

H. pylori Protocol

H. pylori bacteria are the most common cause of peptic ulcer disease and are present in around 50% to 75% of the world's population. H. pylori are considered normal flora of the intestinal microbiome, usually found in low numbers. Infection may be well established by the time pathology presents, causing a delay in accurate diagnosis and treatment. Additionally, dyspepsia is often treated as an isolated symptom, without identification of *H. pylori* as the underlying cause, resulting in worsening disease progression or relapse.

H. pylori replicates in the mucous layer of the stomach lining and duodenum. The bacteria secrete urease, an enzyme that converts urea to ammonia, which protects the *H. pylori* from being damaged by stomach acid. If left untreated, *H. pylori* continue to multiply and erode stomach tissue, which leads to gastritis and/ or peptic ulcer disease, and in rare cases, stomach cancer.¹

Risk Factors²

- Frequent antibiotics
- PPI use
- Chronic stress
- Age
- Poor diet
- Immune suppression

- Frequent travel
- Contaminated water
- Smoking
- Improper food handling
- Celiac and other food intolerances



Diagnosis and Testing

Diagnosis through testing can be difficult due to the elusive nature of *H. pylori* infection. However, practitioners often depend on a clinical diagnosis based on symptom presentation.

Symptoms of H. pylori ³		
Dull or burning stomach pain (more often a few hours after eating and at night) lasting minutes to hours and coming and going over several days to weeks.	Fatigue	
Bloating	Joint Pain	
Nausea and vomiting (bloody vomit)	Loss of appetite	
Indigestion (dyspepsia)	Dark stools (from blood in your stool)	
Burping	Unexplained weight loss	

¹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3703212/

² https://my.clevelandclinic.org/health/diseases/21463-h-pylori-infection

³ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4177467/



Additionally, the confirmatory tests below may be utilized.3

- Urea breath test
- Stool test (antigen and/or PCR)
- Histology biopsy through edoscopy

Clinical Pearl #1 - Don't Forget the Mouth

An often overlooked area when addressing *H. pylori* is the oral microbiome. *H. pylori* can inhabit the oral cavity and may contribute to periodontal disease and dental caries.⁴ Additionally, because of its presence in the mouth, kissing and sharing food may be a source of exposure. All family members should be treated to prevent reinfection.

In the mouth, there is a complex interplay between microorganisms (bacteria, archaea, viruses, fungus, and protozoans), the immune system, and various habitats in the body, making it important to establish microbial balance. For this reason, including Biocidin's Dentalcidin® toothpaste as part of a protocol makes an additional impact.

See our Oral Health Protocol for more information.

Clinical Pearl #2 - H. pylori and Food Sensitivities

Most *H. pylori* patients tend to be sensitive to multiple foods; however, as their gut health improves, patients usually notice that they can tolerate a greater variety of foods and can widen their food choices.

Biofilms

H. pylori infections have an impressive ability to survive due to urease production, chemotactic motility, adaptability to the fluctuating environment of the GI tract, and especially biofilm formation.^{5,6} Biofilms are communities of bacteria embedded in an extracellular matrix, making them resistant to eradication. They are responsible for most chronic and recurrent infections and contribute to toxin load and inflammatory burden. They can be found almost anywhere in the body.

For more information, see our Biofilms Protocol.

³ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4177467/

⁴ https://www.tandfonline.com/doi/full/10.1080/1040841X.2021.1907740

⁵ https://pubmed.ncbi.nlm.nih.gov/29743338/

⁶ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4452508/

Lifestyle Recommendations

- **Diet.** Paradoxically, *H.pylori* infection causes depletion of stomach acid even though acid reflux is a common symptom. Because of this, it is difficult for the body to digest raw, high-fiber, or fried foods. Therefore, it is best to eat cooked, steamed, easy-to-digest foods, including plenty of soups, broths, and congee (rice porridge). For the same reason, small portion sizes are recommended.
- Stress support. Deep breathing, simplifying, learning to say "no," and consistent sleep/wake cycles are all ways to help balance cortisol. Chronically elevated cortisol levels significantly contribute to ulcer formation and disrupted stomach acid.
- **Lifestyle habits.** Smoking, alcohol, soft drinks, and fatty, fried, acidic, and spicy foods may cause stomach acid imbalances.
- Long-term PPI use. Be cautious of discontinuing PPIs suddenly to prevent the rebound of symptoms while you work on identifying the root causes of disordered stomach acid.

Therapeutic Plan Suggestions

CORE PROTOCOL			
Biocidin® Liquid or Capsules	Titrate to 15 drops 2x/day	Titrate to 3 capsules 2x/day	
G.I. Detox [™] +	2 capsules at bedtime. 1 hour away from food, supplements, and medications. Temporarily increase dose to 2 capsules 2-3x/day if Herxheimer's reaction observed/worsens.		
Proflora [™] 4R	1 capsule any time		
ADDITIONAL SUPPORT			
Olivirex®	Titrate to 2 capsules 2x/day		
Biotonic™	20 drops 2x/day		
In the case of long-standing dysbiosis, testing for presence of pathogenic strains is highly recommended.			

Questions?

For clinical questions, email <u>clinical@biocidin.com</u> or call 800-775-4140, x3.

