

CLINICAL GUIDELINE

Faecal Testing in Persistent Gastrointestinal Symptoms

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained.

Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Guidelines on the Use of Faecal Testing for Patients with Lower Gastrointestinal Symptoms within NHS GGC

Introduction

- Calprotectin (FC) is a calcium and zinc-binding protein within the cytosol of neutrophils
- Quantitative Faecal Immunohistochemical Test (qFIT) is a sensitive test for detection
 of globin protein (and hence altered blood) in the gastrointestinal tract. Unlike the
 bowel screening programme which detects globin protein at a concentration of
 80ug/g stool in asymptomatic individuals, the test employed in symptomatic patients
 can detect globin concentrations as little as 10ug/g stool
- Both qFIT and FC are sensitive but non-specific markers of inflammation within the GI tract. Calprotectin in patients under the age of 40 is a good screen for inflammatory bowel disease (IBD). However, qFIT has been shown to be a good predictor of the likelihood of any significant colorectal pathology, including colorectal cancer and advanced adenomas in addition to IBD.
- We now **recommend qFIT** instead of faecal calprotectin as a primary investigation for new colorectal symptoms where an infective cause is unlikely or has been excluded.
- Faecal calprotectin remains recommended for the monitoring of patients with known Inflammatory Bowel Disease (IBD).

Indication for testing Faecal Haemoglobin (gFIT)

Determining Likelihood of Significant Colonic Pathology in Patients with new lower risk Colorectal Symptoms

qFIT is a useful screen for significant colonic pathology in patients who present with new colorectal symptoms which are suggestive of colorectal pathology which reflect a potential, but not a high, risk of disease.

It is recommended that qFIT be used as an initial test in patients who present with new colorectal symptoms including "altered bowel habit", lower abdominal discomfort and/or infrequent or isolated episodes of rectal bleeding.

The concentration of faecal haemoglobin correlates with the likelihood of significant colonic disease. Data from a large case series in Scotland indicate that a qFIT of >10 ug/g stool confers a 20% risk of significant colonic pathology, while a qFIT of >400 ug/g stool confers a 50% risk of significant colonic pathology. In younger patients, inflammatory bowel disease is the more likely diagnosis, and in older patients advanced colonic adenomas or colorectal cancer are more prevalent.

If a patient has no high risk colorectal symptoms and qFIT is undetectable, data from 3 Scottish sites suggests the risk of significant colorectal pathology may be less than $1/1000^{1}$.

The lower GI referral pathway incorporating QFIT and agreed between primary and secondary care in August 2020 is depicted in Figure 1. The contents are discussed below.

(i) Urgent Suspicion of Cancer Referral without need for qFIT

We recommend use of QFIT to guide and prioritise investigation in **all** patients with new colorectal symptoms <u>except where there is an evident abdominal or rectal mass.</u>

(ii) Urgent/USC Referral with Concurrent Unresulted qFIT

In patients who meet criteria for Scottish Government 'Urgent Suspicion of Cancer' referral criteria QFIT should be checked whenever possible. The result does not need to be available at time of vetting but the need for investigation, the choice of

investigation and its priority will be determined according to the result by the vetting team.

This includes

- Repeated rectal bleeding without obvious perianal cause (not the first episode of bleeding, where QFIT result would be encouraged first)
- Persistent (> 4 weeks) change in bowel habit especially to looser stools (not simple constipation)
- **Abdominal pain with weight loss** (not asymptomatic weight loss, which although may trigger cancer exclusion investigation is unlikely to represent colorectal malignancy and should be referred via a different pathway and without checking QFIT)
- Unexplained iron deficiency anaemia

(iii) Absence of "high risk symptoms"

If a patient has no higher risk symptoms then we recommend a qFIT test result <u>prior to</u>referral.

Patients with a positive qFIT should therefore be referred at URGENT priority if qFIT between 10-400, or URGENT SUSPICION OF CANCER PRIORITY if qFIT > 400 and at an older age.

If a patient presents with a short history of diarrhoea (e.g. one week or less) then sending stool for microbiological culture should be the first investigation, with QFIT reserved for more persistent symptoms in patients with a negative stool culture.

In most cases it is recommended that patients should be referred via the colorectal pathway and many will be vetted direct to test. However, in younger patients, especially under that age of 25, where inflammatory bowel disease is the most likely diagnosis then referral at urgent priority to the **Gastroenterology Clinic** may be preferable in the first instance rather than direct to colonoscopy.

If a patient does not have high risk symptoms referral is discouraged **until qFIT result is available**. Generally patients should not be referred at a routine priority where no QFIT result is available. If a patient has no high risk symptoms and an undetectable qFIT it is suggested that reassurance may be sufficient as the yield of colonoscopy in low. If further advice is needed then they can be referred at a routine priority. We would suggest referral to gastroenterology for patients with disturbance to bowel habit and referral to colorectal surgery for patients with perianal symptoms or defecatory difficulties. Simple constipation does not need investigated and can generally be managed in primary care.

