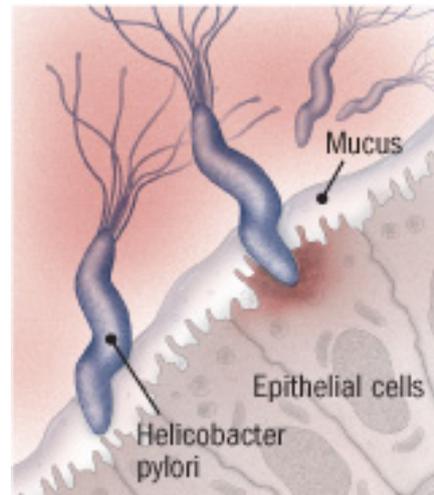
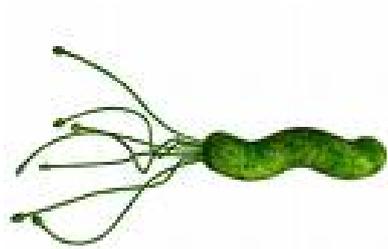


Community Endoscopy Service

Advice Sheet for Patients

Helicobacter Pylori

What is Helicobacter Pylori?



Helicobacter Pylori

Helicobacter pylori (*which is written in an abbreviated form as H. pylori*) is a type of bacterium, a bug or germ, that lives in the sticky fluid (mucus) which coats the lining of the human stomach and duodenum. It is usually a lifelong infection and may cause no problems. However, it is closely associated with peptic ulcer. This leaflet answers questions that you may want to ask about H. pylori.

What is a peptic ulcer?

Peptic ulcers look like mouth ulcers. They are sensitive raw patches in the lining of the stomach or duodenum (part of the gut immediately after the stomach), see figure 1.

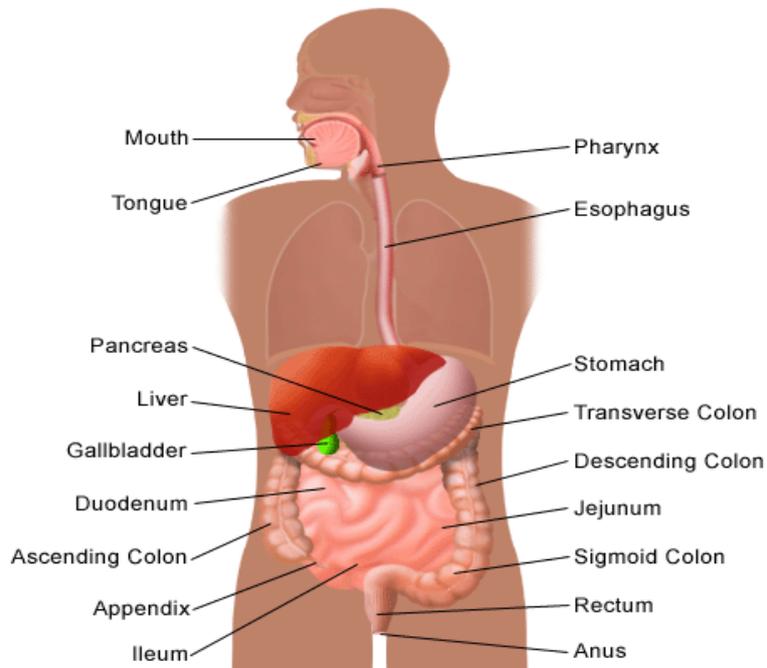


Figure 1

What are gastric and duodenal ulcers?

Gastric ulcers are ulcers in the stomach and duodenal ulcers are those of the duodenum. Research has shown that *H. pylori* is a known cause of peptic ulcers, see figure 2.

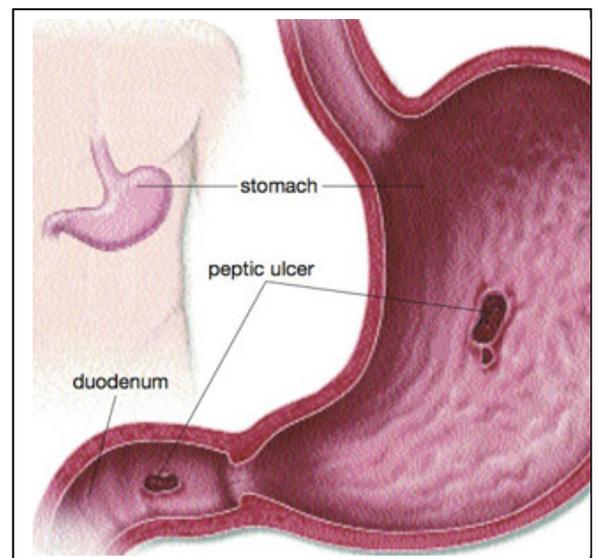


Figure 2

Where does H. pylori come from?

