Helicobacter pylori is the bacterium believed to cause gastritis and virtually all abdominal ulcers, apart from drug-induced forms. It resides in the acidic environment of the stomach by producing bicarbonate, which increases the pH, allowing it to survive. In doing so, it adheres to and disrupts epithelial cells of the stomach, depletes microvilli, and decreases mucous production. This can lead to pain and inflammation, which over time can significantly increase the risk of gastric cancer.

It is recommended that such infections be treated with a combination of proton pump inhibitors and antibiotics to eradicate these bacteria. When H. pylori is eradicated, ulcers heal and don’t recur. It would be wise to consider testing all immediate family members if one member does have H. pylori as it can be found in people who do not have symptoms of stomach ulcers or gastritis. High stress, caffeine, alcohol, aspirin or NSAID intake may increase the incidence of infection.

**Symptoms:**
- Indigestion type pain that occurs 2-3 hours after eating or in the night, and is relieved by taking antacids
- Excess acidity or dyspepsia
- Nausea and vomiting
- Upper intestinal bloating
- Duodenal and gastric ulcers
- Chronic gastritis
- Coronary heart disease
- Acid reflux
- Weight loss and decreased appetite
- Family history of gastric cancer

**Testing options:**

Conventional diagnosis of H. pylori is usually made by an antibody blood test. This will reveal whether the patient has been exposed to H. pylori but does not identify a current, active infection, and is of no value in confirming successful eradication, as the antibodies persist long after successful eradication.

The following options are available for testing an active H. pylori infection, or for confirming successful treatment:

**H. pylori Specific Antigen – stool test**

H. pylori stool antigen (HpSA) testing reveals H. pylori antigens shed directly into the stool. This can be ordered independently or as an add-on to a larger stool panel. Follow-up testing can be conducted after a minimum of 2 weeks from completion of the antibiotic course.

**H. pylori Breath Test**

The breath test procedure is a non-invasive diagnostic tool utilising a C13 urea powder, to detect the presence or absence of an active H. pylori infection. The patient must provide two sets of breath samples, pre and post drinking the urea solution, at timed intervals. These can be performed in the patient’s home and the samples returned to the laboratory for analysis. Follow-up testing can be conducted as early as 3 days after completion of antibiotic therapy.
Helicobacter pylori Stool Antigen

Patient: SAMPLE REPORT
DOB: February 13, 1974
Sex: F
MRN: 0001181607

Order Number: A1080244
Completed: May 09, 2008
Received: May 08, 2008
Collected: May 06, 2008
Route Number: A086468

Genova Diagnostics Europe
356 West Barnes Lane
New Malden, Surrey. KT3 6NB
Great Britain and Northern Ireland

HpSA (Helicobacter pylori stool antigen)
Helicobacter pylori is a bacterium which causes peptic ulcer disease and plays a role in the development of gastric cancer. Direct stool testing of the antigen (HpSA) is highly accurate and is appropriate for diagnosis and follow-up of infection.

Commentary is provided to the practitioner for educational purposes, and should not be interpreted as diagnostic or treatment recommendations. Diagnosis and treatment decisions are the responsibility of the practitioner.

HELICOBACTER PYLORI BREATH TEST

00 min -23.44
30 min -13.55
Difference 9.89

Result is positive if the difference is greater than 4.00

13C Urea Result: POSITIVE

The above test is used to demonstrate the presence or absence of H. pylori that is active in the gut. A NEGATIVE result would indicate that whilst an individual may have been exposed to H. pylori at some time, it is NOT active at this time.

H. pylori infection is strongly associated with persistent stomach inflammation (chronic superficial gastritis), and studies have shown that such an infection significantly increases the risk of stomach or duodenal ulcer formation.

It has been recommended, that if POSITIVE, such infections be treated with the appropriate antibiotic therapy, to achieve eradication of this bacteria.

Reported by: KR