

# **A GENERAL REVIEW OF THE ULCERATIVE DISORDER PATHOPHYSIOLOGY, TRETMENT**

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## ABSTRACT

Ulcers are a prevalent gastrointestinal disease that many people encounter. In essence, it is an inflammatory rip in the digestive tract's mucous lining or skin. Ulceration occurs when the natural equilibrium is upset, either by a loss in mucosal resistance or an increase in aggression. "Peptic ulcers" is a generic term that includes ulcers of the digestive tract in the duodenum or stomach. Peptic ulcer development is dependent on the presence of acid and peptic activity in the stomach juice as well as the breakdown of the mucosal barrier. Most peptic ulcers are caused by *Helicobacter pylori* (*H. pylori*) infections; in these cases, standard therapy consists of a mix of drugs, including proton pump inhibitors and antibiotics. Skeptical

## INTRODUCTION <sup>(1)</sup>

The term "peptic ulcer" is frequently used to refer to any gastric or duodenal ulceration. Peptic ulcers are lesions in the mucosa of the stomach or duodenum in which acid and pepsin play a key role. This includes ulceration brought on by NSAIDs or overproduction of gastrin.

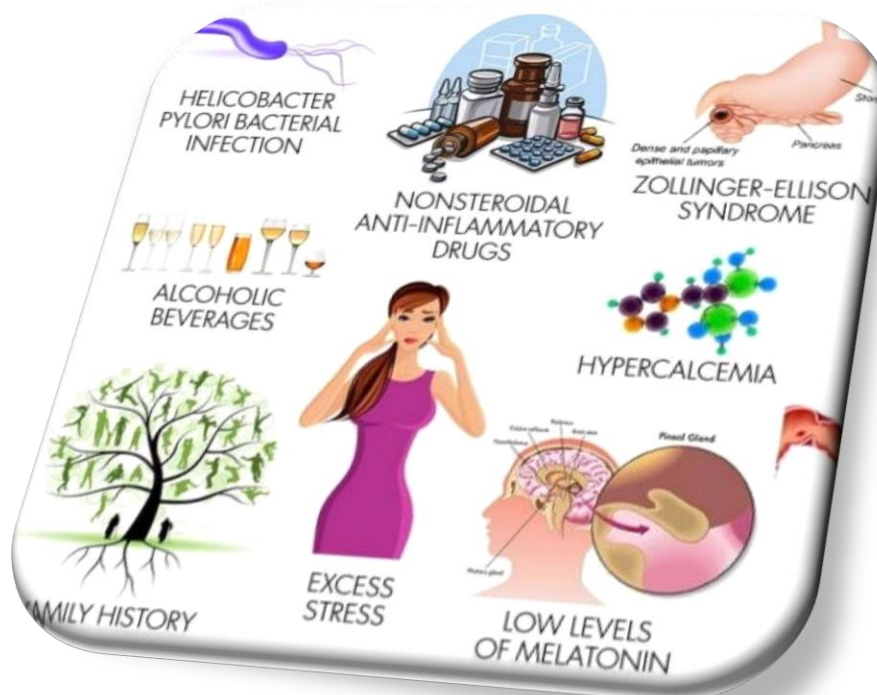
Peptic ulcer illness is widespread. It is equally common in both sexes and typically manifests after the age of fifteen. *H. pylori* is currently the most often recognized causal agent. *H. pylori* is linked to about 70% of stomach ulcers and 95% of duodenal ulcers; however, only 15% of people with *H. pylori* colonization will experience peptic ulcer disease. Patients with *H. pylori* positivity have a two-fold greater risk of developing peptic ulcers. According to clinical trials, people who take NSAIDs (non-steroidal anti-inflammatory drugs) are also more likely to develop peptic ulcers (36%), compared to patients who do not take NSAIDs (8%).

There are weaker links between peptic ulcer disease and alcoholism, smoking, and family history. Patients should discontinue taking NSAIDs as they may lessen the risk of peptic ulcers; however, it is frequently not possible to cease using NSAIDs entirely, and some alternatives may require long-term usage of proton pump inhibitors in addition. The general consensus is to give up smoking and cut back on alcohol, but there isn't much data to back up these suggestions. Clarithromycin and metronidazole or clarithromycin and amoxicillin combined with a proton pump inhibitor constitutes first-line triple therapy for the eradication of *H. pylori*. The most successful regimens involve twice daily doses for a duration of one week, such as omeprazole 20 mg twice daily, amoxicillin 1 g twice daily, and clarithromycin 500 mg twice daily. Numerous combinations and treatment durations have been suggested, but these are the most effective. Initial eradication regimens gradually alter because of the failure rates linked to the emergence of *H. pylori* strains resistant to antibiotics. At the moment, strains resistant to metronidazole are widespread, and the rate of resistance to clarithromycin is rising.

