

## ***Helicobacter pylori* Infections & Peptic Ulcers**

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**A** peptic ulcer is an active, chronic ulceration in the lining and wall of the esophagus, stomach, pylorus, or duodenum. Peptic ulcers may also be called by their location: pyloric ulcer, esophageal ulcer, gastric ulcer, or duodenal ulcer. Peptic ulcers are those caused by pepsin, a digestive juice produced by the stomach. Gastric ulcers are peptic ulcers occurring in the stomach; duodenal ulcers are peptic ulcers occurring in the first 11 inches of the intestine. Gastric ulcers may be encouraged by food stagnation in the stomach. Eating between meals slows gastric emptying. In the United States population 5-15 percent have ulcers, but probably only about half of them are diagnosed. Many ulcers never produce symptoms severe enough to lead to diagnosis. Ulcers tend to flare up during the spring and fall of the year.

The true culprit for virtually all cases of chronic gastritis and peptic ulcers is now recognized as a germ, *Helicobacter pylori*. It may attack the mucous membrane of the stomach or duodenum when the protective mucus barrier is broken by various stomach irritants. People who harbor the bacterium *Helicobacter pylori* are three times more likely to develop stomach cancer than those who do not have the germ.

The outstanding symptom of ulcers is pain occurring in the soft area of the abdomen just below the breast bone, often at regular times, and relieved by eating. Pain may radiate to the back in some cases. The pain is often considered to be heartburn, or an empty stomach. The pain more often appears when the stomach is empty, and is relieved by the intake of food. Constipation is another common symptom. Nausea, vomiting, loss of appetite, and even anemia, may occasionally occur.

Some ulcers are not diagnosed until the person vomits blood. Severe ulcers include hemorrhage, perforation of the bowel with peritonitis; penetration of the ulcer into the pancreas; blockage of the stomach outlet due to scar tissue; and unrelenting pain. Many of these complications may require surgery. It is important to treat ulcers vigorously to avoid the complications.

## Causes

1. Infection by *Helicobacter pylori* followed by increased acid secretion. Humans may acquire *Helicobacter heilmannii* from their pets. A 38-year-old man with ten ulcers discovered on endoscopy that he had three different strains of *Helicobacter heilmannii*, a species commonly found in animals, but rarely in humans. His cat was found to be infected with one of the strains. *Helicobacter heilmannii* may be present in 80 to 100 percent of cats, dogs, and pigs, and may produce symptoms of gastroenteritis.

*Helicobacter pylori*, the species of *Helicobacter* most often found in humans, has been associated with gastric and stomach ulcers, and with stomach cancer. The few persons who have been diagnosed with *Helicobacter heilmannii* have developed ulcers and cancer, suggesting that this strain acts like its near relative.—*Journal of Clinical Microbiology* 36:1366-1370, 1998

2. Failure to drink sufficient water at room temperature.

3. The use of aspirin or other NSAIDs (non-steroidal anti-inflammatory drugs). It is felt that many drugs (including aspirin) inhibit the synthesis of prostaglandins, and some feel that prostaglandins exert a protective influence on the mucosa.

4. Allergies or food sensitivities: Test yourself for allergies by omitting the ten groups of foods known to cause most food sensitivities: (1) milk, (2) coffee, tea, colas, and chocolate, (3) citrus fruits and juices, (4) corn, wheat, rice, and yeast, (5) eggs, pork, beef, and fish, (6) tomatoes, potatoes, strawberries, and apples, (7) peanuts, soy products, and all beans, (8) cane sugar, hot peppers, and all spices, (9) lettuce, onion, and garlic (10) nuts and seeds. After two weeks begin adding back groups in the following order: #4, 7, 10, 3, 6, etc., putting at least three days between the reintroduction of food groups. One study revealed that patients with proven peptic ulcers also suffered in 98 percent of cases from respiratory tract allergies.—*Annals of Allergy* 32:127-30. 1974

5. White bread seems to act the same way tobacco does in the production of ulcers. The researchers who did the study felt that whole-grain bread might be of benefit to ulcer patients; and the use of alcohol, and excessive dietary sugar, salt, and fat eliminated.

