



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Invited Commentary

Invited commentary on “Optimizing response in surgical systems during and after COVID-19 pandemic: Lessons from China and the UK – Perspective. Int J Surg, 2020, May 4, Epub ahead of print”

ARTICLE INFO

Keywords:

Covid-19

Pandemic

Surgeon

Emergency surgery

Virtual consultation

Dear Editors,

Currently the world is experiencing an unrivalled crisis of modern times. Surgical care in general should be well thought of to prevent undue exposure of surgeons and other health care workers (HCWs) to the risk of infection transmission. Increasing load of surgery also usurps the hospital resources and facilities, which remain precious in a pandemic. Therefore, a strategy to help keep essential surgical systems working effectively and to provide the best surgical care for emergency conditions is the need of the hour.

Liu et al. propose triaging in a surgical system following a predicted choice of patients, who need emergent care, as a key measure to decrease exposure of HCWs to infection [1]. In furtherance to this concept, Andrea et al. recommend cancellation of all educational activities such as grand rounds and tumour boards to reduce gathering [2]. Easily accessible fever clinics with a dedicated task force increase the availability of more HCWs in other areas of the hospital [1]. Based on their experience in dealing with the outbreak in Wuhan, China, Zhang et al. [3] adopted the idea of adult fever clinics. Although they used home care and isolation as a strategy, they do not recommend it, as inappropriate home care may be life threatening.

Virtual consultation is another strategy that obviates the need of interaction with doctors in person, and thus reduces disease transmission risk. Virtual consultation is also an instrument of “forward triage”, which sorts patients before they reach hospital [4]. The use of televisit system for hospitalised patients and electronic ICU monitoring programs, where 60–100 patients in multiple hospitals can be monitored by physicians on a single platform, are significant advancement of the virtual platform [4]. Houston's Project ETHAN [5] (Emergency Telehealth and Navigation) uses telemedicine to add to the care offered by paramedics, which may reduce unnecessary patient transfer to the emergency department. Furthermore, quarantined physicians can use virtual consultations, thus sparing other physicians for in-hospital care.

The Local Resumption of Elective Surgery Guidance of the American College of Surgeons [6] states that before making guidelines for

screening of asymptomatic patients, it is important to know, understand and update the local testing capabilities and turnaround time. It recommends RT-PCR testing for all patients undergoing planned surgeries or for selected patients after screening, with or without mandatory preoperative quarantine. Emergency surgery should be a priority and all hospitals should develop a policy for such procedures. Others recommend use of dedicated negative pressure OR, restricting entry of OR staff, full PPE for scrub team, limited use of electrocautery and ultrasonic scalpels, and to avoid laparoscopy [7]. Limited operating on cancer patients with consideration of alternative treatment strategies such as oral chemotherapeutic drugs should be considered [1].

It is imperative to have a robust PPE management system and the American College of Surgeons Local Resumption of Elective Surgery Guidance [5] recommends PPE for all airborne and droplet contacts to be made available for at least 30 days before releasing restrictions on surgeries. Recommendations for infected patients, persons under isolation, cancer patients and non-infected patients should be framed locally.

As of now the future course of the pandemic is not very clear. Once the epidemic ebbs, Andrea et al. suggest a selective increase of booked surgeries paying particular attention to minimise the exhaustion of workforce in order to avoid “a crisis after a crisis” [2]. To sum up, with frequent change in the nature of challenge, management recommendations should be flexible keeping in line with newer evidence as and when generated.

Funding

Nil.

Provenance and peer review

Invited Commentary, internally reviewed.

DOI of original article: <https://doi.org/10.1016/j.ijssu.2020.04.062><https://doi.org/10.1016/j.ijssu.2020.05.052>

Received 15 May 2020; Accepted 15 May 2020

Available online 21 May 2020

1743-9191/ © 2020 IJS Publishing Group Ltd. Published by Elsevier Ltd. All rights reserved.

Declaration of competing interest

None.

References

- [1] Z. Liu, Z. Ding, X. Guan, Y. Zhag, X. Wang, J.S. Khan, Optimizing response in surgical systems during and after COVID-19 pandemic: lessons from China and the UK-Perspective, *Int. J. Surg.* (2020) May 4, Epub ahead of print.
- [2] P. Andrea, M. Beat, O. Graziano, T. Frederic, T. Christian, Response of a European surgical department to the COVID-19 crisis, *Swiss Med. Wkly.* 150 (2020) w20241, <https://doi.org/10.4414/smww.2020.20241>.
- [3] J. Zhang, L. Zhou, Y. Yang, W. Peng, W. Wang, X. Chen, Therapeutic and triage strategies for 2019 novel coronavirus disease in fever clinics, *Lancet Respir. Med.* 8 (2020) e11–e12 [https://doi.org/10.1016/S2213-2600\(20\)30071-0](https://doi.org/10.1016/S2213-2600(20)30071-0).
- [4] J.E. Hollander, C.G. Brendan, Virtually perfect? Telemedicine for COVID 19, *NEJM.ORG.* (March 2020), <https://doi.org/10.1056/NEJMp2003539>.
- [5] J.R. Langabeer II, M. Gonzalez, D. Alqusairi, T. Champagne-Langabeer, A. Jackson, J. Mikhail, D. Persse, Telehealth-enabled emergency medical services program reduces ambulance transport to urban emergency departments, *West. J. Emerg. Med.* 17 (2016) 713–720, <https://doi.org/10.5811/westjem.2016.8.30660>.
- [6] American College of Surgeons, Local resumption of elective surgery guidance, [Published April 2020] <https://www.facs.org/covid-19/clinical-guidance/resuming-elective-surgery>.
- [7] Y. Gao, H. Xi, L. Chen, Emergency surgery in suspected COVID-19 patients with acute abdomen: case series and perspectives, *Ann. Surg.* (April 13, 2020), <https://doi.org/10.1097/SLA.0000000000003961> Epub ahead of Print.

Farhanul Huda, Somprakas Basu*

All India Institute of Medical Sciences, Rishikesh, 249203, Uttarakhand,
India

E-mail address: somprakas.surg@aiimsrishikesh.edu.in (S. Basu).

* Corresponding author.