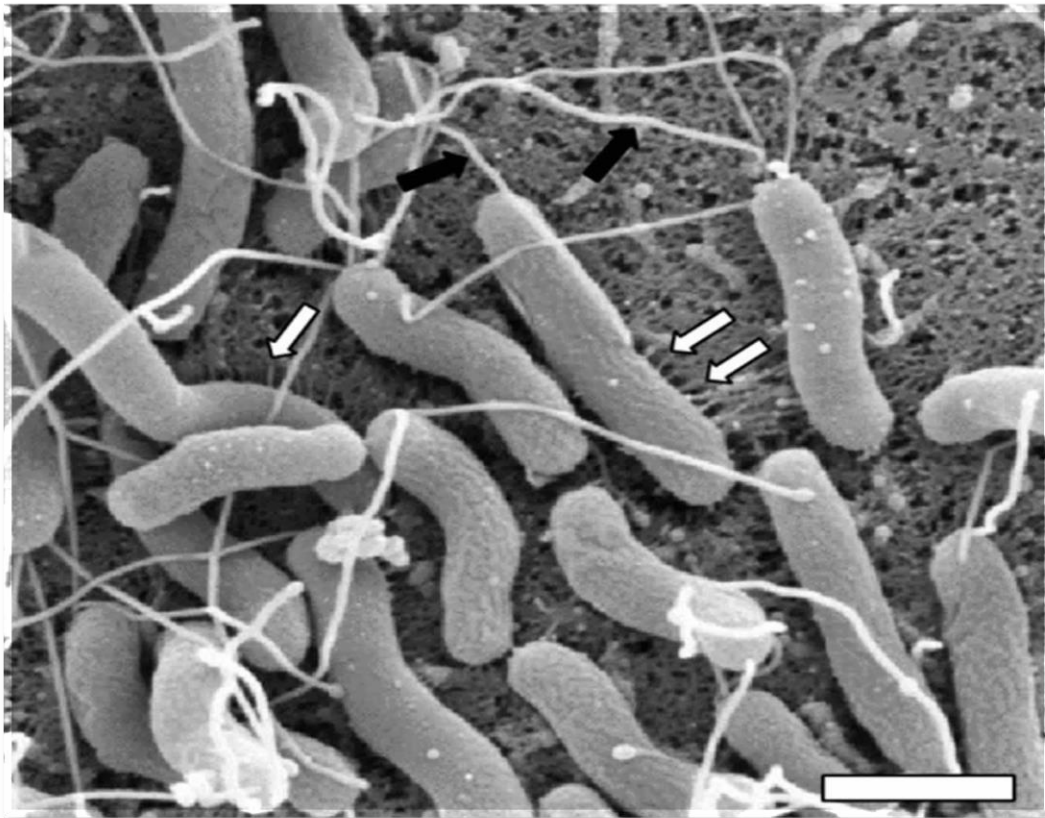
## CAUSES OF PEPTIC ULCER

When the stomach's natural protections from the damaging effects of digestive juices (including acid and pepsin, an enzyme that helps breakdown protein) stop working or the acid production is too overwhelming for these protective defenses to work properly, you can get an ulcer. There are a few different ways this happens.

- *Helicobacter pylori*;



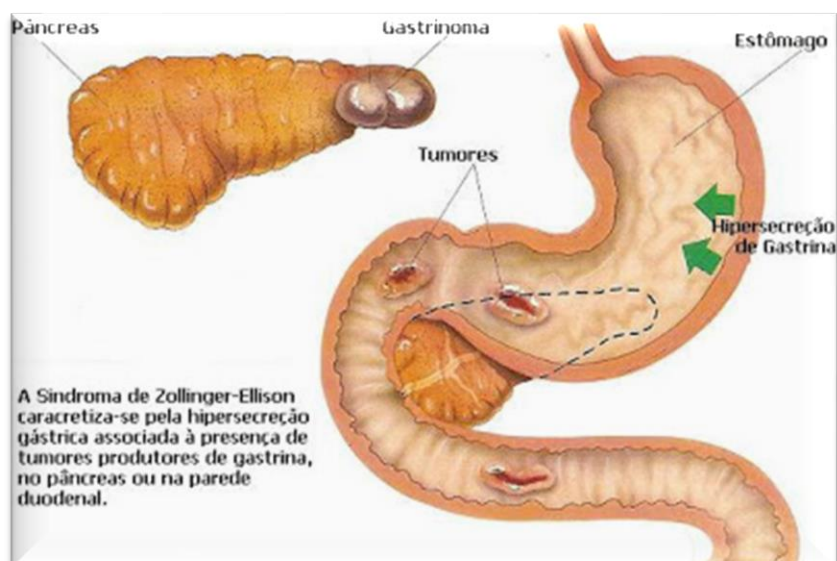
*Helicobacter pylori* (*H. pylori*) -- *H. Pylori*, a bacterial organism, is responsible for most ulcers. This organism weakens the protective coating of the stomach and duodenum and allows the damaging digestive juices to irritate the sensitive lining below. Interestingly, as many as 20% of Americans over age 40 have this organism living in their digestive tract, but not all of these people develop ulcer.



➤ (NSAIDs) drugs;

Non-steroidal anti-inflammatory drugs (NSAIDs) - - ongoing use of this class of medications is the second most common cause of ulcers. These drugs (which include aspirin, ibuprofen, naproxen, diclofenac, tolmetin, piroxicam, fenoprofen, indomethacin, oxaprozin, ketoprofen, sulindac, nabumetone, etodolac, and salsalate) are acidic. They block prostaglandins, substances in the stomach that help maintain blood flow and protect the area from injury. Some of the specific drugs listed are more likely to produce ulcers than others. Therefore, if you must use long-term pain medications, talk to your doctor about which ones are safest.

➤ Zollinger Ellison Syndrome;



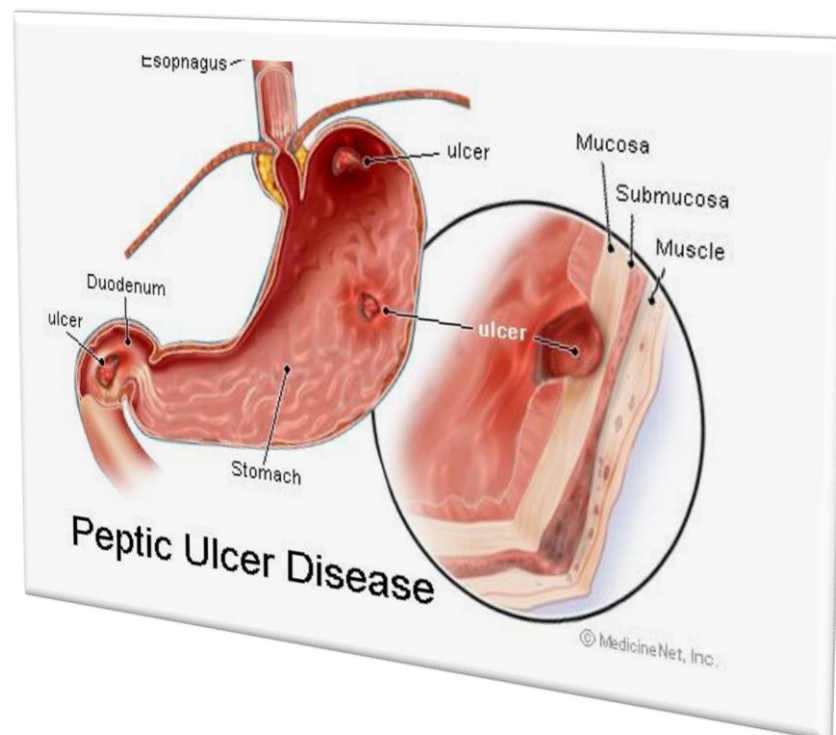
Zollinger-Ellison syndrome -- people with this uncommon condition have tumors in the pancreas and duodenum that produce gastrin, a hormone that stimulates gastric acid production. Diarrhea may precede ulcer formation

➤ Others

Other causes of ulcers are conditions that can result in direct damage to the wall of the stomach or duodenum, such as heavy use of alcohol, radiation therapy, burns, and physical injury.