6. Insufficient intake of linolenic acid from nuts, seeds, whole grains, and beans.

7. Inadequate chewing, overeating, or under-eating. All food should be chewed to a cream before swallowing. Overeating and eating between meals slows gastric emptying, promotes excessive acid, and encourages ulcers. Put at least five hours between the end of one meal and the beginning of the next meal. A New York

physician observed that we loosen our belts to relieve fullness and pressure after overeating. He began to wonder if belts might play a role in the development of ulcers. He reports a study of his patients who were divided into two groups. One group was instructed to wear suspenders instead of a belt. The suspender wearing group was free of all symptoms within seven weeks, and later suffered fewer recurrences of their ulcers than did the belt wearing group. The author concludes that belts may compress the pylorus.—*American Journal of the Medical Sciences* 175:396, March 1928

8. Attention should be paid to dress. The extremities should be well clothed to balance the circulation and avoid congestion in the abdomen.

9. Dr. Maxwell Berry of Emory University reported to the 1956 meeting of the American College of Gastroenterology that 75 percent of peptic ulcer patients also have the hypoglycemic syndrome. He stated that there was tremendous acid production in the stomachs of patients with low blood sugar. He feels that a very large percentage of people with the hypoglycemic syndrome will develop ulcers. Any problem with blood sugar should be treated.

### **Treatment**

We have had most excellent results with a program for *H. pylori* in which ulcers of many years duration have been cured. While we give many suggestions for treatment, the ones most important are items Nos. 1-8 which are mandatory. The other suggestions should be used as needed. It is suggested that this program be followed for about six weeks, even if the symptoms disappear in a few days. This germ is very difficult to eradicate; but if you can get rid of it, there is a 90 percent chance that the ulcers will not recur. Of course, you should be careful not to eat or drink after anybody else, as the germ is infectious. Some patients develop gas, abdominal distress, bloating, and constipation during the first few days of therapy, but after about the fifth day of treatment digestive disturbances are rare.

1. The presence of any food in the upper gastrointestinal tract is one of the chief stimulants to acid secretion, and reducing the frequency of food intake is far more important than the composition of the food. Food stimulates secretion of the hormone gastrin as long as it is in the stomach. Gastrin stimulates excessive production of gastric acid, which in turn leads to ulcers. Gastric acid production is known to follow a circadian rhythm. We recommend a two meal plan, with breakfast around 7 a.m. and dinner at about 1 p.m. with no between-meal snacks. Regularly scheduled meals allow one to take advantage of the rhythmic production of acid. Have a set mealtime not to be varied by so much as 20 minutes during the first month. Also eat a low protein diet, as acid is formed most freely in response to the presence of protein in the stomach.

2. Begin a simple diet consisting of not more than two food items, plus bread and spread. Never eat between meals. The diet should be changed to a non-irritating type, which means the total elimination of vinegar and any product containing vinegar including bread, irritating spices (ginger, cinnamon, nutmeg, cloves, black and red pepper), the brown drinks (caffeinated beverages, even when decaffeinated, prolong the stomach acid output and should not be used), tea, coffee, colas, and chocolate; animal products of all kinds (meat, milk, eggs, and cheese); excessive quantities of salt, all baking soda or baking powder; all beverages except water and herb teas; all sweetening agents including honey; refined fats such as margarine, butter, mayonnaise, fried foods, cooking fats, salad oils, and nut butters.

3. Avoid antacids as they cause rebound acidity in the stomach. Fast one day using nothing except water at room temperature, and do not fear that you will have pain. Most patients are surprised at the reduction of pain by fasting. Fasting also reduces acid production. Take eight to ten charcoal tablets at the beginning of the fast, and once daily for one week. Meals on the first day after the fast should be approximately half the quantity one ordinarily eats.

4. Avoid use of the so-called hydrogen blockers, such as Zantac and Tagamet. They may have significant side effects. Also, when stomach acid is severely blocked, it allows overgrowth of bacteria in the stomach. Malabsorption of B12 is common, along with an increase in infections—possibly an increase in stomach cancer.

5. Chew food well taking small bites as dry as possible and eating slowly. A well chewed meal produces as much hydrochloric acid as a poorly chewed meal, but the well chewed meal produces more buffer substance. This is very important. Proper mastication mixes urogastrone from the salivary glands with food. Urogastrone protects the intestinal mucosa from erosion in animal tests. Inadequately chewed food is one of the known causes of ulceration.

6. Maintain good hydration, as many people have peptic ulcers because of chronic dehydration. Under 50 years of age you may need around eight glasses of water or herbal teas each day; over 50 you probably need ten to twelve glasses.

7. Do not smoke as smoking inhibits pancreatic bicarbonate secretion and promotes backward flow of material from the duodenum to the stomach. Smokers have more gastric and duodenal ulcers, a higher death rate from ulcers, and slower healing of their ulcers.