Indication for testing Faecal Calprotectin (FC)

It is Recommended that Faecal Calprotectin be Reserved for Monitoring Patients with Known Inflammatory Bowel Disease

i) Assessment of disease activity

- FC levels correlate well with colonoscopic appearances and histology in IBD
- FC is a superior surrogate marker to CRP &/or ESR in this setting
- FC levels in small bowel Crohn's disease tend to be lower than in colonic disease

ii) Relapse prediction

- Elevated FC in 'clinical remission' has been shown to confer a higher rate of clinical relapse within one year
- In ulcerative colitis (UC) in remission, FC usually returns to within the normal range whereas this is not normally the case for Crohn's disease (CD).
- FC level check in CD patients in 'clinical remission' forms a useful baseline value to gauge whether or not future new symptoms are inflammatory in nature when rechecked

iii) Assessment of treatment efficacy

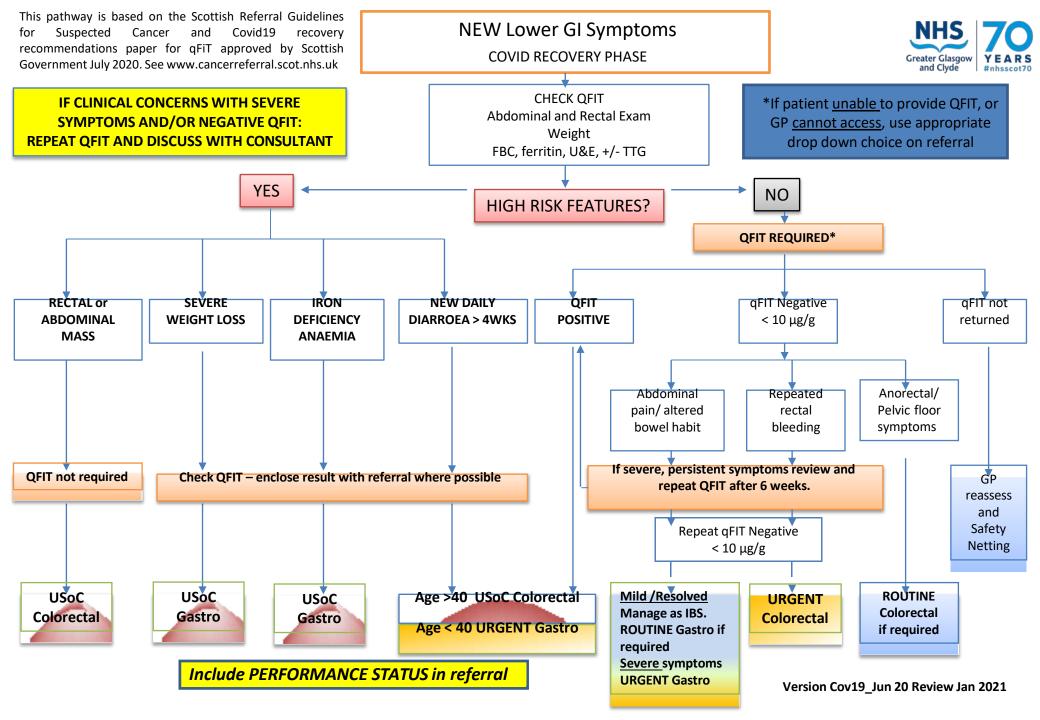
• FC levels have been shown to correlate with symptom improvement and endocopic / histologic scores in IBD patients treated with steroids, immunosuppressants and biological agents

iv) Prediction of post surgical relapse in CD

FC levels correlate with endoscopic / histologic scores in post-operative CD patients

Figure 1: Below

Lower GI Referral Pathway incorporating QFIT agreed between Primary and Secondary Care August 2020



References

- 1. McSorley ST, Digby J, Clyde D *et* al Yield of colorectal cancer at colonoscopy according to faecal haemoglobin concentration in symptomatic patients referred from primary care. *Colorectal Disease* 2020; 00: 1-7 https://doi.org/10.1111/codi.15405
- 2 Scottish Government Guidance on the use of FIT in the prioritisation of patients with colorectal symptoms now and in the recovery period after COVID. https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/07/coronavirus-covid-19-guidance-for-use-of-fit-testing-for-patients-with-colorectal-symptoms/documents/coronavirus-covid-19-guidance-for-use-of-fit-testing-for-patients-with-colorectal-symptoms/coronavirus-covid-19-guidance-for-use-of-fit-testing-for-patients-with-colorectal-symptoms/govscot%3Adocument/Clinical%2BGuidance%2Bfor%2Bthe%2Buse%2Bof%2BFIT%2Bin%2BSymptomatic%2BPatients%2Bduring%2BCOVID%2Bv1.0.pdf