## **SYMPTOMS;**

Peptic ulcers are open sores that develop on the inside lining of your stomach, upper small



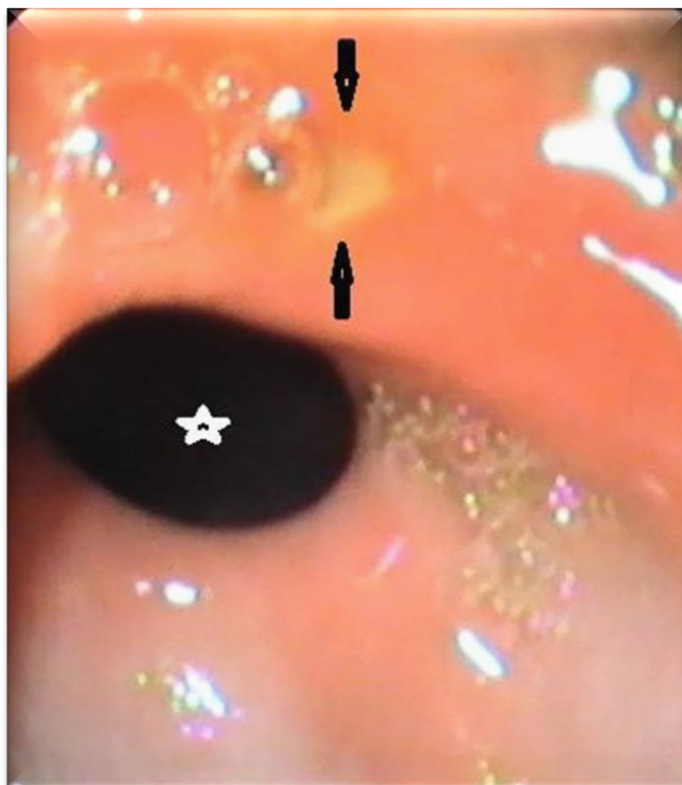
intestine or esophagus. The most common symptom of a peptic ulcer is abdominal pain. It wasn't too long ago that lifestyle factors, such as a love of spicy foods or a stressful job, were thought to be at the root of most peptic ulcers. Doctors now know that a bacterial infection or some medications — not stress or diet — cause most peptic ulcers. Burning pain is the most common peptic ulcer symptom. The pain is caused by the ulcer and is aggravated by stomach acid coming in contact with the ulcerated area. The pain typically may

- 1) Be felt anywhere from your navel up to your breastbone
- 2) Last from a few minutes to several hours
- 3) Be worse when your stomach is empty
- 4) Flare at night
- 5) Often be temporarily relieved by eating certain foods that buffer stomach acid or by taking an acid-reducing medication

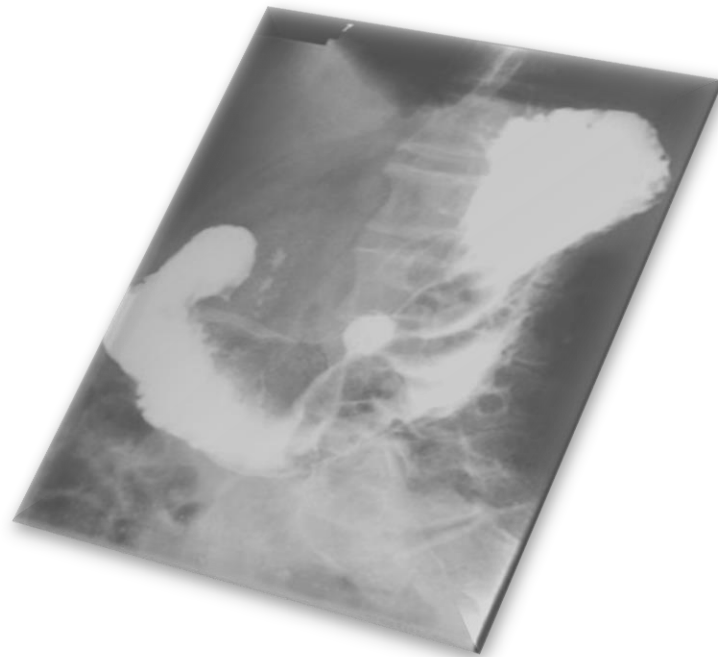
- 6) Disappear and then return for a few days or weeks
- 7) Less often, ulcers may cause severe signs or symptoms such as:
- 8) The vomiting of blood — which may appear red or black
- 9) Dark blood in stools or stools that are black or tarry
- 10) Nausea or vomiting
- 11) Unexplained weight loss
- 12) Appetite changes

## **PEPTIC ULCERS ARE DIVIDED INTO ACUTE AND CHRONIC ULCERS-Acute peptic ulcers ethology**

Half of the patients give history of ingestion of aspirin or anti-inflammatory drugs. Sometimes these acute ulcers may occur following stress, when they are called 'stress ulcers'. This may occur following hypotension from haemorrhage, endotoxin shock or cardiac infarction. Sepsis is an important etiological factor. Un drained pus may be responsible for acute stress ulcers. Upper gastrointestinal bleeding from these ulcers may be seen in critically ill patient and should be a signal of search for pus. These acute ulcers are seen after cerebral trauma or neurological operations. After major burns acute ulcers may be seen (Curling's ulcer). Within first 48hrs multiple erosions may develop anywhere in the body and fundus of the stomach. During convalescent period of such burn cases, acute duodenal ulcer may occur which often become chronic Patients on steroids may develop acute ulcers, known as 'steroid ulcers'.



## CHRONIC PEPTIC ULCERS ARE DIVIDED INTO GASTRIC ULCER AND DUODENAL ULCER



### ❖ Diminished mucosal resistance

Diminished mucosal resistance - due to lowering of the ability to resist the effect of acid pepsin digestion causes gastric ulcer.

### ❖ Pyloro-duodenal reflux

Pyloro-duodenal reflux - Regurgitated bile and other duodenal juices have been taken to be the prime cause of pre-ulcerative superficial gastritis. Such biliary reflux may account for a large number of gastric ulcer cases.

### ❖ Deficient mucous barrier

Deficient mucous barrier - A surface layer of mucus protects normally from the digestive effect of the hydrochloric acid and pepsin. When this mucous barrier becomes deficient gastric ulcer may develop. Most cases of gastric ulcers produce large quantities of mucus.

### ❖ Mucosal trauma

Mucosal trauma - 85% of gastric ulcers occur along the lesser curve of the stomach. This part of the stomach is exposed to injurious effects of heat and trauma.

### ❖ Local ischemia

Local ischemia - arterio-venous shunts which are present in the sub-mucosa of the stomach are under control of sympathetic nervous system and excessive stress and strain may cause diminution of blood supply to the mucous membrane of the stomach leading to ulcer formation.

