

Risk mitigation for suspected colorectal cancer diagnostic pathway during COVID-19 pandemic

Editor

COVID-19 has imposed unprecedented healthcare challenges with immediate pandemic-focussed resource mobilization. Severe curtailment of surgical and diagnostic services, including bowel screening, will inevitably lead to delayed diagnosis and treatment of colorectal cancer. There will be an increase in presentation with complications in the medium-term and more advanced stage in the longer-term¹⁻³.

As a unit managing over 500 colorectal cancer patients annually, within a week of lockdown we adopted a pragmatic approach to mitigate risk and maximize cancer yield using the diagnostic tools available. Our ‘COVID-adapted pathway’ integrates multiple quantitative faecal immunological tests (qFIT), to enrich for significant colorectal disease,

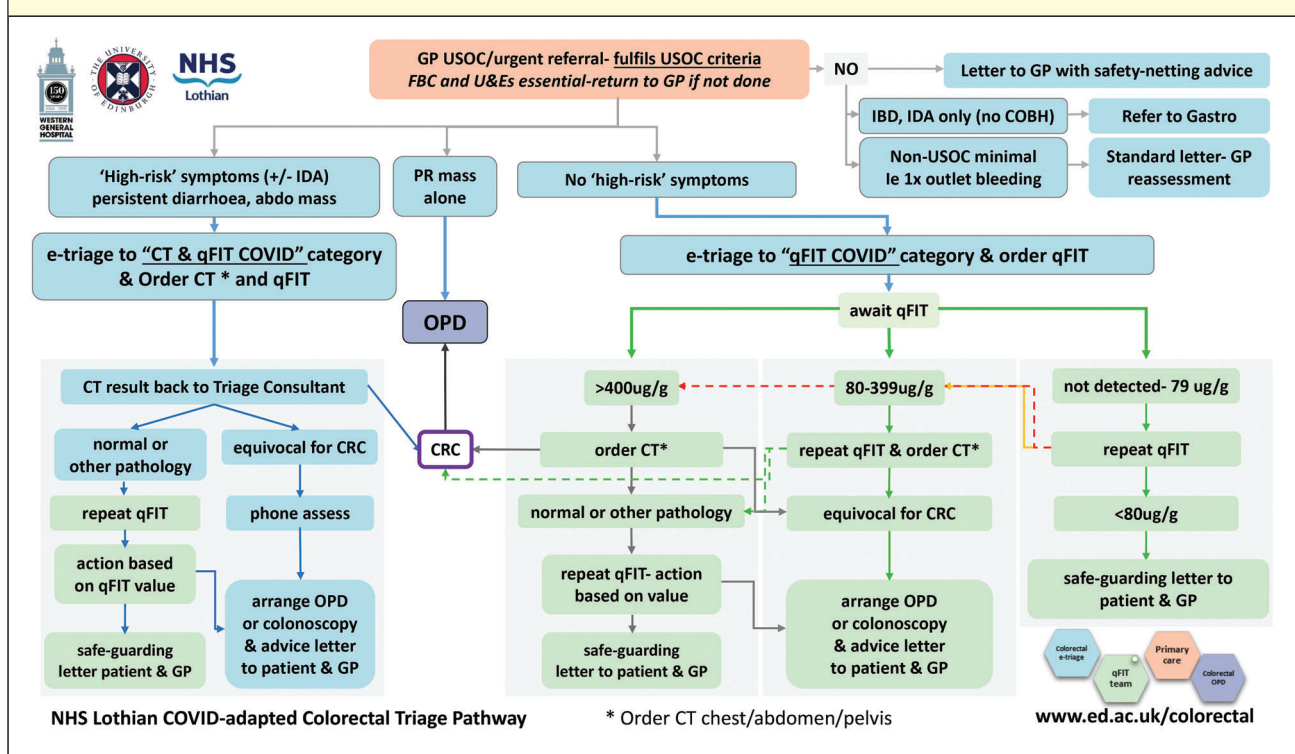
with plain CT scanning to detect gross pathology (Fig. 1). We incorporated repeat qFITs, in an attempt to minimize false negatives, based on analysis of our audit (~5000 symptomatic patients) driven by our pre-existing qFIT sensitivity concerns. Our COVID-adapted pathway was rapidly implemented in collaboration with biochemistry, gastroenterology, radiology and GP colleagues with health board support. Risk mitigation guidelines have emerged recently but naturally lack firm data or detail regarding local application^{4,5}.

