Lactoferrin, Stool
Screen & Quantitative

Overview

- In patients with active inflammatory bowel disease, lactoferrin, a proven marker of inflammation, is released from leukocytes infiltrating the intestinal mucosa.

- The Lactoferrin Screen, Stool is more specific and beneficial than the orderable Fecal Leukocyte (WBC) Test as it detects an increased presence of lactoferrin. The screen does not rely upon the staining of intact leukocytes, which in some cases may not be present due to collection, age of specimen, and cell lysis.

- The Lactoferrin Quantitative, Stool assay offers a safe non-invasive, accurate method of differentiating inflammatory bowel disease (IBD) from irritable bowel syndrome (IBS), once infectious causes of inflammation and colorectal cancer are ruled out. This assay is 86% sensitive and 100% specific in distinguishing IBD from IBS, making this an important diagnostic tool.

Diagnostic Value

An estimated 30 million Americans suffer from IBS, a disorder characterized by crampy abdominal pain, bloating, constipation, and/or diarrhea. The same clinical symptoms may be seen in individuals with ulcerative colitis (UC) and Crohn’s disease (CD), both known as IBD, which affect more than 1 million Americans.

Although individuals with IBS may experience severe discomfort and require symptomatic treatment, patients with IBD may develop rectal bleeding and permanent intestinal damage often requiring long-term therapy. Whereas stool lactoferrin tends to be elevated in patients with active IBD, it is minimally present in patients with IBS.

Distinguishing IBS from IBD is critical in patient management.

Test Utility

The screening assay is an immunochromatographic test for the qualitative detection of elevated levels of stool lactoferrin. A positive result indicates an increased level of stool lactoferrin and warrants additional testing. The Fecal Leukocyte (WBC) Test continues to be offered as it may be used to validate a positive Lactoferrin Screen in breast feeding infants.

The quantitative assay is an ELISA test offering a safe, non-invasive, accurate method of measuring concentrations of stool lactoferrin. An elevated level, reported in mcg/mL, is an indicator of intestinal inflammation. The test can be used as an in vitro diagnostic aid to distinguish patients with IBD from those patients with IBS.

Specimen Requirements

- Lactoferrin Screen, Stool  
  Test Code: NBLD0422  
  CPT Code: 83630

Collect undiluted stool specimen in a clean airtight container with NO preservatives. Specimen should be stored refrigerated or at room temperature up to 14 days from time of collection.

Limitations: Test results should be interpreted in conjunction with breastfeeding status. Breast milk is naturally high in lactoferrin and stool samples from breast-fed infants may cause a false positive with this assay. This test may not be appropriate for immunocompromised persons (as they may not have adequate leukocytes to shed).
Specimen Requirements

Lactoferrin Quantitative, Stool  
Test Code: NBLD0423  
CPT Code: 83631

1 gram of frozen stool (0.3 grams minimum). Collect undiluted stool in a dry sterile leak-proof container. Do NOT add fixatives or preservatives. Stool must be frozen within 48 hours from collection time. Patients may collect stool and hold at room temperature for 48 hours and then must be frozen.