H. pylori is a germ that can only infect human beings. Animals have a similar bacteria, but they cannot infect humans. Hence H. pylori must pass from one person to the next.

How do we get infected with H. pylori?

It is still not certain how this germ moves from the stomach of one person to the next. These bacteria are rarely detected in saliva, gastric juices or stools. The latest theory is that people may be highly infectious for only a matter of days or weeks – and transmission may be via the fingers when coming into contact with infected vomit or stools. Good hygiene in the home seems to decrease transmission.

How long does H. pylori infection last?

This is a lifelong infection for most people. Without medical help, the infected person seems incapable of getting rid of it. Long term infection, perhaps for up to 50 years, can result in loss of the stomach secretions. At that stage, the infection disappears in some people.

Where does the H. pylori live in the stomach?

The normal human stomach has a very thin layer of secretion that coats the whole of its inside surface. This secretion has a protective role, acting as a barrier between the acid in the stomach and the sensitive stomach wall. The duodenum can also have this type of secretion, particularly if the stomach secretes a great deal of acid, and in these people, H. pylori can also survive in the lining of the duodenum. H. pylori has become adapted to live exclusively in this layer of mucus.

How many people are infected with H. pylori?

In Britain about half the population over middle age is infected with H. pylori. It seems likely that most people get infected in childhood. Probably, almost all of our grandparents were infected with these bacteria but, because of improved hygiene in the modern home, very few children are now infected in Britain. Unfortunately, most children in the developing world still get infected. This means that almost everybody in these countries has a chronic infection with H. pylori.

What does H. pylori do?

H. pylori acts as an irritant to the lining of the stomach and this causes inflammation of the stomach (gastritis). H. pylori also appears to be the cause of peptic ulceration. A combination of factors (including H. pylori, gastric acid, genetic background, use of aspirin or drugs for arthritis and cigarette smoking) may combine to cause ulcers of the stomach or duodenum. It is possible that a small proportion of people who are infected develop a cancer of the stomach in later life. This is probably because of the chronic irritation to the lining of the stomach, throughout decades of long term infection. There is no evidence at present that eradication of H. pylori in adults will reduce the risk of gastric cancer.

How do we know H. pylori is an important cause of peptic ulcers?

Without treatment patients may develop ulcers experiencing painful episodes. However, such relapse becomes extremely rare if H. pylori is cleared from the stomach by medical treatment. Eradicating H. pylori infection can give a cure of most gastric and duodenal ulcers.

Who should receive treatment to eradicate H. pylori infection?

Patients with definite proof of peptic ulceration are the ideal people to receive treatment to eradicate H. pylori infection. These patients will usually have a long term cure of their ulcer disease, if the treatment clears all traces of H. pylori infection from the stomach. However if it proves impossible to clear the stomach, ulcer patients can be protected from relapse by long term daily treatment with a drug to decrease gastric acidity

What about people who are H. pylori positive, but without any sign of peptic ulceration?

This type of person is often well with no symptoms and no treatment is indicated. A person who suffers from indigestion without evidence of a peptic ulcer will often feel no better after eradication of H. pylori infection.

Should everyone be tested for H. pylori?

In the future, it may well be worthwhile to search out every person with H. pylori infection. However at the moment we do not have a simple and inexpensive form of treatment to provide mass eradication of H. pylori infection, nor do we know that doing so would help people without an ulcer. It is possible that vaccination may prove the answer, but no vaccines are available against H. pylori at the moment.

What research is needed?

H. pylori has stimulated an enormous amount of research over the last 10 years. Many questions remain unanswered for example, the exact method by which the germ passes from one person to another, the reasons why it causes peptic ulceration and new strategies for eradicating infection using either antibiotic or vaccines.

Resources on the web

<http://www.patient.co.uk/health/Helicobacter-Pylori-and-Stomach-Pain.htm>

<http://www.corecharity.org.uk/Helicobacter-pylori/Page-2.html>

<http://www.bsq.org.uk/patients/patients/general/helicobacter-pylori.html>