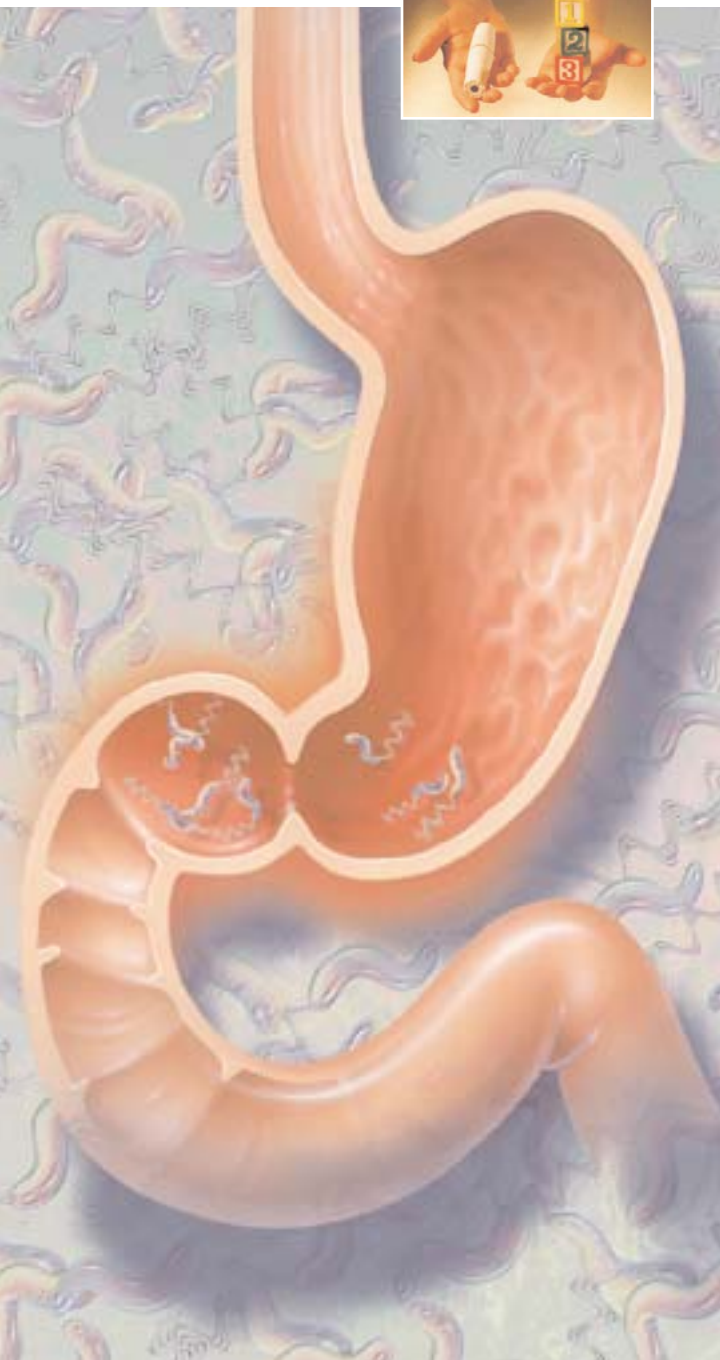


Lara **PYLORI-CHEK™**

(¹³C-Urea Breath Test)

and ULCERS



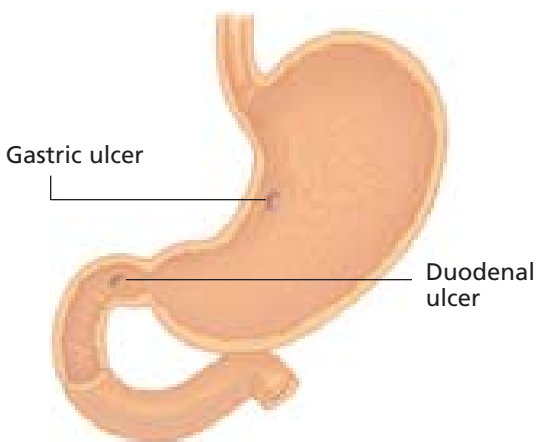


WHAT IS A PEPTIC ULCER?

