Advocacy for COVID-19 vaccination at perioperative consultations: an opportunity for protection

The perioperative consultation is widely recognised as a teachable moment for health promotion. Clinicians successfully encourage patients to quit smoking, reduce their alcohol intake, improve their diet and exercise more frequently. This framework is applicable to vaccination against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) prior to surgery.

There is a compelling need for strategies to reduce SARS-CoV-2 transmission and infection in surgical patients. The risk of infection varies depending on the local incidence of community infection, and the testing and infection control practices of healthcare institutions. Worldwide, nosocomial transmission has occurred, although universal mask wearing by staff and patients may have reduced this risk. Nosocomial SARS-CoV-2 infection has occurred in ENT, general and orthopaedic surgery, and is associated with a high post-operative mortality risk. There is an ethical obligation to discuss nosocomial SARS-CoV-2 infection as a risk of surgery, and ensure preoperative SARS-CoV-2 vaccination is available to surgical patients. Ensuring patients receive appropriate vaccination prior to surgery will prevent both acquisition of infection and reduce the severity of disease.

Surgery has been substantially curtailed during SARS-CoV-2 outbreaks to reduce the risk to patients and release resources to care for patients with SARS-CoV-2. Vaccination has the potential to reduce risk and facilitate continued surgical activity.

Vaccination against SARS-CoV-2 confers excellent protection against severe illness and death. Whilst no studies have examined the effect of SARS-CoV-2 vaccination against post-operative death, the mortality risk of perioperative SARS-CoV-2 is high, and vaccination should reduce risk. Infections in staff caring for patients with SARS-CoV-2 have also occurred, and vaccination of surgical patients should reduce this risk.

Imminent surgery does not contraindicate vaccination. Ideal timing of vaccination depends on balancing the urgency of surgery with maximising vaccine effectiveness. Current recommendations suggest vaccination a minimum of one week before or after surgery, so that vaccine adverse events such as fevers are not confused with surgical complications. For non-urgent elective surgery, patients should complete the full vaccine course before surgery. For more urgent surgery, the first dose of vaccine should be given at least 14 days prior to surgery, with partial protection being elicited within 12 days of the first dose and good protection against severe disease from 21 days. For very urgent surgery, the vaccination can be given at least one week prior to surgery.

Side effects from vaccines are extremely rare, and clinicians should refer to existing guidelines for patients with specific medical conditions. Where there is doubt, patients should be referred to specialist immunisation services.

There has been a rise in vaccine hesitancy following safety scares with the AstraZeneca vaccine. Vaccine hesitancy is complex and is not unique to SARS-CoV-2 vaccination. Vaccine hesitancy is the convergence of complacency, convenience and confidence, and cannot be addressed by health policy makers alone. Individual physicians have an essential role in promoting vaccination, and the perioperative consultation offers an opportunity to promote uptake among vulnerable patients. Advice should be consistent within the profession to avoid damaging community confidence.

We have used a high-risk perioperative clinic to discuss and facilitate vaccination for patients with an elevated risk of both perioperative and SARS-CoV-2 related morbidity and mortality. The consultation provides a unique setting for vaccine education; tailoring discussion to a patient’s comorbidities, addressing specific concerns, combating misinformation and building confidence. Ideally, vaccination would be readily available to all patients attending any perioperative clinic. Providing on-site, same-day access would remove barriers and improve uptake. This model could be extended to other vaccinatable diseases that can be endemic in hospitals, including influenza.

The perioperative consultation represents a golden opportunity to encourage vaccination against SARS-CoV-2 to patients at high risk of morbidity and mortality. Clinicians from all disciplines should discuss vaccination with patients, including the risk of nosocomial infection. Organisations should facilitate vaccination for patients planned for surgery. Vaccination will reduce the risks for patients and staff members and may facilitate continuing elective surgery during SARS-CoV-2 outbreaks. Despite a low current community prevalence, multiple outbreaks across Australia are highly likely in the future and we strongly encourage patients be vaccinated before surgery to protect themselves and their community.

Author contributions

Ned Douglas: Conceptualization; writing-original draft; writing-review & editing. Katherine Gregorevic: Conceptualization; writing-original draft; writing-review & editing. Mandy Law: Writing-original draft; writing-review & editing. Benjamin Thomson: Writing-original draft; writing-review & editing. Douglas Johnson: Writing-original draft; writing-review & editing.
The modern incorporation of electronic medical systems into the hospital environment shifts the dynamics of patient-doctor interaction to a third party—the computer. Current literature is limited regarding how patients perceive their hospital experience as such technology is introduced. This study aims to understand how patients are impacted by the presence of computers during surgical outpatient consultations.

Methods

Post-consultation surgical patients were approached in the Outpatient Department of The Queen Elizabeth Hospital in August 2019. They were asked five Likert-style questions which were delivered verbally to improve the likelihood of receiving a patient response. To prevent duplicate responses, patients confirmed they were not previously approached with the same survey. Additional patient feedback was recorded. No information about the patient, their consultant, their medical problem or any other identifiable factors was recorded.

Responses to each question were assigned to levels on a five-point Likert scale: 1 ‘not at all’, 2 ‘slightly’, 3 ‘moderately’, 4 ‘a lot’ and 5 ‘extremely’. Mean and standard deviation (SD) were calculated.

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