Colorectal Disease

Resumption of elective colorectal surgery during COVID-19 and risk of death.

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Letter to Colorectal Disease: Resumption of elective colorectal surgery during COVID-19 and risk of death.

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Dear Editor

The ACPGBI have recently released recommendations for re-starting elective colorectal surgery to address the concerns that significant numbers of patients have been deferred during this pandemic in worldwide (1). It is a credit to the specialty that most units have managed to continue with urgent cancer surgery through the pandemic, with leading units undertaking 4 to 5 urgent cases per week . Despite this there is now need to accommodate other patient groups who need colorectal surgery such as those with inflammatory bowel disease and others with benign colorectal conditions who have been placed on hold. The anxiety from patients about timely widening of services to reduce waiting time, against a backlog for surgeons trying to serve this need, in an already bulging set of waiting lists, and whilst stakeholders look on concerned over reduction in clinical activity.

We report on nosocomial or hospital acquired infection with COVID-19 (2) . Our study included 1564 patients from 11 hospital sites throughout the UK, and one in Italy, and collected outcomes up to 28th April, 2020. The overall in-hospital mortality rate for patients with COVID was 27.2% (425/1564). Of the COVID-19 cases, the conservative estimate of nosocomial infection rate was at least 12.5%. The median patient age for nosocomial COVID was 80 years old (IQR, 71.5-86.5 years), and 73 years (IQR, 60,82 years) for patients admitted with community acquired COVID infection. Nosocomial COVID patients were also frailer than the community acquired COVID group; median level of frailty was moderately frail [CFS=6] versus vulnerable [CFS=4], respectively. It is reassuring that the risk of developing of COVID infection as a nosocomial infection after elective surgery is no higher than for other hospital acquired infections (3). It was also found that patients with nosocomial infection was associated with a modest reduction in risk in mortality, which may be attributed to timely care.

However, the biggest issue, is the significantly increased risk of death this group for patients undergoing routine procedures in the midst of a pandemic. When we consider that the National Bowel Cancer Audit reports a <2% risk of death with elective colorectal surgery for cancer (4), a figure of 27% would be unacceptably high. Similarly, data from CovidSurg reported in the Lancet reports that 30-day post-operative mortality worldwide was 23·8% (268 of 1128) in COVID patients rising to 38·0% (219 of 577) for those with pulmonary complications (5).

The decision making regarding the harm patients may come to by delaying surgery needs to be urgently weighed up against the high death rates seen in those who develop nosocomial COVID. Units such as Salford Royal have devised risk prediction tools that may be of use in prioritization of patients according to vulnerability to COVID (6).

Hopefully, the current risk of nosocomial COVID infection has reduced as the first wave of the pandemic has lessened. We feel a special approach is required for frail patients who require elective surgery at this time. Innovative alternatives may be reported as a bridge to managing certain groups as long-term conditions rather than a ‘cure’ with surgery – antibiotics (7) and stents for acute

appendicitis example. We would recommend a multi-disciplinary discussion between patient, carer, surgeon and geriatrician regarding delaying surgery longer than previously anticipated. Ahead of the second wave of COVID predicted this winter, we would urge patients 80 years and older to undergo an urgent frailty assessment with their GP in order to optimize their medical and functional status.

References

1. Resumption of Elective Colorectal Surgery during COVID-19 Updated ACPGBI considerations on surgical prioritisation, patient vulnerability, and environmental risk assessment. The Royal College of Surgeons of England, May 2020.
2. Nosocomial COVID-19 infection: examining the risk of mortality. The COPE-Nosocomial study (COVID in Older PEople). Carter B et al. Journal of Hospital Infection, accepted July 2020.
3. Public Health England. Surveillance of Surgical Site Infections in NHS Hospitals in England: 2014/15 London: PHE; 2015.
4. National Bowel Cancer Audit 2019 report (www.nboca.org.uk)
5. Mortality and pulmonary complications in patients undergoing surgery with perioperative SARS-CoV-2 infection: an international cohort study. Covidsurg Collaborative. The Lancet 2020, vol 396, P27-38.
6. https://cuttingedgeblog.com/2020/04/01/prioritising-surgical-treatment-in-coronavirus-pandemic-salford-score/amp/
7. The HAREM (Had Appendicitis and Resolved/Recurred Emergency Morbidity/Mortality) Study. Harem Collaborative. Br J Surg 2020 Jul;107(8):e257.