

## The impact of the COVID-19 pandemic on the Management of Locally Advanced Primary/Recurrent Rectal Cancer

### Editor

COVID-19 pandemic continues to impact healthcare systems worldwide with over 5.5 million cases and over 350 000 deaths<sup>1</sup>. The necessity to repurpose wards to isolation facilities and reallocate intensive care unit (ICU) bed capacity for the management of COVID-19 cases poses a logistical challenge for locally advanced primary/recurrent rectal cancers (LARCs), requiring exenterative-type surgical resections<sup>2</sup>, beyond total mesorectal excision planes (bTME). The PelvEx Collaborative Group performed a survey from 3<sup>rd</sup> to 19<sup>th</sup> May 2020 obtaining responses from 50 exenterative units internationally.

36 (72 per cent) units reported that they had to set aside resources and develop restricted areas for the treatment of COVID-19-positive cases, eight (16 per cent) had no or minimal active COVID-19-positive cases, and six (12 per cent) managed only COVID-19 cases exclusively. Endoscopic procedures still carried out in most centres (*Table S1*, supporting information). 72 per cent of centres will proceed with a regular computed tomography (CT) scan of the abdomen and pelvis instead of CT colonography to evaluate for synchronous proximal lesions in endoscopically impassable cancers. 43 (86 per cent) centres continue to perform bTME resections involving more than one organ or compartment during this time: 42 per cent at usual capacity, 44 per cent have had varying reductions in referrals and caseload, and 14 per cent have stopped operating. Although there is more frequent use of the open approach (*Table S2*, supporting information), preoperative assessment of fitness for surgery has not changed. Depending on the severity of resource limitations among hospitals around the world<sup>3</sup> and the prevailing COVID-19 burden, it may be crucial to prioritize the LARCs for

**Table 1** Time interval from completion of preoperative treatment to surgery among surveyed exenterative units

Time interval	Before pandemic	During pandemic
6-8 weeks	11 (22%)	8 (16%)
8-12 weeks	36 (72%)	33 (66%)
12-16 weeks	3 (6%)	7 (14%)
Variable	0 (0%)	2 (4%)

bTME resections (*Table S3*, supporting information). In general, definitive surgery has been delayed (*Table 1*), or deferred in favour of LCCRT and TNT in suitable cases so as to avoid surgery coinciding with a peak period of intense resource restriction (*Table S4*, supporting information).

For patients with LARC it is imperative to balance the risk of poorer cancer-specific survival associated with any prolonged delay in treatment, against the risk of deterioration and death from contracting Sars-CoV-2<sup>3</sup>. Therefore during this time, individualizing the treatment strategy for each patient with LARC should include the following considerations: Vulnerability of patient to succumb to morbidity or mortality from COVID-19 infection, burden of COVID-19 cases managed, prevalence and trend of COVID-19 infection within the hospital, suitability for LCCRT, SCRT, TNT, anticipated availability of resources for surgery given the prevailing status of the pandemic within the region/country, after the projected completion of preoperative treatment, surgical fitness and prioritization of cases eligible for surgery. Fitter patients with more favourable tumour biology are arguably better candidates in the current setting, particularly those with superior response to neoadjuvant treatment, increased tumour regression, and higher chance of R0 resection<sup>4</sup>. In contrast, frail and/or elderly patients may be considered for a period of prehabilitation, which may comprise home-based exercises and physiotherapy, weighing the potential risks of COVID-19 infection<sup>5</sup>, against the oncological consequences of deferral. This risk-benefit assessment

can be similarly applied to symptomatic LARC patients with malignant fistulation, progressive obstruction or debilitating pain, for whom other treatment modalities such as faecal diversion and radiotherapy have been unsuccessful. New dimensions in the LARC management paradigm have emerged, where there is more standardization of clinical decision-making, risk stratification of patients and prioritization of multidisciplinary care paramount in the resource-limited setting. Moreover, reconfiguration in these aspects of patient care and restructuring of surgical teams with leaner manpower to maintain surgical care delivery<sup>6</sup> as we navigate this pandemic will lead to more cost-effective healthcare while preserving optimal oncological outcomes. Finally, pertinent ethical issues that are inevitably encountered as a result should be prudently addressed within a systematic framework.

PelvEx Collaborative

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- 1 COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). <https://coronavirus.jhu.edu/map.html>.
- 2 Beyond TME Collaborative. Consensus statement on the multidisciplinary management of patients with recurrent and primary rectal cancer beyond total mesorectal excision planes. *Br J Surg* 2013; **100**: 1009–1014.
- 3 COVIDSurg Collaborative. Global guidance for surgical care during the COVID-19 pandemic. *Br J Surg* 2020; **107**: 1097–1103.
- 4 PelvEx Collaborative. Factors affecting F outcomes following pelvic exenteration for locally recurrent rectal cancer. *Br J Surg* 2018; **105**: 650–657.

- 5 Carlson GL. Prioritizing Access to Surgical Care During the Coronavirus Pandemic. *Dis Colon rectum* 2020; **63**: 879–880.
- 6 Soreide K, Hallet J, Matthews JB, Schnitzbauer AA, Line PD,

Lai PBS *et al.* Immediate and long-term impact of the COVID-19 pandemic on delivery of surgical services. *Br J Surg* 2020; <https://doi.org/10.1002/bjs.11670> [EPub ahead of print].

### Supporting information

Additional supporting information can be found online in the Supporting Information section at the end of the article.