

Patients with recurrent gastrointestinal symptoms: changing practice overview

Recurrent symptoms of potential abdominal disease are often difficult to interpret without laboratory support and input. Here, Jason Cunningham reviews the latest guidelines and testing panel.

Gastrointestinal disease, including conditions such as inflammatory bowel disease (IBD; most commonly Crohn's disease and ulcerative colitis), irritable bowel syndrome (IBS), coeliac disease and food allergy, is a significant healthcare burden on the NHS.^{1,2} Gastrointestinal symptoms are one of the most common complaints patients present with and frequently these symptoms are representative of several gastrointestinal diseases, making it difficult to diagnose on a clinical history alone.³⁻⁸

Guidelines on faecal calprotectin testing changed practice

Prior to publication of the National Institute for Health and Care Excellence (NICE) guidelines on faecal calprotectin testing, before endoscopy, diagnostic tests to exclude IBD consisted of non-specific inflammatory markers such as erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP). In 2013, the NICE guidelines changed this practice, recommending faecal calprotectin testing, a specific marker of gastrointestinal (GI) inflammation, as a clinical option for the differential diagnosis of IBD or IBS. Owing to the potential cost savings through reducing the number of avoidable endoscopies and other patient benefits, this change in practice led to a significant increase in test requests, an increased burden on laboratory resources.⁸

Recommended panel of tests may change practice again

Although faecal calprotectin testing can help to differentiate between IBD and IBS,⁹ it does not cover the spectrum of disorders that present with recurrent GI symptoms. As such, since 2011, primary care practices in the Coventry and Warwickshire area have been using a clinical pathway devised by Dr Ramesh Arasaradnam and colleagues to determine the need for referral in patients aged less than 45 years with symptoms of IBS for more than one month with no red flag symptoms. The clinical pathway recommends testing for:

- full blood count to identify patients with anaemia

'EliA Calprotectin 2 is a fully automated test for faecal calprotectin that offers the high sensitivity, specificity and predictive value that today's laboratories require'

- thyroid stimulating hormone to identify patients with hypothyroidism
- coeliac serology to identify patients with coeliac disease
- faecal calprotectin to identify patients who may have an inflammatory disease of the bowel.

Dr Arasaradnam reports that the clinical pathway has been a huge success,⁹ has helped to reduce the burden on secondary care gastroenterology, and has provided primary care with a tool to inform clinical decisions. This in turn has helped to improve the patient experience.



Gastrointestinal symptoms are one of the most common complaints patients present with, making it difficult to diagnose disease on a clinical history alone.

Laboratory implications

Considering that other experts, such as Dr John O'Malley,⁹ have also endorsed this panel of tests, it is likely that we will see another change in clinical practice, with clinicians starting to request this panel of tests. Individual laboratories will need to consider the potential impact on workload and whether or not their present kit is suited to handling a significant increase in the number of requests. Laboratories may choose to utilise the expertise of specialists like Karen Garratt, Thermo Fisher Scientific's application specialist for EliA Calprotectin 2, to evaluate new kits; considering the anticipated increase in workload, it may be wise to reflect sooner rather than later.

How can Thermo Fisher Scientific help you?

A substantially improved faecal calprotectin test

EliA Calprotectin 2 is a fully automated test for faecal calprotectin that offers the high sensitivity, specificity and predictive value that today's laboratories require. The test features extended stool extract stability, helping laboratories to optimise workflow, and an expanded measuring range that reduces the need for further dilution and retesting. The use of faecal calprotectin may enable laboratories to help clinicians predict disease flares.

A comprehensive GI test menu

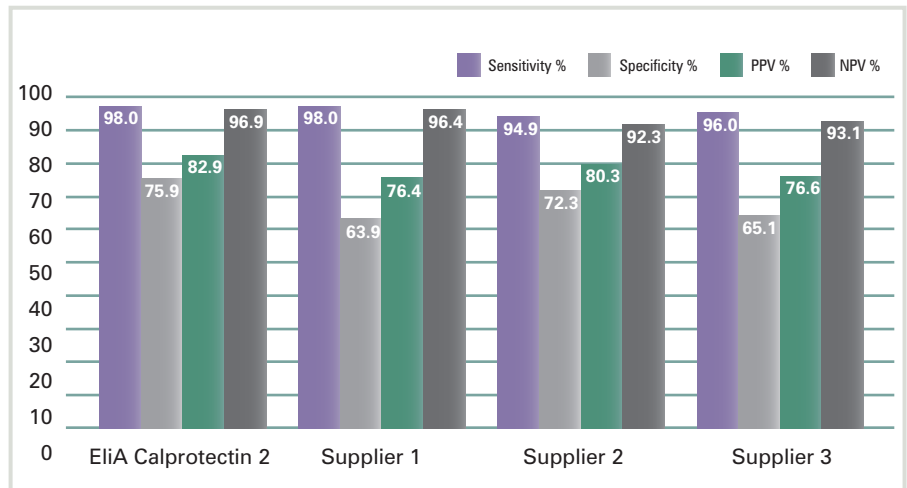
- EliA Celikey IgA, IgG
- EliA Gliadin^{DP} IgA, IgG
- EliA Calprotectin 2
- EliA ASCA IgA, IgG.

A reputation synonymous with quality

- Phadia Laboratory Systems are fully automated platforms offering autoimmunity and allergy testing on one instrument.
- All assays are manufactured in accordance with Good Manufacturing Practice guidelines.
- Extensive, high-quality service package:
 - remote system monitoring and fault identification
 - immediate training and system support
 - remote collection of instrument log files
 - retesting of EliA samples with unclear results.

On-site scientific application specialist

Application specialist Karen Garratt can also offer any assistance required to speed up



Clinical performance of EliA Calprotectin 2 compared to other suppliers' tests. Results of an internal study using 182 stool samples (n=90 IBD; n=83 IBS and other functional bowel disorders).

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the process of bringing EliA Calprotectin 2 into routine use in your laboratory. If you would like to discuss how Karen can support the evaluation and implementation of EliA Calprotectin 2 testing in your laboratory, please contact her by email (karen.garratt@thermofisher.com).

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References

- 1 Williams JG, Roberts SE, Ali MF *et al.* Gastroenterology services in the UK. The burden of disease, and the organisation and delivery of services for gastrointestinal and liver disorders: a review of the evidence. *Gut* 2007; **56** (Suppl 1): 1–113.
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- 4 Van Assche G, Dignass A, Panes J *et al.*; European Crohn's and Colitis Organisation (ECCO). The second European evidence-based Consensus on the diagnosis and management of Crohn's disease: Definitions and diagnosis. *J Crohns Colitis* 2010; **4** (1): 7–27.
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- 9 Institute of Biomedical Science. Learning with industry. Calprotectin testing. 2014 (www.ibms.org/go/practice-development/cpd/learning-with-industry).



Phadia Laboratory Systems are fully automated platforms offering autoimmunity and allergy testing on one instrument.

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