Towards a full capacity of anaesthesia and surgical services in the epicenter (Wuhan) of the COVID-19 epidemic

J. Wu^1 , S. $Yao^{1,2}$ and R. Liu \bigcirc 3,*

*Correspondence to: Department of Anesthesiology and Critical Care, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania, USA (e-mail: liur@uphs.upenn.edu; RenYu.Liu@pennmedicine.upenn.edu)

Editor

The novel coronavirus disease (COVID-19) pandemic and its related city lockdowns have had a profound and sustained impact on all surgeries requiring anaesthesia. We offer our perspective on returning to full-capacity surgical services requiring anaesthesia after the COVID-19 pandemic peak periods. Data were obtained on the number of monthly surgical cases requiring anaesthesia from the Quality Control and Service Cloud Platform of Anesthesia, for 226 hospitals (of 323 participating hospitals) that had intact reports from January 2019 in Hubei Province, China. Among them were 29 hospitals in Wuhan, the capital of Hubei and the epicentre of COVID-19, which had a strict city lockdown from 23 January to 8 April 2020¹. The remainder of the hospitals (197) are outside Wuhan, and did not experience strict city lockdowns

As indicated in Fig. 1, the number of surgical cases decreased dramatically in February 2020, with a 94 per cent drop in Wuhan and a 64 per cent drop outside Wuhan, compared with numbers in February 2019. The number of surgical cases recovered quickly outside Wuhan, and had reached nearly normal capacity (96 per cent recovery) by the end of May 2020. However, there was only a 57 per cent recovery of surgical cases in Wuhan by May 2020.

The data clearly indicate that the COVID-19 pandemic had a profound impact on surgical services, and the related city lockdown worsened the impact, resulting in a much steeper decrease in the number of surgeries and a much slower recovery. This might have been due to resource allocation and limitations, a strict requirement for viral testing and clearance, patient redistribution owing to fear of infection, and transportation limitations, as well as the psychological impact of the city lockdown. Specific strategies for hospitals affected by a city lockdown are needed to resume full capacity of surgical services as soon as possible. Recovery to a normal or a near-normal (pre-COVID-19) capacity may not meet the surgical needs of all patients, as so many operations were cancelled or postponed during the COVID-19 pandemic. To catch up with the 200 000 cases that were cancelled or postponed in just 1 month in the 229 hospitals, each hospital will

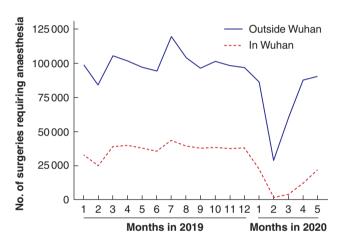


Fig. 1. Number of monthly surgical cases requiring anaesthesia from January 2019 to May 2020 in Hubei province

Data are from 29 hospitals in Wuhan where there was a city lockdown from 23 January to 8 April 2020, and 197 hospitals outside Wuhan in Hubei province without city lockdowns.

need to accommodate an average of an additional 873 cases, even if they have returned to a 'normal' or pre-COVID-19 surgical activity. It is unclear whether a weekend schedule will be welcomed by medical providers due to huge service burdens already existing after the pandemic. Creative manpower and other resource mobilization appear critical. Establishing strong community bonds during the crisis, by offering support on social needs, could help patients coming to local hospitals for needed treatments.

During the crisis, a multidisciplinary approach could help develop an effective surgical scheduling strategy². Other recommendations have been proposed to offset the negative impact on surgical service recovery³. Despite the lack of current consensus, some medical centres in China and the USA have adopted the policy of accepting preoperative negative coronavirus test results within 7 days for inpatients, and 3 days if the test is done outside the hospital. Chest CT was used initially as an important

¹Department of Anaesthesiology, Institute of Anaesthesia and Critical Care Medicine, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei, China

²Anaesthesia Quality Control Centre of Hubei, Hubei, China

³Department of Anesthesiology and Critical Care, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania, USA

screening tool in China, but is not now required by many hospitals, owing to low specificity4. As there are potential falsenegative results, the requirement for surgical masks while in the hospital should not be overlooked⁵.

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