To best enrich for those likely to harbour serious bowel pathology, patients are stratified according to qFIT values at different stages, which guides the nature and timing of investigations, interspersed with safety-netting mechanisms including telephone or outpatient assessment and prioritization to urgent colonoscopy. Detailed letters are sent to patients tailored to original referral category, waiting list status and advice according to the pathway arm.

Accelerated implementation of a bespoke cancer pathway, within existing frameworks that are solely COVID-19 management focussed, is challenging. Nonetheless, the emphasis on cancer clinical governance has overcome initial inflexibility regarding personnel redeployment and inertia surrounding electronic health record modification. During a 6-week period, 665 new ‘suspected cancer’ patient referrals have been filtered through our pathway. Based on our symptom/qFIT algorithm, 239 patients were booked for CT scans (56 per cent completed), from which seven cancers (5.3 per cent) have been identified.

Data on validity of qFIT as a risk stratification tool is limited. Although multiple tests may enrich a few patients, there is considerable variation in interval double-test qFIT values with only 5 per cent potential enrichment. The true outcome of this approach will require long-term audit and eventual standard diagnostic methods to confirm a true

Fig. 1 NHS Lothian COVID-adapted Colorectal Triage Pathway






CT: computed tomography scan, IDA: iron deficiency anaemia, IBD: inflammatory bowel disease, COBH: change of bowel habit, qFIT: quantitative faecal immunochemical test, OPD: outpatients department, USOC: urgent suspected of cancer.

negativity for cancer. Patient concerns about acquiring COVID-19 from hospital attendance is appreciable, with 5 per cent of symptomatic patients declining CT scans. It seems likely that an even larger number are not presenting to primary care, since the number of GP referrals have decreased by more than 40 per cent.

Standard diagnostic test capacity will be limited for the foreseeable future and is somewhat dependent on local COVID-19 testing. Despite the caveat regarding sensitivity, PCR testing is essential for resumption of colorectal diagnostic services, both to combat fear amongst staff and patients and limit PPE use. COVID-19 has provided a unique opportunity across healthcare to restructure services in a positive manner. Experience and data gathered from our strategy will provide insight into the features we retain during service

resumption and its potential for risk stratification.

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- 1 COVIDSurg Collaborative. Elective surgery cancellations due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans. *Br J Surg* 2020; <https://doi.org/10.1002/bjs.11746> [Epub ahead of print].
- 2 Pellino G, Spinelli A. How Coronavirus Disease 2019 Outbreak Is Impacting Colorectal Cancer Patients in Italy: A Long Shadow Beyond Infection. *Dis Colon Rectum* 2020; **63**: 720–722.
- 3 Figueroa J, Brennan P, Theodoratou E, Poon M, Purshouse K, Din F *et al*. Trends in excess cancer and cardiovascular deaths in Scotland during the COVID-19 pandemic 30 December 2019 to 20 April 2020. *medRxiv* 2020: 2020.2005.2002.20086231.
- 4 The Association of Coloproctology of Great Britain and Ireland. Resumption of Elective Colorectal Surgery during COVID-19. Updated ACPGBI considerations on surgical prioritisation, patient vulnerability and environmental risk assessment. <https://www.acpgbi.org.uk/content/uploads/2020/05/Updated-ACPGBI-considerations-on-resumption-of-Selective-Colorectal-Surgery-during-COVID-19-v17-5-20.pdf>.
- 5 D'Souza N, Abulafi M. Navigating the storm of COVID-19 for patients with suspected bowel cancer. *Br J Surg* 2020; **107**: e204.