A peptic ulcer is a break in the lining of part of the duodenum or stomach. There are two types of peptic ulcers:

1. duodenal ulcer, which occurs in the duodenum (the most common type of ulcer);
2. gastric ulcer, which occurs in the stomach.

Ulcers can be different sizes, but are usually very small (0.5 to 1 cm in diameter). Ulcers usually happen one at a time. Shallow ulcers that are no deeper than a scratch are called erosions. Deeper ulcers that can go through the lining of the duodenum or stomach may lead to bleeding or perforation of the stomach or duodenal wall.



Erosion



Ulcer



WHAT IS *Helicobacter pylori*?

Helicobacter pylori (*H. pylori*) is a bacteria that can lead to infection. These bacteria live in the lining of the stomach, where they can cause either duodenal or gastric ulcers. Doctors agree that almost everyone who has an ulcer also has an infection (*H. pylori*) in his or her stomach. This infection may be related to symptoms of indigestion such as pain or discomfort just below the breast bone, heartburn, excessive burping or belching, nausea, or feeling full or bloated in the upper stomach.



WHAT ELSE CAN CAUSE AN ULCER?

Other things that may help cause an ulcer include stomach acid, drugs, family history of ulcers, smoking, stress, age, and gender.

Stomach Acid

Many people with ulcers make more acid in their stomach than they need. Some people produce a lot of acid but don't get ulcers, while other people produce normal amounts of acid and develop ulcers.

Drugs

Some drugs can cause ulcers. The most common are Aspirin® (ASA) and other drugs used for arthritis known as non-steroidal anti-inflammatory drugs (NSAIDs). Drugs are more likely to cause gastric ulcers than duodenal ulcers.

Family History

If people in your family such as your mother or father have had an ulcer, you are more likely to get one, too.

Smoking

If you smoke you have a greater chance of getting an ulcer.

Stress

Although people believe that stress can cause ulcers, there is no strong evidence that this is true.

Age

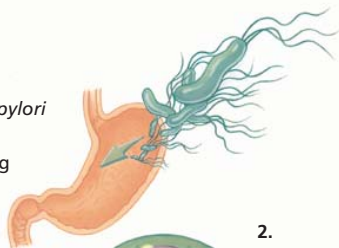
As you get older, the risk of getting an ulcer increases. A person who is 50 years old is more likely to have an ulcer than a person who is 25 years old.

Gender

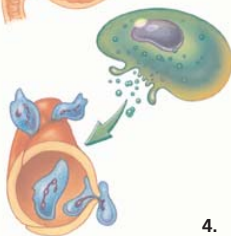
Men are a little more likely to get ulcers than women.



1.
Helicobacter pylori
(*Hp*) in the
stomach lining



3.
Blood flow
is increased
and white
blood cells
arrive via
small blood
vessels in
the
stomach
lining



2.
Local
"immune"
cells are
activated

4.
White blood
cells surround
and try to
destroy the
bacteria (*Hp*)



5.
Infection and immune reaction results in
inflammation – gastritis



HOW DOES *H. pylori* CAUSE AN ULCER?

Helicobacter pylori goes into the lining of the stomach wall, where it can start an inflammatory response called gastritis. Gastritis causes damage to the lining of the stomach, making an ulcer more likely to develop.



HOW DO I KNOW IF I HAVE *H. pylori*?

To find out if you have *H. pylori*, your doctor can use different detection tests. One of the most accurate tests to diagnose the *H. pylori* infection is the ^{13}C -urea breath test (UBT).



LARA Pylori Chek™ (^{13}C -UREA BREATH TEST)

This is a non-radioactive, non-invasive test used to detect *H. pylori* infection or to confirm that the infection is gone. *Helicobacter pylori* secretes an enzyme called urease which changes urea into carbon dioxide (CO_2) gas. This is a gas you normally breathe out. If you have an *H. pylori* infection, urea will be turned into carbon dioxide (CO_2) and breathed out. If you **do not** have an *H. pylori* infection in your stomach, urea will be absorbed by your stomach and excreted within a few hours.

The ^{13}C -urea breath test is very simple and involves collecting two breath samples. All you have to do is blow into a plastic tube that collects a sample of your breath. After the first breath sample, you will drink apple juice and then some water which has been mixed with a small amount of a ^{13}C -urea solution. This water solution is non-radioactive and

tasteless. Breath samples are taken at the start of the test and then at 30 minutes after you drink the solution. Your breath samples are then analysed for the amount of ^{13}C -labelled CO_2 they contain. The results will show if you have *H. pylori*.