8. Cabbage and several leafy vegetables contain the “anti-gizzard erosion factor,” later called vitamin U. Olives also have vitamin U. Use four to ten olives a day

depending on how many calories you can afford. Use only black or green ripe olives; avoid those canned in vinegar or oil. Juice cabbage freshly and take one glassful four times a day. When mealtime is near to dosage schedule, it is good to take the juice ten minutes before the meal. One liter (1.06 quarts) per day for 30 days of concentrated cabbage juice (high in L-glutamine) has been curative in up to 92 percent of patients studied. A mixture of 75 percent cabbage juice and 25 percent tomato or celery juice was used with patients who objected to the flavor of the cabbage juice. Raw celery juice also contains much of the L-glutamine, and may be used occasionally to give relief from the monotony of the cabbage juice.

Some patients develop gas, abdominal distress, bloating, and constipation during the first few days of therapy, but after about the fifth day of treatment digestive disturbances are rare. If symptoms become severe, the juice may be eliminated for a day. Ordinarily it takes four to five pounds of cabbage to produce one quart of juice. Only fresh, green cabbage should be used. Cabbage juice maintains its anti-ulcer activity for at least three weeks if frozen and preserved at approximately 0 degrees C.

9. An Elimination and Challenge diet should be attempted to determine the foods to which the patient is most sensitive. Eliminate all foods causing any kind of reaction until the symptoms are entirely gone. They may then be reintroduced one at a time every ten days. Millet is often soothing to the intestinal tract, especially in peptic ulcers.

10. Buy large green bananas called plantain, peel, and lay the slices out on a towel to dry, either in the sun or in an oven turned to the lowest possible temperature. When the plantain is entirely dry, pulverize the pieces in a blender to a powder and take two tablespoonfuls two to three times daily.

11. Aloe vera gel or liquid, two ounces ten minutes before each meal, has a healing benefit. Often helpful is a heaping teaspoon of finely ground slippery elm stirred into two to four ounces of Aloe vera juice.

12. A paste made of carob powder and water can be taken by the teaspoonful any time there is pain or nausea. Beginning on the seventh day, take a heaping tablespoon of charcoal for pain four times daily, early morning, mid-morning, mid-afternoon, and bedtime, avoiding mealtimes by at least half an hour on either side as food interferes with the effectiveness of the charcoal. No need to take carob or charcoal if there is no pain or nausea.

13. Irish treatment for stomach ulcers – after boiling potatoes, drink the water. It will cure ulcers in a few weeks if done on a daily basis.—*Jude's Herbal Home Remedies* by Jude C. Williams, M.H. 1996, Lewellyn Publications, P.O. Box

64383-869, St. Paul, MN 55164-0383 Potatoes are often very helpful to peptic ulcer patients. Vitamin C has an important healing influence on wounds, and potatoes are high in vitamin C. Furthermore, potatoes have an alkaline reaction, assisting in acid neutralization. Two or more potato feedings daily may be helpful. Potatoes may be baked, boiled, mashed, etc., but should not be fried, and dairy milk should not be added.

14. Dried sweet almonds, well-chewed, raise the pH of the gastric juice, decrease hydrochloric acid production, and significantly inhibit peptic activity.

15. A concentrate of apricot juice has been used as a Japanese folk remedy for gastritis and enteritis since ancient times. The major ingredients in the Japanese concentrate are the apricot puree, citric acid, malic acid (essentially apricot concentrate and fruit acids). *H. pylori* is usually killed by this fruit concentrate, or a sour medium such as lemon juice. Do not use vinegar or other concentrated fruit acids regularly as they are stomach irritants.

16. Take Nutribiotic (grapefruit seed extract which is antibacterial), four drops in a glass of water three times a day. This should be taken just after meals as it is likely to upset the stomach in some people with peptic ulcer. It is quite bitter and some get a stomach ache from it, but if tolerated, increase after about a week to six drops in water three times a day.

17. Use a tincture of golden seal and echinacea, one teaspoonful every hour for six hours; then one teaspoonful every four hours for 24 hours (you must wake up at night to take it), then five teaspoons a day until four bottles containing eight ounces have been taken.

For *H. pylori*, golden seal and powdered myrrh can be used, two or three capsules three times a day at mealtime for 30 days. The capsules should be made from the following formula: four parts golden seal to one part powdered or crystalline myrrh. Dr. Helen Yuh says that every case for which she has used this formula has cleared of *H. pylori* within 30 days. If you do not wish to make capsules, one half teaspoon of the powder is equal to two capsules. Mix the powder with water just before taking it.

