Ulcers Protocol

Clinical Protocol to Support Microbial Balance and Mucosal Health*

designs for health®

Pathophysiology of Peptic Ulcers

Peptic ulcers occur when stomach acid erodes the mucosal lining in the stomach and/or duodenum. Symptoms commonly include burning stomach pain, feeling of fullness, bloating, belching, heartburn, nausea, and intolerance to fatty foods, although some patients may be asymptomatic. Complications may include internal bleeding, obstruction, increased risk of gastric cancer, and a perforation with an increased risk of serious infection (peritonitis).[1-2]

Most peptic ulcers develop due to *Helicobacter pylori (H. pylori)* infections and/or chronic use of nonsteroidal anti-inflammatory drugs (NSAIDs) and aspirin.[1] The majority of the population harbors *H. pylori* as part of a normal microbiome balance, with its presence often coexisting asymptomatically in the stomach. It is estimated approximately 10% of those develop ulcers. Based on some estimates, ≤50% of gastric ulcers and 80% of duodenal ulcers are associated with *H. pylori* infections.[3] Studies estimate that approximately 25% of NSAID users develop peptic ulcers. Aspirin users also have twice the risk of developing peptic ulcers.[4] Zollinger-Ellison syndrome, a condition that increases the production of stomach acid, causes a small portion of peptic ulcers.[5] Older age, mental health conditions, obesity, and sarcopenia may also increase the risk of developing peptic ulcer disease. [6-10]

Diagnosis of peptic ulcers requires a comprehensive evaluation by a licensed clinician by endoscopy or other imaging tests,[4] which are usually performed by a gastroenterologist. Symptoms are discussed along with testing for *H. pylori* infection.

This protocol is designed to support patients who have ulcers through lifestyle techniques, diet, and specific nutrients known to support gut health and the mucosal lining.*

Diagnostic Biomarkers and Clinical Indicators of an Acute Viral Infection

- GI-MAP ™ DNA Stool Analysis
- Endoscopy, optionally with biopsy
- Barium swallow
- CT scan
- *H. pylori* urea breath test
- *H. pylori* enzyme linked immunosorbent assay serum test
- *H. pylori* stool antigen test
- *H. pylori* serum antibody test[11]

· Immunoglobulin M (IgM)
  - ≤30 Negative
  - 30.01 to 30.99 Equivocal
  - ≥40 U/mL Positive

· Immunoglobulin G (IgG)
  - <0.75 Negative
  - 0.75 to 0.99 Equivocal
  - ≥1 Positive

Therapeutic Diet and Nutritional Considerations

- Recommend a trial restricted or elimination/reintroduction diet to identify any potential food triggers or dietary antigens
- Recommend avoidance of potential triggering foods, such as high fat, spicy foods, mint, chocolate, coffee, black tea, alcohol, and acidic drinks
- Advise patients to chew food thoroughly to support sufficient mechanical digestion
- Recommend a diet rich in fruits and vegetables to benefit from the antioxidant, anti-inflammatory, antimicrobial, cytoprotective, and anti-secretory effects of phytochemicals, all of which may support healthy gastric mucosa*[12]
- Recommend foods rich in vitamin A, vitamin C, vitamin E, and B vitamins. Studies have found a deficiency in water-soluble vitamins, especially vitamin B6 and vitamin C, in patients with peptic ulcers. Vitamins C and E also aid mucosal health*[13-15]
- Bananas, broccoli, carrots, leafy greens, liver, nuts and seeds (especially sunflower seeds), salmon, strawberries, sweet potato, whole grains

Lifestyle Interventions

- Recommend smoking cessation and alcohol abstinence
- Consult on the avoidance of aspirin and NSAIDs, unless necessary
- Counsel on stress management activities to reduce stress
- Recommend adequate sleep as there is an increase in gastric mucosal blood flow, melatonin secretion, and gastric bicarbonate efflux during sleep, all of which protect against peptic ulcers and decrease gastric acid secretion. Adequate sleep has also been found to reduce the risk of peptic ulcer disease.[16]
- Encourage low-to-moderate physical activity, but not intense and prolonged exercise[17]

Supplement Protocol

Primary Support:

GastroMend-HP™

Dose	2 capsules twice per day on an empty stomach	**Duration**	Ongoing as needed
Formula Highlights	GastroMend-HP™ is a blend of botanical extracts and nutrient complexes that support a healthy gastric microbial balance and healthy gastric mucosa.*		

DGL Synergy™

Dose	2 chewable tablets per day on an empty stomach	**Duration**	Ongoing as needed
Formula Highlights	DGL Synergy™ is a fast-acting, pleasant-tasting, chewable form of deglycyrrhizinated licorice (DGL) to support the mucosal lining.* It also contains glycine to support the production of bile and calcium glycerophosphate to aid in promoting healthy levels of acid.*		

Aloe/200x™

Dose	1 capsule per day	**Duration**	Ongoing as needed
Formula Highlights	Aloe 200x™ contains 500 mg of certified, organically grown aloe vera per capsule to soothe damaged and inflamed cells in the gastrointestinal tract.*		

ProbioMed™ 100

Dose	1 capsule per day with a meal	**Duration**	Ongoing as needed
Formula Highlights	ProbioMed™ 100 is a high potency, shelf-stable, dairy-free probiotics formulation containing 100 billion CFU per serving. It consists of 10 of the most highly researched probiotic strains, with each strain and specific CFUs count being fully disclosed to support a healthy gastrointestinal microbial balance.*		

Optional, Additional Therapy in H. Pylori Cases:

GI Microb-X™

Dose	2 capsules three times per day on an empty stomach (or with a small amount of food, if necessary)	**Duration**	3 to 4 weeks**
Formula Highlights	GI Microb-X™ is a blend of botanical extracts with a long history of use for supporting a healthy gastrointestinal microbial balance.* The ingredients have properties that may provide a broad spectrum of activity against the most common pathogens present in the human gastrointestinal tract in conditions of dysbiosis while being relatively sparing of normal flora.*		

****Note:** Retest for *H. pylori* via quantitative polymerase chain reaction (qPCR) gastrointestinal microbial assay plus GI-MAP™ and/or breath testing, biopsy *Campylobacter*-like organism (CLO) test, or antibodies (serum or stool) after several months as a follow-up.

For a list of references cited in this document, please visit:
https://www.designsforhealth.com/api/library-assets/literature-reference---ulcers-protocol-references

Dosing recommendations are given for typical use based on an average 150 pound healthy adult. Health-care practitioners are encouraged to use clinical judgement with case-specific dosing based on intended goals, subject body weight, medical history, and concomitant medication and supplement usage. Any product containing botanical substances has the potential for causing individual sensitivities, appropriate monitoring, including liver function tests (LFT) is recommended.

For considerations regarding herb-drug and nutrient-drug interactions, please refer to reliable, evidence-based resources such as the Natural Medicine Database or Stargrove MB, Treasure J, McKee DL. *Herb, Nutrient, and Drug Interactions: Clinical Implications and Therapeutic Strategies.* St. Louis, MO: Mosby-Elsevier; 2008.

***These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.**