CANTERBURY
Endoscopy & Gastroenterology

Helicobacter Pylori (H. pylori)

Helicobacter pylori (H. pylori) is a type of bacteria that infects the lining of the stomach. Most people pick up the infection in childhood and is likely spread through contaminated water and food.
While many people carry the bacteria without symptoms, in others, it can cause chronic inflammation, leading to ulcers or an increased risk of stomach cancer if left untreated.

How does it affect the stomach?

Unlike most bacteria, *H. pylori* can survive the harsh, acidic environment of the stomach by producing an enzyme called urease, which neutralises stomach acid in its immediate vicinity.
Once established, the bacteria can:

- Inflame the stomach lining: This is known as gastritis.
- Cause peptic ulcers: By breaking down the protective mucus layer, the bacteria allow stomach acid to create open sores in the lining of the stomach or the duodenum (the start of the small intestine). Certain pain relief medicines called NSAIDS, such as aspirin, ibuprofen, and naproxen, can also cause ulcers. Peptic ulcers are also more common if you smoke.
- Long-term infection with H. pylori can increase the risk of developing stomach cancer.

How common is it?

In Aotearoa New Zealand, *H. pylori* is less common than in many other countries. On average, about 1 in 5 people have the infection.
However, your risk of having the bacteria depends a lot on your background. It is much more common in some communities than others. Māori, Pacific peoples and Asians have higher risk compared to New Zealand Europeans.

What are the symptoms of H. pylori infection?

Many patients are asymptomatic. However, when the bacteria cause inflammation or an ulcer, symptoms may include:

- A dull or burning pain in the upper abdomen (often worse when the stomach is empty).
- Frequent burping or bloating.
- Nausea or a loss of appetite.
- Unexplained weight loss.

How is H. pylori diagnosed?

Currently, there are two main methods to diagnose H. pylori infection in Christchurch.

- Faecal Antigen Test: A stool sample is analysed to look for proteins associated with the bacteria.
- Gastroscopy & Biopsy: During a gastroscopy, a small tissue sample (biopsy) is obtained, to be examined under the microscope or tested for the urease enzyme (CLO test).

Important: To ensure an accurate result, you must stop taking Proton Pump Inhibitors (PPIs) like Omeprazole for at least 2 weeks, and Antibiotics for at least 4 weeks, prior to testing.

How is H. pylori treated?

In New Zealand, *H. pylori* is typically treated with a combination of medications taken over 7 to 14 days. This is often referred to as "Triple Therapy":

1. A Proton Pump Inhibitor (PPI): To reduce stomach acid and allow the lining to heal.
2. Two Different Antibiotics: Usually a combination of Clarithromycin and Amoxicillin (or Metronidazole) to kill the bacteria.

Re-testing for clearance

It is essential to confirm that the infection has been completely eradicated. Generally, a faecal antigen test is arranged at least 4 to 6 weeks after you finish your course of antibiotics to ensure the treatment was successful.