Prospects of ERAS (enhanced recovery after surgery) protocols in post pandemic era

Editor

It is estimated that over 28 million operations have been either cancelled or postponed globally during the lockdown time\(^1\). The impact of disruption caused on routine surgical services during this time could have lasting effects and many clinical and financial implications. The impact of pandemic on the standards of care and the care particularly related to the ERAS pathways is yet to be ascertained. No institutions have made or suggested any modifications to the ERAS pathways that were implemented during the pandemic\(^2-3\).

Cancellation and postponement of non-urgent operative cases were a strategy sought by most centres in preparation of the pandemic approaching them. As a result, the number of elective surgeries performed during the pandemic was handful. Due to the theoretical risk of aerosol generation, laparoscopy was avoided in almost all cases. However, in most settings where the ERAS pathways are well established patients have been watchfully taken through the standard ERAS protocols post operatively.

While COVID safety measures appear to contradict standard ERAS protocols (i.e. avoidance of minimal access surgery etc.), some reports have suggested that the standard ERAS pathway was COVID safe\(^2\). It was also recognised that the implementation of ERAS elements was more efficient during this time\(^1\). This could perhaps be explained owing to the particular consciousness of the caregivers and patients in minimising the length of stay and thereby reducing the risk of nosocomial viral infection. The capacity expansion to accommodate increased number of unwell patients and to minimise the unplanned intensive care admissions from respiratory complications may have been among the other motives.

As the lockdown measures are gradually being lifted off, the consideration of restarting elective surgeries is widely under scrutiny. While the COVID risk is expected to be continued for longer than expected, minimising the risk of peri-operative viral infection is imperative. This is particularly critical in dealing with the vast number of elective surgical caseload that has been deferred during the lockdown time. The high risk of pulmonary complications and the mortality associated with peri-operative SARS-CoV-2 infection has been very well demonstrated in a recent international cohort study\(^4\). Consistent and rigorous implementation of ERAS protocols in this COVID risk ambience, therefore, be far more demanding than any other time.

Preadmission counselling need specific emphasis on the additional risk of SARS-CoV-2 infection. Most trusts already have implemented the use of additional consent forms to cover this risk. Self-isolation for 2 weeks, PCR testing 2 weeks before and 48 hours prior to the surgery and screening CT chest in selective patients need to be incorporated in the peri-operative infection control bundle of ERAS pathway. Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) and European Association of Endoscopic Surgery (EAES) joint recommendations\(^5\) have given a green light on restarting minimally invasive surgery while adherent to controlled measures. This would further facilitate the risk reduction in chest infections and early discharges following surgeries that observed in the pre-COVID time.

At present, prospects of achieving viral free surgical settings or surgical teams in the foreseeable future is very much down to the odds of developing a successful vaccination. Re-starting elective surgical procedures with an acceptable risk is the most viable solution for most clinical settings. Need for modifications in ERAS pathway to suit the new normality would, therefore, be an aspect to explore further. The significance of enhanced recovery in improving the efficacy of care delivery in the present context cannot be overemphasised. Implementation of ERAS pathway, therefore, is an epitome salvage strategy in the post pandemic era that is worth considering in adoption across all surgical specialties.

A. S. D. Liyanage\(^\oplus\), C. Weerasinghe, K. Gokul, B. H. Babu and P. Ainsworth

Department of surgery, Southport and Ormskirk NHS Trust, Town Lane, Kew, Southport, United Kingdom (@liyanagealoka, @SONHStrust),

DOI: 10.1002/bjs.11903

1 Elective surgery cancellation due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans. COVIDSurg collaborative. Br J Surg 2020; https://doi.org/10.1002/bjs.11746 [Epub ahead of print].

2 Sica GS, Campanelli M, Bellato V, Monteleone G. Gastrointestinal cancer surgery and enhanced recovery after surgery (ERAS) during COVID-19 outbreak. Lang Arch Surg 2020; https://doi.org/10.1007/s00423-020-01885-0 [Epub ahead of print].

3 Thomakos N, Pandraklakis A, Bischof SP, Nelson G. ERAS protocols in gynecologic oncology during covid-19 pandemic. Int J Gynaecol Cancer 2020; https://doi.org/10.1136/ijgc-2020-001439 [Epub ahead of print].

4 COVIDSurg collaborative. Mortality and pulmonary complications in patients undergoing surgery with perioperative SARS-CoV-2 infection: an international cohort study. The Lancet 2020; 396: 27–38.

5 Francis N, Dort J, Cho E, Feldman L, Keller D, Lim R et al. SAGES and EAES recommendations for minimally invasive surgery during COVID-19 pandemic. Surg Endosc 2020; https://doi.org/10.2196/18928 [Epub ahead of print].