration should be made rather for a patient-centered goals of care discussion.

References:

1. El-Boghdady, K., Cook, T.M., Goodacre, T., Kua, J., Denmark, S., Mercer, N., Moonesinghe, S.R. and Summerton, D.J. (2023), Timing of elective surgery and risk assessment after SARS-CoV-2 infection: 2023 update. *Anaesthesia*. <https://doi.org/10.1111/anae.16061>
2. [Ending Isolation and Precautions for People with COVID-19: Interim Guidance \(cdc.gov\)](#)