

Ask the pharmacist

Your pharmacist is the best (next to your doctor, of course) source of information on how to get the most from your treatments.

Help... there are germs in the stomach!

Q: My elderly mum went for her yearly blood tests at a health lab recently. She was recommended a “blow test” called UBT and the result showed there were germs in her stomach. She was told to buy some medicines from the pharmacy. Is the UBT accurate? What medicines should she take?

A: The germs referred to are known as *Helicobacter pylori*, which live in various parts of the stomach and duodenum (upper intestine).

H. pylori is found in more than 50% of the world’s population, especially in developing countries (where the infection rate may exceed 70%).

This bacterium is associated with duodenal and gastric (peptic) ulcers, low-grade gastric lymphoma and active/chronic gastritis, as well as gastric cancer (up to 94%). However, over 80% of people infected with *H. pylori* are asymptomatic.

Diagnostic tests

The most reliable diagnostic test for detecting *H. pylori* is a biopsy during endoscopy, which is then evaluated by:

- Histological examination and phase contrast microscopy;
- Microbial culture ; and
- Rapid urease test (e.g. CLO or PyloriTek test).

Other non-invasive methods include:

- Blood antibody (serological) tests;
- Stool antigen test; and
- Carbon urea breath test (UBT) – with ¹³C- or ¹⁴C-labeled urea.

The carbon-14 (radioactive) UBT must be performed in a nuclear medicine facility.

The non-invasive tests are recommended as a “test-and-treat approach” to determine the cause of stomach pain and related digestive problems. They are not recommended if you are older than 55 (when stomach cancer is more prevalent), have familial history of stomach cancer or serious clinical signs.

The UBT method should be used (in patients with peptic ulcer) for:

- Monitoring the success of *H. pylori* eradication treatment;
- Confirming infection by *H. pylori*, where suitable biopsy material cannot be obtained or after diagnosis with barium meal; or
- Cases whereby endoscopy is not indicated.

Possible treatments

H. pylori eradication requires multiple-drug therapy (sometimes called triple or quadruple therapy), typically with antibiotics plus a proton pump inhibitor (PPI). The PPI suppresses gastric acid by shutting down “pumps” in acid-producing cells.

Triple therapy is recommended for minimum one week and consists of:

1. Omeprazole 20mg (or lansoprazole 30mg or pantoprazole 40mg);
2. Clarithromycin 500mg; and
3. Amoxicillin 1000mg (or metronidazole 500mg for penicillin-allergic patients).

Quadruple therapy – with a PPI, tetracycline 500mg, bismuth subsalicylate/subcitrate 525mg, and metronidazole 500 mg – is effective but cumbersome.

These treatments are with controlled medicines prescribed by a medical doctor and cannot be bought over the counter. **OH!**