The Evolving Use of Faecal Immunochemical Testing - *Accelerated by the COVID-19 Pandemic*

The COVID-19 pandemic has brought many challenges for clinicians and supporting services that have driven the need to manage patients differently. With current changes in the availability of endoscopy and laboratory testing resources, new solutions have had to be developed.

On the 31st December 2019, the World Health Organisation (WHO) was informed of a cluster of cases of pneumonia of unknown cause in Wuhan, China; by the second week of January it was reported that a novel coronavirus (later named SARS-CoV-2, the virus causing COVID-19) had been identified as the cause for some of these pneumonia cases. By the 11th March 2020, WHO declared COVID-19 a pandemic, the first pandemic caused by a coronavirus[1].

Due to the COVID-19 pandemic, the way in which patients are being investigated for colorectal cancer has changed; to protect both the patients and the clinical staff and due to the reallocation of some staff.

Prior to COVID-19 the role of the faecal immunochemical test (FIT), in addition to screening for bowel cancer, was for the symptomatic assessment of primary care patients, as guided by NICE DG30 [2]. However, with the reduction in services available, FIT is now also being utilised for triaging patients on existing secondary care waiting lists and patients being referred under two-week-wait (2WW) pathways from Primary Care. Uptake for this has varied nationally with some areas of the UK seeing a large increase in FIT requests as the test becomes included in more pathways.

On the 3rd April 2020, the British Society of Gastroenterology (BSG), supported by several key groups, published guidance on endoscopy activity during COVID-19.

In this guidance the BSG recommended that all endoscopy, except emergency and essential procedures, should be ceased immediately [3]. By the end of March 2020 (the start of the pandemic lockdown period in the UK), endoscopy activity had reduced to only 5% of normal activity [4]. Rutter et al, recently published data from the National Endoscopy Database which showed that "Pre-COVID" an average of 394 colorectal cancers were detected by colonoscopy and flexible sigmoidoscopy per week, whereas during COVID this has decreased to an average of 112 cases per week [4].

In June 2020, an article in The Lancet (Gastroenterology & Hepatology by Arasaradnam et al.) for the BSG Endoscopy COVID working group, described how FIT could be used as a triage tool to guide the prioritisation of investigations. This would help in the management of the limited capacity of endoscopy departments during COVID-19, rather than being used instead of other investigations[5].

Recent guidance by NHS England advises the usage of FIT as shown below, for managing patients with symptoms that might be due to colorectal cancer (CRC) and to identify those most in need of urgent investigation [6]:

For urgent endoscopy or CT: (CTC or plain CT)

- Early signs of a large bowel obstruction, eg. lower abdominal pain and distension.
- Other NG12 specified symptoms with a FIT >100 µg Hb/g faeces who have not had a colonoscopy in the previous three years.
- Symptoms deemed by specialist GI surgeons/ gastroenterologists at the point of triage, to merit urgent intervention.

For prioritised endoscopy or colonic imaging:
(CTC, plain CT or colon capsule endoscopy)

- NG12 specified symptoms, with a FIT 10-100 µg Hb/g faeces.
- Other NG12 specified symptoms with a FIT >100 µg Hb/g faeces who have had a colonoscopy requiring no further investigation in the previous three years.

For patients to be safety-netted on a patient tracking list:

- NG12 specified symptoms, with a FIT <10 µg Hb/g faeces.

The FIT cut-offs that have been published for triaging during COVID-19 have varied between local guidance, e.g. The London Pathway involves referring only FIT-positive 2 week wait patients at a threshold over 10 μg Hb/g faeces for investigation and patients with a FIT more than 150 μg Hb/g faeces are prioritised for colonoscopy [7].

The cut-offs published recently by Scottish Government are shown below, with two published pathways for use during the pandemic and then during the subsequent recovery period [8].

Increased utilisation of FIT during the COVID-19 pandemic has allowed more focussed referral to services which are unable to operate at full capacity, whilst supporting prudent healthcare.

Ongoing clinical audit of these processes and analysis of outcome measures will hopefully provide more national evidence based guidance on the use of FIT in these settings, alongside robust safety netting for FIT negative patients.

References

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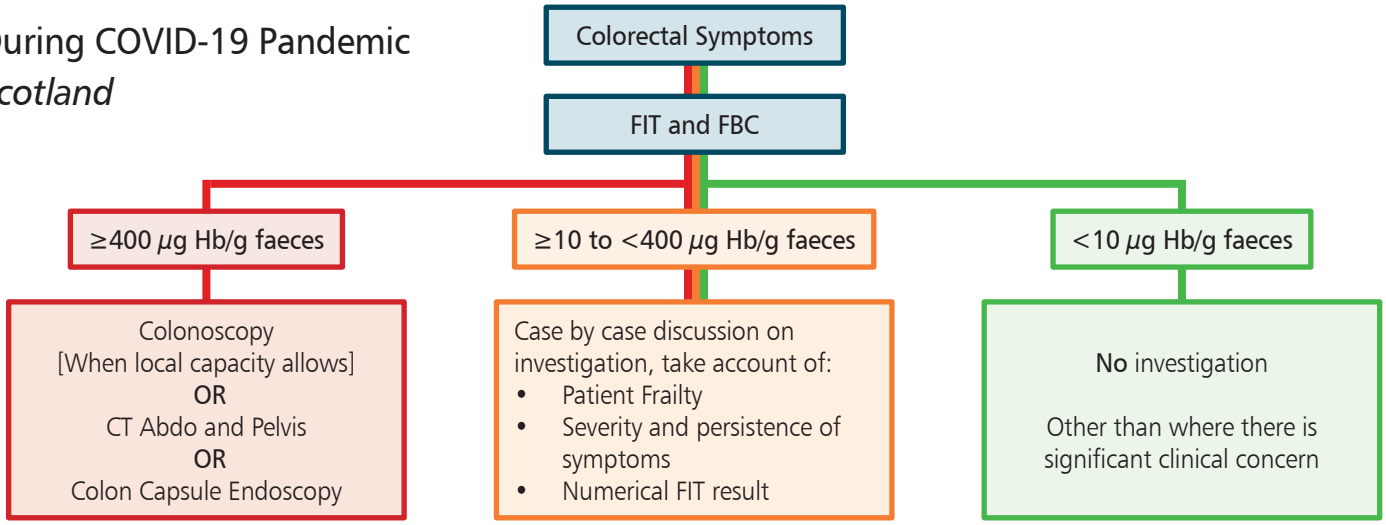
During COVID-19 Pandemic
Scotland



During Recovery Period
Scotland