❖ Antral stasis

antral stasis - As the gastric ulcer patients have low acid content some factor such as injury to the gastric mucosa which renders it more susceptible to acid peptic damage may lead to ulcer formation

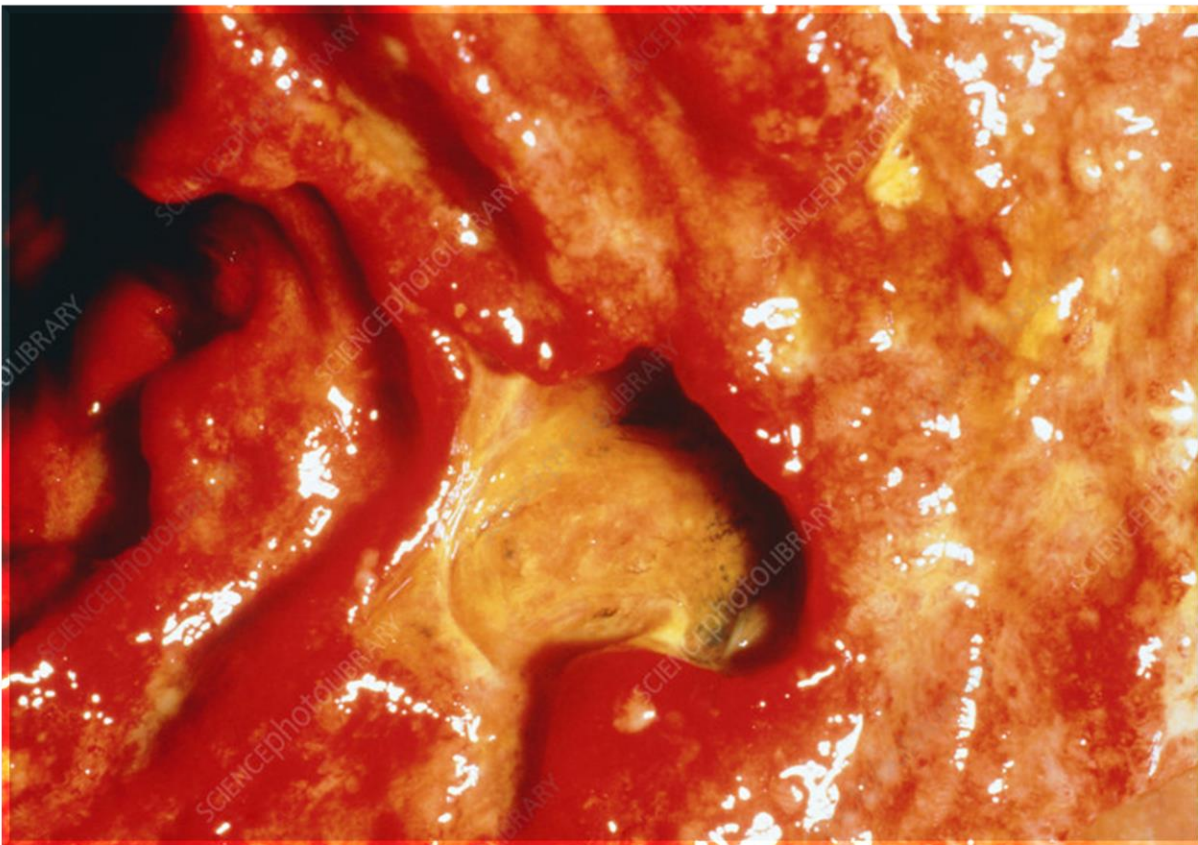
❖ Non-steroidal anti-inflammatory drugs

Non-steroidal anti-inflammatory drugs (NSAIDs) - ingestion of these drugs in patient suffering from arthritis as a long-term basis are a significant etiologic factor at present time. The drugs of this group are often called as ulcerogenic drugs.

❖ Helicobacter pylori

Helicobacter pylori - it is a spirochetal bacterium which exists in the deep mucosal layer of the antrum mainly and duodenum rarely is associated with ulcer disease.

### Duodenal ulcer:





## ❖ Acid hyper-secretion

Acid hyper-secretion - Duodenal ulcer is seemingly simplified at first sight by a clear relationship to over-production of hydrochloric acid by the stomach.

## ❖ Genetic factors

Genetic factors - in a great number of cases the acid production may be within the high side of the normal range and in these cases, ulceration cannot be explained except the diminished mucosal resistance to normal acid secretion. Diminished power of resistance of the mucosa has also been incriminated to cause duodenal ulcer. There is a significant relationship between blood group 'O' and the development of duodenal ulcer.

## ❖ Endocrine organ dysfunction

Endocrine organ dysfunction - There are various endocrine dysfunction (Cushing's syndrome, Zollinger-Ellison syndrome, parathyroid tumor etc) can cause duodenal ulcer.

## ❖ Liver disease

Liver disease - Ulceration of both stomach and duodenum has co-existed with disease of the liver particularly cirrhosis. It may be due to increase in blood supply to the gastric mucosa and over production of histamine in the stomach wall to stimulate the parietal cells.

## ❖ Emotional factors

Emotional factors - Anxiety, stress and strain have always been incriminated to cause peptic ulcer.

## ❖ Diet and smoking

Diet and smoking - Irregular diet, spicy food and excessive drinking tea and coffee have always provoked ulcer formation. Smoking does appear to predispose ulcer formation. The exact cause is not yet clearly understood, but it seems that smoking diminishes mucosal defence mechanism almost similar to NSAIDs.

## ❖ Helicobacter pylori

Helicobacter pylori - it has been isolated in 100% of duodenal ulcer cases. Its eradication has definitely led to decrease in recurrence rate and this clearly indicates its importance in the etiology of duodenal ulcer.

## RISK FACTORS

- 1) Genetic factors may predispose you to developing an ulcer
- 2) Increasing age
- 3) Chronic pain, from any cause such as arthritis, fibromyalgia, repetitive stress injuries (like carpal tunnel syndrome), or persistent back pain, leading to ongoing use of aspirin or NSAIDs
- 4) Alcohol abuse
- 5) Diabetes may increase your risk of having H. pylori
- 6) Living in crowded, unsanitary conditions increases the risk of H. pylori infection
- 7) Immune abnormalities may, in theory, make it more likely for H. pylori or other

