Microbiology; stool

Order: SAMPLE REPORT
Client #: 12345
Doctor: Sample Doctor
Doctor's Data, Inc.
3755 Illinois Ave.
St. Charles, IL 60174

Patient: Sample Patient
Age: 35
Sex: Female

Sample Collection	Date/Time
Date Collected	09/22/2022
Date Received	09/23/2022
Date Reported	09/24/2022
Specimens Collected	1

Helicobacter pylori	**Result**	**Reference Interval**
Helicobacter pylori	Positive	Negative

Information

- The HpSA enzyme immunoassay (EIA) is an in virto qualitative procedure for the detection of H. Pylori antigens in the stool. Test results are intended to aid the diagnosis of H. Pylori infection, and to monitor response during and past therapy.

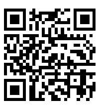
  Helicobacter pylori (H. pylori) was detected by enzyme immunoassay in this stool specimen. H. pylori is a spiral-shaped, flagellated, micro-aerophillic organism, which resides primarily in the human gastric mucosa. H. pylori is able to thrive in the high acidity of stomach by its ability to produce the enzyme urease. Urease converts urea from saliva and gastric juices into bicarbonate and ammonia which are strong bases. This creates a neutralizing cloud of chemicals which surround H. pylori and allow it to survive in its environment.

  H. pylori has worldwide distribution, most notably in developing countries where the rate of acquisition is up to 90% in children up to the age of five. Overcrowding and poor sanitary conditions contribute to an increase of H. pylori infection. In the United States, the projected incidence of H. pylori infection is 0.5 to 1%, with far fewer infections occurring in childhood. About 50% of the rate of incidence of H. pylori infection in the U.S. occurs in adults over the age of 60.

  Research has indicated that a strong correlation exists between the presence of H. pylori and those suffering from chronic gastritis as well as gastric and duodenal ulcers. H. pylori has been isolated in 90-95% of patients with duodenal ulcers and up to 80% of patients with gastric ulcers. The rate of recurrence of duodenal ulcers is reduced dramatically following successful eradication of H. pylori (4% percent compared to 80% with ongoing infection). Recurrence of gastric ulceration with bleeding is virtually eliminated with successful H. pylori treatment vs. a 33% risk of rebleeding with untreated or unsuccessfully treated H. pylori infection. One possible therapy often used includes "triple therapy" with bismuth, metronidazole and either amoxicillin or tetracycline. Natural agents include garlic, mastic gum, tea catechins, and deglycyrrhizinated licorice.

  H. pylori can colonize the stomach for many years or decades. It may remain inactive/asymptomatic or can cause on-going gastric inflammation via secretion of inflammatory substances such as CagA toxin and interleukin 8. It is not yet certain which host factors contribute to progression of inflammation and pathogenicity. H. pylori is also recognized as a class I carcinogen for the development of adenocarcinoma. Current research is also exploring the possible involvement of H. pylori in non-gastrointestinal conditions such as coronary heart disease, Reynaud's phenomenon, diabetes, and gallstone disease.

Notes:
Methodology: Enzyme Immunoassay



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