

July 2014 • Members

Helicobacter pylori and Celiac Disease

Two stomach conditions that should not go undiagnosed

H pylori infection and celiac disease affect the stomach. They can both result in serious problems. For example, *H pylori* infection can cause a bleeding ulcer or stomach cancer. Celiac disease can result in anemia and osteoporosis. It can also result in cancer of the stomach, intestine, or lymph glands.

So if you often have abdominal pain, bloating, and gas, read this newsletter to learn more. Then talk with your doctor. Describe all your symptoms. Tell your doctor when and how often you have them. Your doctor will decide if you need to be tested for these 2 conditions.

Helicobacter pylori

What is it?

H pylori is a bacterium that is often found in the stomach. It can cause inflammation. It can also cause the stomach to be very sensitive to gastric acids that help digest food. It's best known as the cause of stomach and intestinal ulcers.

Who's at risk of this infection?

People who live in crowded, unclean conditions are more likely to be infected. Those who live with an infected person are at greater risk of getting it too. This is because *H pylori* is spread by contact with contaminated food, water, saliva, vomit, and stool. People who are infected most often get it during childhood.

About 30% to 40% of people in the U.S. are infected.¹

Who should be tested?

These people should be tested for the *H pylori* bacterium:

- Those with symptoms
- Those who have had an ulcer and no antibiotic treatment
- Those with a gastric MALT lymphoma
- Those who have had surgery for early stomach cancer
- Children who have a mother, father, sister, or brother with stomach cancer
- Children who have iron-deficiency anemia that doesn't go away after therapy



H pylori symptoms

Most people never get symptoms. But those who do may have:

- Gnawing or burning stomach pain that gets better after eating, drinking, or taking an antacid
- Nausea
- Bloating
- Burping
- Loss of appetite

More serious symptoms include:

- Dark or black stool
- Weight loss
- Severe stomach pains
- Presence of blood in vomit

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Which tests are used?

These tests are used to diagnose an *H pylori* infection:

- Urea breath test (UBT): this test uses a sample of your breath to measure carbon dioxide. *H pylori* breaks down urea to produce carbon dioxide.
- Stool antigen test: this test uses a stool sample to test for the presence of *H pylori*.
- Antibody test: this test uses a blood sample. It's an older test that is used only in certain situations.
- Endoscopy: this test uses a camera attached to a long, thin tube. It allows the doctor to look at your stomach and intestine. It also allows the doctor to take a small amount of tissue for more testing.
- Culture: this test uses the tissue collected during an endoscopy. It can find out if *H pylori* bacteria are present.
- Rapid urease test: this test uses the tissue collected during an endoscopy. It looks for an enzyme, called urease, which is produced by *H pylori*.

Celiac disease (CD)

What is it?

CD is an inherited autoimmune disease. When a person with the disease eats a substance called gluten, his/her body attacks the intestines. This makes it hard for the body to take in important nutrients. So the person is malnourished, no matter how much he/she eats.

Who's at risk of CD?

First-degree relatives of those with CD are at greatest risk. People with HLA-DQ2 or HLA-DQ8 have a genetic risk for CD. People with these conditions may also have CD:

- Type 1 diabetes
- Autoimmune thyroid disease
- Down syndrome
- Low levels of IgA
- Iron-deficiency anemia with no known cause
- Osteoporosis that presents at an early age

Celiac disease symptoms

People with CD may have:

- Diarrhea
- Constipation
- Stomach pain, bloating, and gas
- Vomiting
- Weight loss
- Irritability
- Fatigue and weakness
- Depression
- Itchy skin rash
- Mouth sores
- Discolored teeth
- Headaches
- Heartburn
- Infertility
- Thin bones

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Who should be tested?

Doctors test those:

- Who have symptoms
- With unexplained iron-deficiency anemia
- With unexplained increases in liver enzymes (ALT, AST)
- Who have a first-degree relative with CD

Sometimes doctors test children who fail to thrive or are shorter than expected for their age.

Which tests are used to diagnose CD?

Antibody tests are often used first. They can help find out if an intestinal biopsy is needed. There are 3 antibody tests:

- Tissue transglutaminase (TTG) antibody
- Deaminated gliadin peptide (DGP) antibody
- Endomysial antibody (EMA)

A total IgA test is often used to be sure the person can make IgA antibodies. If not, the tests for CD might be negative even when the person has CD.

When the antibody tests are positive, doctors then do a biopsy of the intestine.

Doctors use HLA-DQ2 and HLA-DQ8 genetic testing to rule out CD. A negative result means the person doesn't have CD and probably won't get it.

Additional information

You can learn more about *H pylori* infection and celiac disease at these websites:

H pylori

National Digestive Diseases Information Clearinghouse (NDDIC)
<http://digestive.niddk.nih.gov/ddiseases/pubs/hpylori/>

American College of Gastroenterology
<http://patients.gi.org/topics/peptic-ulcer-disease/>

American Gastroenterological Association
<http://www.gastro.org/patient-center/digestive-conditions/peptic-ulcer-disease>

Celiac disease

National Digestive Diseases Information Clearinghouse (NDDIC)
<http://digestive.niddk.nih.gov/ddiseases/pubs/ceciac/index.aspx>

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<http://patients.gi.org/topics/ceciac-disease/>

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<http://www.gastro.org/patient-center/digestive-conditions/ceciac-disease>

Reference

1. Chey WD, Wong BCY, Practice Parameters Committee of the American College of Gastroenterology. American College of Gastroenterology guideline on the management of *Helicobacter pylori* infection. *Am J Gastroenterol*. 2007;102:1808-1825.