factors to cause damage to the lining of the stomach or duodenum

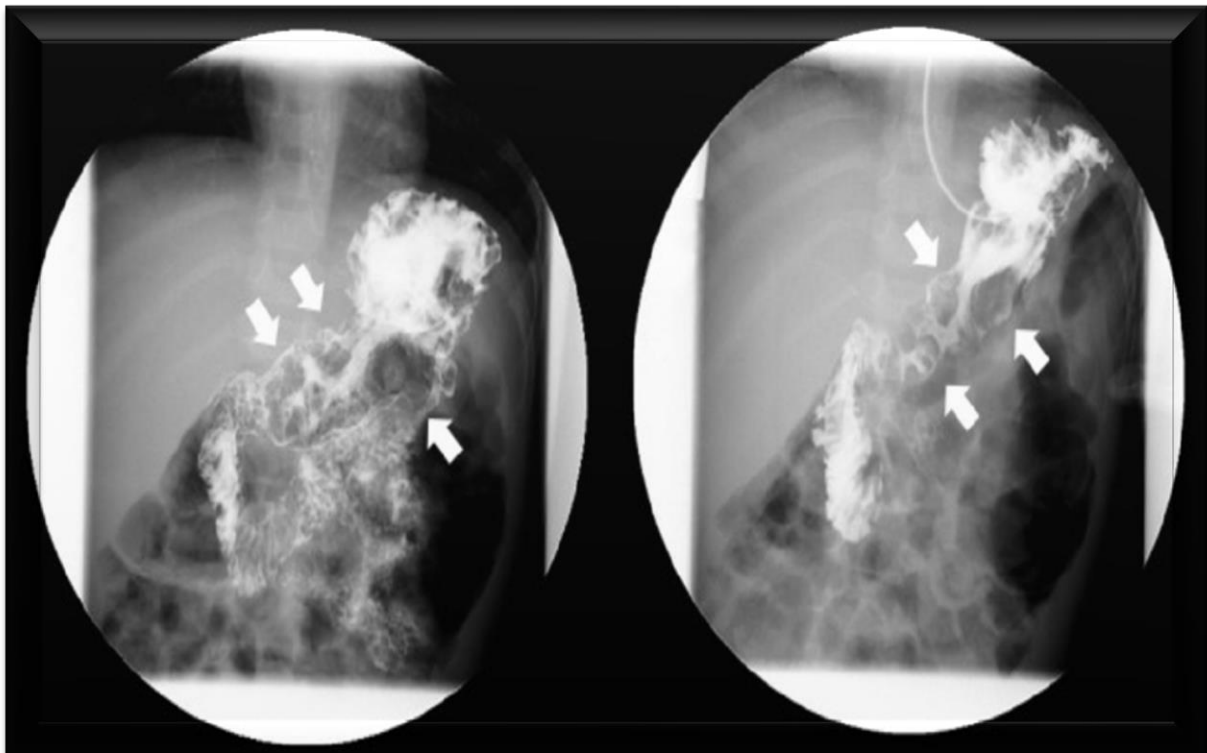
8) Lifestyle factors, including chronic stress, coffee drinking (even decaf), and smoking, may make you more susceptible to damage from NSAIDs or *H. pylori* if you are a carrier of this organism. Again, however, these factors do not cause an ulcer on their own.

## Diagnosis

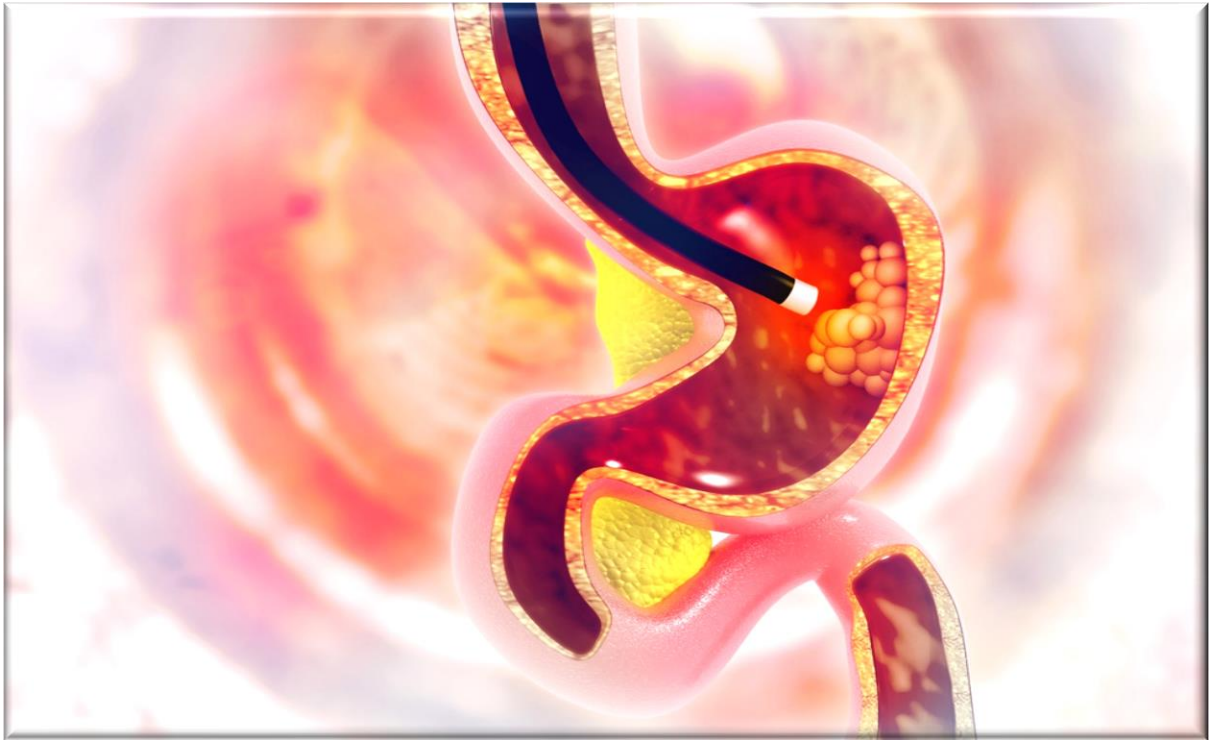
First, doctor will take a detailed history of your symptoms and risk factors, including how long indigestion and pain have been present, how strong these sensations are, if you have lost weight recently, what medications (over the counter and prescription) you have been taking, your smoking and drinking habits, and if anyone in your family has had ulcers. As part of the physical exam, your doctor will do a thorough check of your abdomen and chest as well as a rectal exam to look for, in part, any sign of bleeding. A blood test will be drawn to check to see if you are anemic. These types of tests are done to make sure that you have not had any bleeding about which you have been unaware (called occult bleeding). If there are no signs of bleeding and your symptoms are mild and not serious or life-threatening, your doctor may have you try medications that suppress the amount of acid in your stomach. This is done to see if you feel better, before pursuing expensive and uncomfortable testing. If your symptoms persist or get worse despite the medication, further testing is necessary.

One of two tests will be performed to try to identify an ulcer:

### ❖ Upper gastrointestinal (GI) series



## ❖ Endoscopy



For an upper GI series, you will drink a chalky liquid called barium and then undergo a series of x-rays to check for an ulcer. Endoscopy, a more accurate test, involves the careful insertion of a thin tube with a tiny camera at the end (called an endoscope) into your mouth, down your throat, through the oesophagus to the stomach and duodenum. This allows both direct visualization of these organs for an ulcer or other problems and sampling of tissue from the walls (called biopsy) of the stomach and small intestines to test for *H. pylori*. You are lightly sedated for this procedure. Other tests that may be performed to look for *H. pylori* include a blood test checking for antibodies to this organism, a breath test after drinking a substance called urea, and a stool test looking for the organism in the feces. The breath test, which is the least invasive, is proving to be at least 95% accurate.

