

Helicobacter Pylori: Indications for Testing, Non invasive Testing and Current Treatment Algorithms

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H.pylori remains a very common gastric infection. It is a gram negative microaerophilic bacteria. Over half the population of the world has H. Pylori in their stomachs. Most are non pathogenic commensals but a small subset is cytotoxic and increases the likelihood of gastric cancer, PUD or MALT lymphoma.

H. Pylori is considered a WHO carcinogen so anyone testing positive should be offered treatment.

The indications for testing include PUD, gastric cancer or MALT Lymphoma.

Other indications are more controversial include uninvestigated dyspepsia, NSAID use, ITP and unexplained iron deficiency anemia.

Non invasive testing includes serology, urea breath testing and stool antigen testing

Serology should be avoided in regions with a low prevalence of H. Pylori (such as Canada) due to low specificity.

Urea breath testing (UBT)(either C14 or C13) are quite sensitive (90-96%) and the specificity is high (88-98%). PPIs should be held for 2 weeks prior to testing and antibiotics 4 weeks

H. Pylori stool antigen testing is also quite sensitive (94%) and specific (92%). PPIs and antibiotic also need to be held for a similar amount of time to UBT

First line treatment should be bismuth quadruple therapy or non bismuth quadruple (PAMC) for two weeks. (see Enhanced Pathways for medication specifics)

Failure of one of the above regimens should mandate a trial of the other.

Rifabutin or Levaquin based therapies are third line and a call to a gastroenterologist would be prudent since endoscopy and biopsies for resistance testing might be in order.

Reference

The Toronto Consensus for the Treatment of H. Pylori Infection in Adults. Gastroenterology 2016; 151: 51-69