

Fecal Calprotectin Test for Non-Invasive Assessment of Intestinal Inflammation

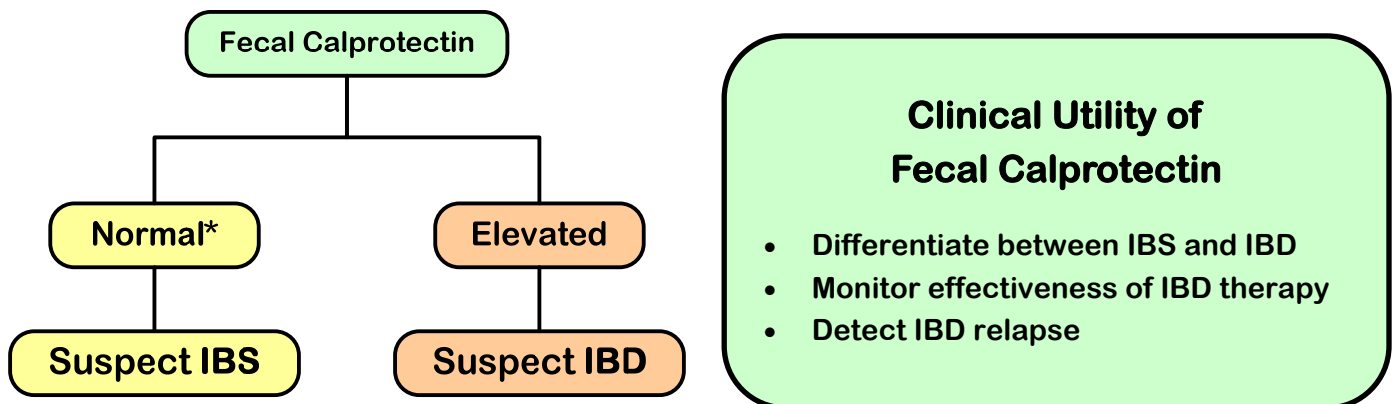
Inflammatory bowel disease (IBD) and irritable bowel syndrome (IBS) are conditions that present with chronic abdominal pain and disrupted bowel habits. Combined, they affect more than 5 million Canadians indiscriminately of age, gender or race¹.

To Scope or Not to Scope

Aside from negatively impacting the quality of life, IBS is relatively benign. It does not lead to any permanent structural damage to the intestines. Dietary and lifestyle changes can usually alleviate the symptoms of this disorder². IBD on the other hand is characterized by intestinal inflammation or ulcerations. This organic disease can lead to serious complications including the development of fistulas, abscesses and strictures; sometimes leading to perforation of the bowel³. This disease also carries an increased risk of malignancy⁴. Diagnosing IBD typically involves endoscopy and medical imaging which is expensive, invasive and difficult to conduct, especially on young patients.

Helping You Diagnose and Monitor IBD

Fecal Calprotectin can be used to confirm the presence of inflammation in the intestines before doing invasive testing⁵. Fecal Calprotectin is detected by an FDA-approved immunoassay that offers a non-invasive way to assess the patient's level of intestinal inflammation. Calprotectin is a calcium-binding protein found within neutrophils which influx into the bowel during inflammation. The levels of the Fecal Calprotectin protein are high in cases of IBD but not IBS; therefore, this test helps differentiate between the two diseases. While Fecal Calprotectin is not a substitute for other diagnostic techniques, it could help identify the patients who are most likely affected by IBD⁵.



* Repeat testing for borderline results is recommended

The Fecal Calprotectin test is also appropriate for monitoring of patients who are being treated for IBD⁶. Elevated levels of Fecal Calprotectin could be indicative of IBD flare-up, thereby allowing physicians to intervene before the IBD symptoms become severe.

Important Notes:

- To avoid potential false positive results, patients should abstain from using NSAIDs for at least two weeks before taking the test⁷.
- Repeat testing for borderline results is recommended.
- The Fecal Calprotectin test is not covered by provincial health plans; however, it may be covered by some extended health insurance plans.

If you would like to receive more information about this test or order Fecal Calprotectin pamphlets for your patients, please email us at contactus@lifelabs.com.

References:

1. Digestive Disorders. Oakville, ON: Canadian Digestive Health Foundation, n.d. Web. 11 Jan 2013.
2. Irritable Bowel Syndrome. Bethesda, MD: The National Digestive Diseases Information Clearinghouse. NIH Publication 2007; 07-693.
3. Carty E, et al. Evaluation of new therapies for inflammatory bowel disease. *Br J Clin Pharmacol* 2003; 56(4):351–361.
4. Bernstein CN, et al. Cancer risk in patients with inflammatory bowel disease: a population-based study. *Cancer* 2001; 91(4):854–862.
5. Sherwood RA. Faecal Markers of Gastrointestinal Inflammation. *J Clin Pathol* 2012; 65(11):981–985.
6. Vermeire G, et al. Laboratory Markers In IBD: Useful, Magic, Or Unnecessary Toys? *Gut* 2006; 55:426–431.
7. Carroccio A, et al. Diagnostic Accuracy of Fecal Calprotectin Assay in Distinguishing Organic Causes of Chronic Diarrhea from Irritable Bowel Syndrome: A Prospective Study in Adults and Children. *Clin Chem* 2003; 49(6):861–867.

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Fecal Immunochemical Test (FIT) covered by MSP from April 1, 2013

As of April 1, 2013, the Fecal Immunochemical Test (FIT) will be performed as the default colorectal cancer screening test and will be covered by MSP (it will no longer be a private pay test).

The FIT Fecal Occult Blood Test (FOBT) is a more sensitive and specific colorectal cancer screening test than the Guaiac FOBT. In addition, the FIT requires only a single sample collection and has no dietary or medication restrictions.

To order the FIT from April 1st, simply check “Fecal Occult Blood” on the standard LifeLabs requisition form. Please note that the Guaiac test will continue to be an MSP-funded test as well. If you would like to order the Guaiac test specifically, please indicate your preference on the requisition form.

2013 Antibigram Editions

- The 2013 Antibigram Editions for the Mainland and Vancouver Island are now available as hard copies (in colour) and are posted on our website at: www.lifelabs.com/Lifelabs_BC/Health_Care/Antimicrobial_Susceptibility_Profile.asp.
- Antibigrams will be distributed to physicians' offices and clinics during March; however, if you do not receive a copy, please call us toll-free at 1-800-431-7206 and ask for Client Services.
- If you have any questions, please contact one of the LifeLabs Medical Microbiologists.

Mainland and Vancouver Island Antibigrams

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