## Lifestyle

Doctors used to recommend eating bland foods with milk and only small amounts of food with each meal. We now know that these eating habits are not necessary for the treatment of ulcers. Dietary and other lifestyle measures that should help, however, include: Eat a diet rich in fibre, especially from fruits and vegetables. This may reduce your risk of developing an ulcer in the first place and may speed your recovery if you already have one. The vitamin A may be an added benefit from these foods. Foods containing flavonoids, like apples, celery, cranberries (including cranberry juice), onions, garlic, and tea may inhibit the growth of *H. pylori*. Quit smoking. Receive treatment for alcohol abuse; your doctor can help get you appropriate care. Cut down on coffee, including decaffeinated coffee, as well as carbonated beverages all of which can increase stomach acid. Reduce stress with regular use of relaxation techniques, such as yoga, tai chi, qi gong, or meditation. These practices may also help lessen pain and reduce your need for the damaging NSAIDs discussed. To incorporate any one of these techniques

into your daily activities, consider taking a class; some early information suggests that, if you have an ulcer, a formal stress reducing program may be more beneficial than listening to tapes on your own at home

## **Treatment of peptic ulcer**

### **Initial treatment**

H. pylori infection. Treatment to eliminate *Helicobacter pylori* (*H. pylori*) bacteria usually involves combining two antibiotics with an acid reducer such as a proton pump inhibitor or sometimes a bismuth compound. Curing the infection speeds the healing of an ulcer and makes the ulcer less likely to recur. It is important to take all the medicine your doctor prescribes so that the bacteria are killed and do not come back. Do not stop taking the medicine just because you feel better. If the bacteria are not eliminated by the antibiotics, they may become even more difficult to kill later (resistant).

### **NSAIDs**

If at all possible, you will need to stop taking nonsteroidal anti-inflammatory drugs (NSAIDs). If you must continue taking an NSAID, other medicines may be used to protect the stomach. For more information, see the Medications section of this topic.

### **Hypersecretory condition**

Acid reducers are most often used to treat an ulcer caused by a hypersecretory condition (a condition in which your stomach produces excessive acid). In addition, your doctor may want to conduct other tests to determine whether there is another cause for the ulcer.

### **Unknown cause**

If no cause can be found (idiopathic ulcer), your ulcer will usually be treated with an acid reducer. Long-term treatment depends on the severity of the ulcer and other factors, such as the size of the ulcer, whether you have had complications, and what other treatments have been used. No matter what is causing your ulcer, it is important to stop taking NSAIDs and to quit smoking.

### **Ongoing treatment**

If you feel that you need to continue to use nonsteroidal anti-inflammatory drugs (NSAIDs) after being diagnosed with a peptic ulcer, work with your doctor to find an alternative pain reliever. Use of NSAIDs can slow the healing of an ulcer or prevent it from healing altogether. If you must continue to use NSAIDs, your doctor may recommend that you take a prostaglandin analog, such as misoprostol, or a proton pump inhibitor. Misoprostol does not help ulcers heal, but it can help prevent ulcers from coming back. If ulcer symptoms do not respond to treatment, follow up with your doctor to be sure *Helicobacter pylori* (*H. pylori*) bacteria have been identified and treated. Most peptic ulcers are caused by infection with *H. pylori* bacteria. Persistent infection will likely be treated with an alternate combination of medicines. Antibiotic treatment for *H. pylori* should be taken exactly according to your doctor's instructions for it to be effective.

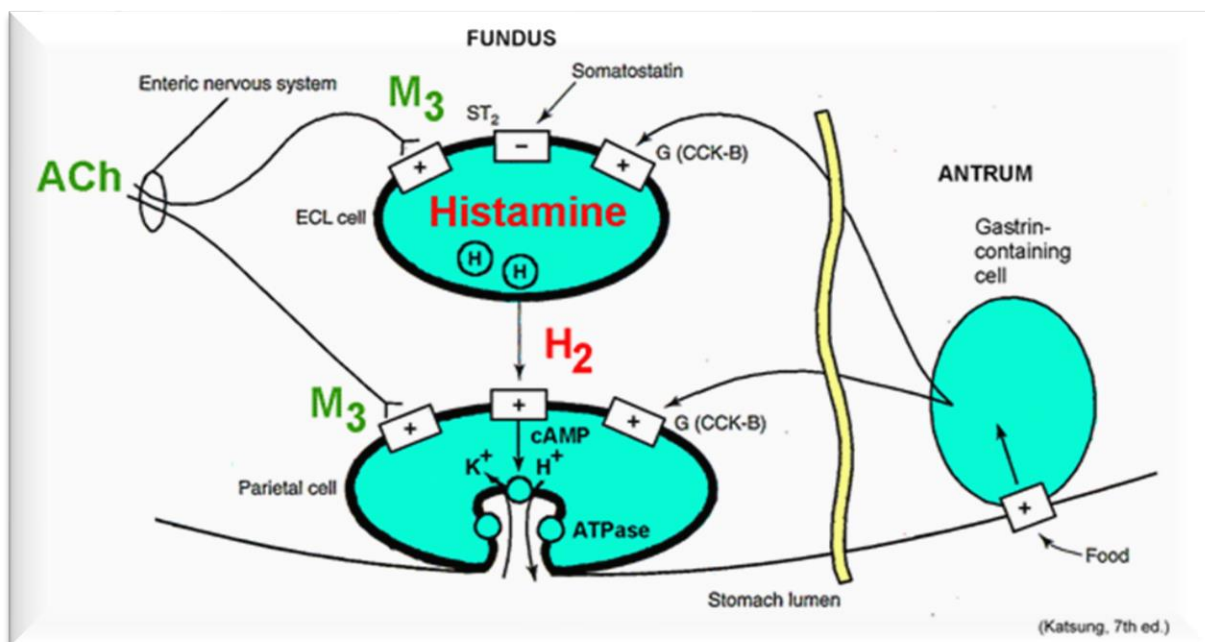
Tests such as the urea breath test and a stool antigen test can determine whether an *H. pylori* infection has been cured. If you have a history of ulcer complications or a family history of stomach cancer, you may need an endoscopy so that your doctor can look at the inside of your stomach and upper small intestine to see whether an ulcer is present. An endoscopy can also be used to collect a tissue sample (biopsy) that can be tested for *H. pylori* or cancer. For more information on these tests, see the Exams and Tests section of this topic

## Medications

If you have *H. pylori*, you will probably be prescribed three different medications. "Triple therapy" (including a proton pump inhibitor, such as omeprazole or Prilosec, to reduce acid production and two antibiotics to get rid of the organism) is commonly used to treat *H. pylori*-related ulcers. A medicine called bismuth salicylate may be recommended in place of one antibiotic. This drug, available over the counter, coats and soothes the stomach, protecting it from the damaging effects of acid. Two drug regimens are currently being developed. Some of the same drugs are used for non-*H. pylori* ulcers as well as for symptoms (like indigestion) due to ulcers of any cause:

Antacids, available over the counter, may relieve heartburn or indigestion but will not treat an ulcer. Antacids include aluminum hydroxide (Amphojel, AlternaGEL), magnesium hydroxide (Phillips' Milk of Magnesia), aluminum hydroxide and magnesium hydroxide (Maalox, Mylanta), calcium carbonate (Rolaids, Titalac, Tums), and sodium bicarbonate (Alka-Seltzer). Antacids may block medications from being absorbed and thereby decrease the medicine's effectiveness. It is recommended to take antacids at least 1 hour before or 2 hours after taking medications. Ask your pharmacist or doctor for more information.