18. Garlic, if tolerated, should be taken in the quantity of three to five cloves, four times a day. The garlic can be chopped and made into a garlic sandwich, if preferred, twice a day. The other two times the garlic cloves may be taken blended in cabbage or celery juice. If raw garlic is irritating to the stomach, it may be steamed. Put one globe of garlic cloves in a microwave oven for one minute and ten seconds, or steam over water for ten minutes, or bake in an oven at 350 for 20 minutes. The entire globe should be taken when it is cooked. The aged garlic

extract such as Kyolic may be substituted as the form of garlic used. Take two capsules four to six times a day for 30 days. Kyolic liquid garlic extract (which is more expensive than the capsules, but we think it is superior in the treatment of peptic ulcers to capsules or tablets) should be taken in the quantity of one teaspoonful three times a day.

Cabbage along with garlic (if tolerated), for two months, may be substituted for the golden seal, echinacea, and grapefruit seed extract if these are unavailable, although it is not as effective a routine.

19. Do not take regular antibiotics as is being advocated, as they add another set of problems.

20. N-acetyl-glucosamine (NAG) is an amino acid which helps to form the protective mucus layer and cellular cement to regulate intestinal permeability.

21. Stress increases stomach acid production. Remember that exercise neutralizes stress, and have a regular out-of-doors program daily. If you are out of physical conditioning, start slowly and build up a little bit day by day.

22. If there is bleeding you may use a single very, very hot compress. Hold the ends of towels folded lengthwise and dip the mid section into hot water. Then twist them as if wringing the towels out of water and lift the towels from the hot water while maintaining their twisted position. Then twist really tightly and stretch them out to remove excess hot water. Quickly open up the towels, fold and apply to the abdomen over the stomach area. The hot compresses should be above 115 degrees, but not as hot as 120 degrees. Allow the compress to stay on only three minutes, and by all means no more than six. This should be followed by a very cold and icy compress for one minute and a cold mitten friction to the arms, ending with a dry friction to encourage blood flow to the arms. Do not rub the abdomen after the cold compress. Keep the patient still and quiet after the treatment.

23. For pain of peptic ulcer, an ice bag may be placed over the point of maximum pain. Cold applications to the area immediately over the stomach (epigastrium), produces an effect similar to sympathetic nerve stimulation by epinephrine. The cold produce lessened muscle tone of the stomach and irregular short but deep peristaltic waves, accompanied by complete relaxation of the pylorus. When used for gastric and pyloric ulcers, pain relief can be dramatic. Applications to other areas of the body produce no such response in the stomach. This illustrates the principle that the major effect of temperature change of the skin is on the tissues and organs which lie immediately beneath the skin being treated.

24. Another method of pain relief is that of applying heat. You may use very hot fomentations or hot wet towels, as hot as can be tolerated on the abdomen. You may prefer a hot bath instead. About half an hour before bedtime sit in a tub of hot water, so hot that you sweat rather profusely, unless your resting heart rate (pulse rate) is more than 90 per minute. The heart rate will increase as you sit longer in the hot water. Do not allow the heart rate to rise above 110 if you have difficulty dropping off to sleep. Keep your face cool with cold compresses wrung from ice water. As soon as the hot part is over (about 20 minutes) you should take a brief cool shower for about 20 seconds. Briskly rub your skin dry with a coarse dry towel, dress for bed, and get into the bed to sweat. You should be able to fall asleep with this treatment. The treatment may be done in the daytime if you have pain then. If you have heart disease and your resting pulse rate is above 90, you should not do this treatment. Choose the fomentations rather than the hot bath.

25. Herbal teas may be used for soothing, for pain, sedation, etc., as needed. These include white willow bark, wild lettuce, licorice, and slippery elm. Chamomile, charcoal, licorice, papaya, slippery elm, and catnip are all good for stomach ulcers.

#### **For acute phase of the ulcer**

Deglycerized licorice has proven very effective in peptic ulcer. It must mix with saliva in order to be effective. It stimulates growth and regeneration of stomach and intestinal cells. The dosage is four to eight 200 mg capsules, taken about 20 minutes before meals for two to four months. This is a treatment for resistant cases. Chew and swallow two tablets of deglycerized licorice tablets (trade name Rhizinate) on arising, between meals, and at bedtime. Two more can be used at any time for pain, especially at night. This substance markedly increases upper bowel mucus production to give a protective coating.

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