Please mention any diet restrictions you may have (e.g., diabetes) to the health care professional performing the test.

This test is for use with people who are 18 years of age or older.



PREPARING FOR THE LARA Pylori-Chek TEST

- It is very important that you **do not** drink or eat any food for at least 4 hours before taking the test. This is called fasting.
- Before taking the breath test, you and your doctor should discuss any medications you have taken recently. The following medications should not be used for 2-4 weeks before taking the LARA Pylori-Chek test, as these medications can interfere with the test results:
 - proton pump inhibitors (e.g., LOSEC®) in the last 2 weeks;
 - antibiotics (e.g., penicillin, tetracycline) in the last 4 weeks;
 - bismuth preparations (e.g., PEPTO-BISMOL®) in the last 4 weeks.

Do **not** discontinue these medications on your own. Talk to your doctor first.

- Before taking the breath test, make sure you discuss with your doctor any treatment or medication you have taken.

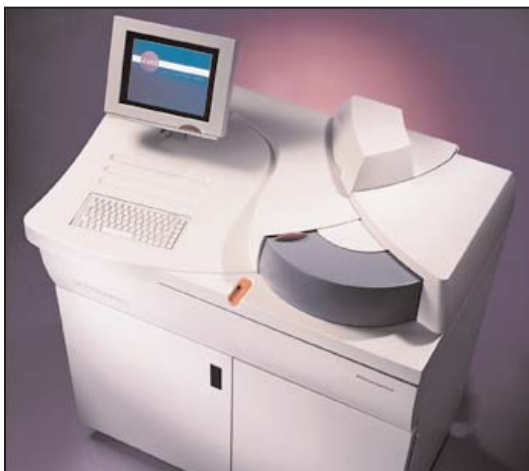


TAKING THE LARA Pylori-Chek TEST

1. You will be asked to blow into a plastic tube until you have completely emptied your lungs. Just before you have finished blowing into the tube, you will twist the end of the breath collector in a counter-clockwise direction while it is still in your mouth. This is to make sure your breath does not escape from the tube. Make sure the collector is closed tightly after removing it from your mouth. The health care professional performing the test will help you.
2. You will then drink apple juice and the ^{13}C -urea water solution.
3. You will be timed to help remind you when the 30-minute breath sample needs to be taken.
4. A second breath test will be taken 30 minutes after you drink the solution. The breath test is done in the same way as the first one.



5. You are now finished the test.
6. Both of your breath samples will be sent to an analysis centre, and your test results will be sent back to your doctor.



LARA™ analyser at the analysis centre.*

WHERE IS THE LARA Pylori-Chek TEST DONE?

- Testing centres are set up in convenient locations to perform the test ordered by your physician.
- Please call 1-800-668-6000 (English) or 1-800-461-3787 (French) to find out the location of the nearest testing centre and whether you require an appointment.
- A qualified professional at the testing centre will help you perform the test and answer any questions you may have.



WHAT HAPPENS IF I HAVE *H. pylori*?

Your doctor will be able to advise you appropriately based on your test results. At one time, peptic ulcer disease was considered a lifelong condition. The aim of the treatment was to try to heal the ulcer and keep it healed. Now, treatment is to heal the ulcer and to get rid of the *H. pylori* infection that can cause the ulcer to return. This should cure the ulcer permanently.

To get rid of the infection, your doctor may prescribe antibiotics to get rid of the bacteria as well as medication that lowers the amount of acid in your stomach. Too much acid can keep the antibiotics from working as well as they should. You have to take all of these medications to make sure that your *H. pylori* infection is gone and that your ulcer is completely healed.

Remember, take your medication exactly as your doctor and pharmacist have instructed you to do. Even if you are feeling better, getting rid of the *H. pylori* infection and healing your ulcer take time.

TM Alimenterics Inc., Astra Pharma Inc. Licensee

*TM Alimenterics Inc.

***Please unfold panels to
the right and complete the
Patient Registration Form
and Survey***



LaRa
PYLORI-CHEK[™]
(¹³C-Urea Breath Test)



ASTRA

Astra Pharma Inc., Mississauga, Ontario L4Y 1M4



C395