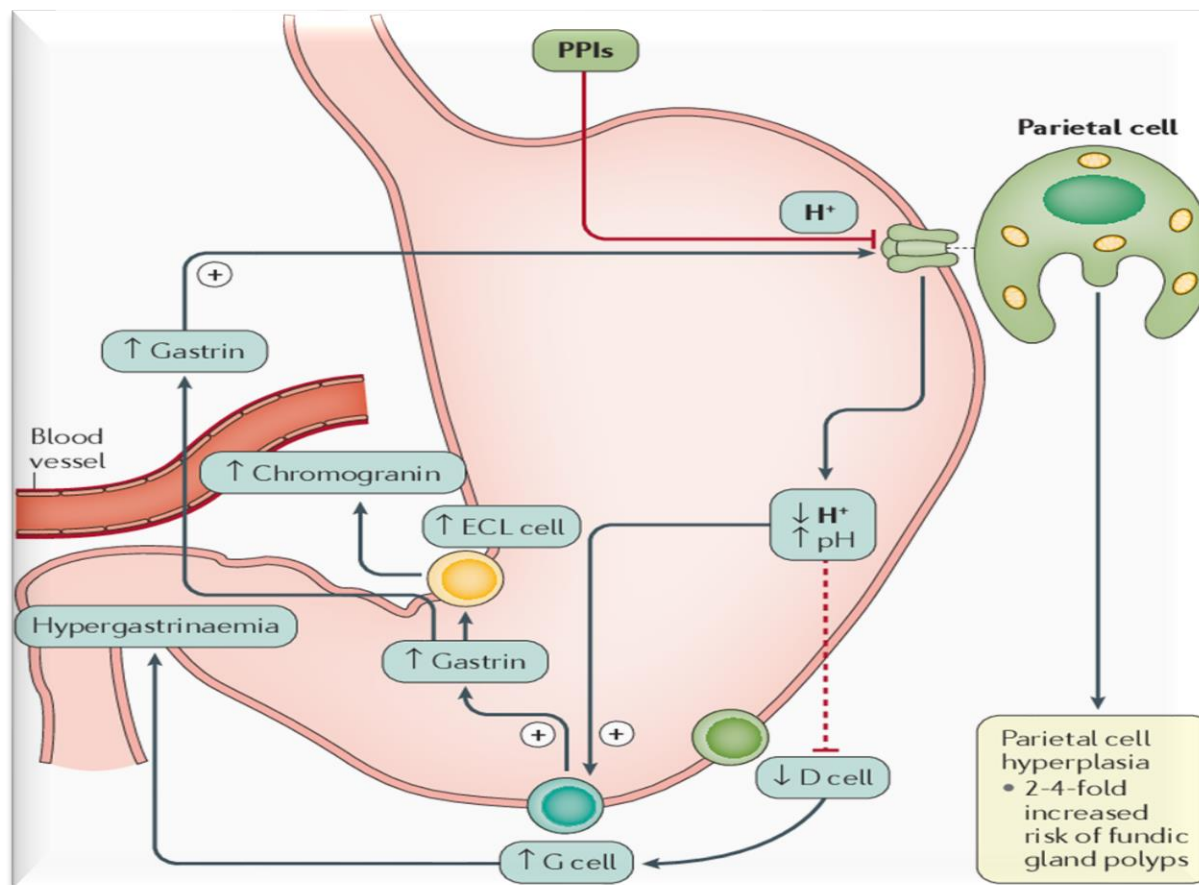
H<sub>2</sub> blockers:



H<sub>2</sub> blockers, such as cimetidine (Tagemet), ranitidine (Zantac), nizatidine (Axid®), and famotidine (Pepcid), reduce gastric acid secretion.

## Proton-pump inhibitors

Proton-pump inhibitors, including esomeprazole (Nexium), lansoprazole (Prevacid), omeprazole (Prilosec), pantoprazole (Protonix), and rabeprazole (Aciphex), decrease gastric acid production



## Sucralfate:

Sucralfate (Carafate) makes a coating over the ulcer crater, protecting it from further damage.

## Surgery and other procedures

Once hospitalized, if bleeding from an ulcer does not stop by using medications and supportive care (like fluids and, possibly, blood transfusion), it can almost always be stopped via endoscopy. The physician (a gastroenterologist) who performs the procedure first identifies the ulcer and the area that is bleeding. The physician will then inject adrenaline and other medications to stop the bleeding and stimulate the formation of a blood clot. If the bleeding recurs after that procedure or you have a perforated ulcer or an obstruction, surgery may be required. If you do not get better from medical or endoscopic treatment, surgery may be

considered. About 30% of people who come to the hospital with a bleeding ulcer need endoscopy or surgery.

## Nutrition and Dietary Supplements

Following these nutritional tips may help reduce symptoms:

