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Commentary

Can surgery continue safely during a pandemic? A commentary on "Surgical activity during the Covid-19 pandemic: Results for 112 patients in a French tertiary care center, a quality improvement study"

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Dear Editor,

We read with great interest the quality improvement study by Philouze et al. [1] which detailed the organisation of the institution during the COVID-19 pandemic, which allowed diversion of maximal resources to manage the surge in COVID-19 cases whilst ensuring emergency, oncological and transplantation surgeries were able to continue. The study demonstrated that with stringent screening protocols, clear pathways to manage proven and suspected COVID positive patients, as well as strict compliance with infection control and personal protective equipment (PPE), surgery was safely carried out during the pandemic. We consider in this commentary how maintaining urgent surgical procedures may be possible, without endangering the safety of patients and healthcare staff.

The COVID-19 pandemic has resulted in changes to the way that all healthcare institutions are run. Hospital beds and staff have been allocated to managing the COVID-19 cases arriving at the hospital. Consequently, many surgeries have been cancelled to provide beds for patients with COVID-19, and to reduce exposure to the virus. A key consideration for conducting safe surgery during the pandemic, is to ensure rigorous testing of each patient before surgery and then managing them accordingly. However, false negative rates can range from 2% to 29% [2]. Placing a patient with a false negative result into a 'COVID-free' area can have extremely detrimental effects on surgical outcomes and therefore compromise safety. By combining RT-PCR with chest CT, the false negative rate can be reduced due to the superior sensitivity of chest CT in detecting COVID-19 [3]. If there is incongruency between either of these tests, then the patient is immediately managed as COVID positive, as was done in the study being discussed. Once the COVID status of the patient is known, they can be allocated to either a 'COVID positive' ward or a 'COVID free' ward and then their surgery can be managed appropriately with the correct level of PPE. A UK study showed that using 'COVID-19 free' hospitals, where the patients were neither suspected

nor proven to be infected with SARS-CoV-2 virus, enabled safe elective surgery to proceed without serious adverse outcomes [4]. 'COVID-free' areas may indeed be paramount to ensuring that safe surgery may continue without complications due to COVID-19. This method, along with ensuring the patient follows strict isolation rules before the surgery may reduce any possible transmission.

Another key factor in performing safe surgery is to ensure healthcare staff are provided with adequate quality PPE, and to prevent it from running out. Procurement of PPE therefore contributes to the safe reinstatement of surgical procedures. The number of healthcare providers needed to manage certain patients can be used to work out the amount of PPE required for each shift. This can be collated and used to work out monthly requirements [5], ensuring that PPE stock is always at a safe level allowing procedures to run smoothly whilst ensuring patients and healthcare staff are maximally protected.

In summary, as the pandemic continues, efforts must be taken to ensure that surgery will not continue to be negatively affected. Vast numbers of surgeries have already been cancelled and another mass cancellation will further increase mortality and morbidity in the future. Patients face longer waiting times for their much-needed surgery and with the uncertainty of how long the pandemic will last, there are concerns about how patients will be able to have their missed surgery, whilst the surgical burden continues to increase. A dual-testing protocol, strict adherence to COVID and COVID-free wards and adequate stock of PPE are crucial considerations in ensuring that hospital activity can continue during the pandemic whilst maintaining maximal safety for all.

Ethical approval

Ethical approval was not required.

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KD Dungar and KL Sooriah both co-authored this work.

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- 2. Unique Identifying number or registration ID: N/A
- 3. Hyperlink to your specific registration (must be publicly accessible and will be checked): N/A

Guarantor

KD Dungar and KL Sooriah both accept full responsibility for this work.

Provenance and peer review

Commentary, internally reviewed.

Declaration of competing interest

None to declare.

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