- ❖ Foods containing flavonoids, like apples, celery, cranberries (including cranberry juice), onions, garlic, and tea may inhibit the growth of *H. pylori*
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- ❖ Eat foods high in B-vitamins and calcium, such as almonds, beans, whole grains (if no allergy), dark leafy greens (such as spinach and kale), and sea vegetables
- ❖ Avoid refined foods, such as white breads, pastas, and especially sugar.
- ❖ Eat fewer red meats and more lean meats, cold water fish, tofu (soy, if no allergy) or beans for protein
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- ❖ Eat fewer red meats and more lean meats, cold water fish, tofu (soy, if no allergy) or beans for protein
- ❖ Avoid beverages that can irritate the lining of the stomach or increase acid production, including coffee (with or without caffeine), alcohol, and carbonated beverages.
- ❖ Drink 6 - 8 glasses of filtered water daily.
- ❖ Exercise at least 30 minutes daily, 5 days a week.
- ❖ You may address nutritional deficiencies with the following supplements:
- ❖ A multivitamin daily, containing the antioxidant vitamins A, C, E, the B-vitamins, and trace minerals, such as magnesium, calcium, zinc, and selenium, Omega-3 fatty acids, such as fish oil, 1 - 2 capsules or 1 tablespoonful oil 2 - 3 times daily, to help decrease inflammation and improve immunity. Cold-water fish, such as salmon or halibut, are good sources, but supplementation is recommended.
- ❖ Probiotic supplement (containing *Lactobacillus acidophilus*), 5 - 10 billion CFUs (colony forming units) a day, for maintenance of gastrointestinal and immune health. Some probiotic supplements may need to be refrigerated for best results. Your child may also take probiotic supplements. Talk to your health care provider before giving your child any dietary supplements.
- ❖ Alpha-lipoic acid, 25 - 50 mg twice daily, for antioxidant support.
- ❖ Vitamin C, 500 - 1,000 mg 1 - 3 times daily, as an antioxidant and for immune support.
- ❖ L-glutamine, 500 - 1,000 mg 3 times daily, for support of gastrointestinal health and immunity.
- ❖ Grapefruit seed extract (*Citrus paradisi*), 100 mg capsule or 5 - 10 drops (in favorite beverage) 3 times daily when needed, for antibacterial, antifungal, and antiviral activity, and for immunity.
- ❖ Resveratrol (from red wine), 50 - 200 mg daily, to help decrease inflammation and for antioxidant effects.

## HERBS:

Herbs are generally a safe way to strengthen and tone the body's systems. As with any therapy, you should work with your health care provider to get your problem diagnosed before starting any treatment. You may use herbs as dried extracts (capsules, powders, teas), glycerites (glycerine extracts), or tinctures (alcohol extracts). Unless otherwise indicated, you should make teas with 1 tsp. herb per cup of hot water. Steep covered 5 - 10 minutes for leaf or flowers, and 10 - 20 minutes for roots. Drink 2 - 4 cups per day. You may use tinctures alone or in combination as noted

- ❖ Green tea (*Camelia sinensis*) standardized extract, 250 - 500 mg daily, for antioxidant, anti-inflammatory, and heart health effects. Use caffeine-free products. You may also prepare teas from the leaf of this herb.
- ❖ Cat's claw (*Uncaria tomentosa*) standardized extract, 20 mg 3 times a day, for inflammation and antibacterial, or antifungal activity.
- ❖ Reishi mushroom (*Ganoderma lucidum*), 150 - 300 mg 2 - 3 times daily, for inflammation and for immunity. You may also take a tincture of this mushroom extract, 30 - 60 drops 2 - 3 times a day.
- ❖ Olive leaf (*Olea europaea*) standardized extract, 250 - 500 mg 1 - 3 times daily, for antibacterial or antifungal activity and immunity. You may also prepare teas from the leaf of this herb.
- ❖ DGL-licorice (*Glycyrrhiza glabra*) standardized extract, 250 - 500 mg 3 times daily, chewed either 1 hour before or 2 hours after meals. Glycyrrhizin is a chemical found in licorice that causes side effects and drug interactions. DGL is deglycyrrhizinated licorice, or licorice with the glycyrrhizin removed.
- ❖ Mastic (*Pistacia lentiscus*) standardized extract, 1,000 - 2,000 mg daily in divided dosages, for activity against *H. Pylori*.
- ❖ Peppermint (*Mentha piperita*) standardized, enteric coated tablet, 1 tablet 2 - 3 times daily, for symptoms of peptic ulcer. Each tablet contains 0.2 ml peppermint oil.

## Homeopathy:

Although few studies have examined the effectiveness of specific homeopathic therapies, professional homeopaths may consider the following remedies for the treatment of ulcers or its symptoms, based on their knowledge and experience. Before prescribing a remedy, homeopaths take into account a person's constitutional type -- your physical emotional, and intellectual makeup. An experienced homeopath assesses all of these factors when determining the most appropriate treatment for you individually. For the treatment of ulcers, even if you do seek homeopathic remedies as adjunctive care, conventional treatment recommendations must be followed.

- ❖ *Argentum nitricum* for abdominal bloating with belching and pain
- ❖ *Arsenicum album* for ulcers with intense burning pains and nausea; especially for people who cannot bear the sight or smell of food and are thirsty
- ❖ *Kali bichromicum* for burning or shooting abdominal pain that is worse in the hours after midnight
- ❖ *Lycopodium* for bloating after eating with burning that lasts for hours; especially for people who feel hungry soon after eating and wake hungry



- ❖ Nitric acid for sharp, shooting pain that worsens at night and is accompanied by feelings of hopelessness and even fear of dying
  - ❖ Nux vomica for digestive disturbances (including heartburn and indigestion) that worsen after eating; particularly for those who crave alcohol, coffee, and tobacco
  - ❖ Phosphorus for burning stomach pain that worsens at night; those for whom this remedy is appropriate tend to feel very thirsty, craving cold beverages
  - ❖ Pulsatilla for symptoms that vary (that is, change abruptly) and pain that gets worse from fatty foods; appropriate people are distinctly not thirsty
- Acupuncture has been used traditionally for a variety of conditions related to the gastrointestinal tract, including peptic ulcers. A growing body of scientific evidence suggests that acupuncture can help reduce pain associated with endoscopy (the procedure used, as described earlier, to make a diagnosis of ulcer or to treat its complications).

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## CHIROPRACTIC

Chiropractors report and preliminary evidence suggests that spinal manipulation may benefit some individuals with uncomplicated gastric or duodenal ulcers. In one small clinical study, researchers compared the effectiveness of medication to spinal manipulation over a period of up to 22 days. Participants who received spinal manipulation experienced significant pain relief after an average of 4 days and were completely free of symptoms on average 10 days earlier than those who took medication. More research is needed to understand when and how chiropractic might be helpful if you have peptic ulcer disease.

## Other Considerations:

**Pregnancy** If you are pregnant or breastfeeding, talk to your doctor before taking any medication, including herbs.

## Prognosis and Complications

With proper treatment, most ulcers heal within 6 - 8 weeks. However, they may recur, particularly if *H. pylori* is not treated sufficiently. Complications from ulcers include bleeding, perforation (rupture) of either the stomach or the duodenum, and bowel obstruction. Each of these problems can be very serious, even life-threatening. Bleeding, which is much less common today because of appropriate and fast medical treatment, occurs in up to 15% of people with peptic ulcers. Obstruction tends to happen where the stomach meets the small intestines. If there is an ulcer at this junction, swelling can occur, blocking the passage of food products through the gastrointestinal tract. If this happens, significant vomiting is generally the main symptom. *H. pylori* ulcers increase the risk of stomach cancer. The good news is that the incidence of ulcers and their complications continue to decline as people seek treatment for symptoms early and doctors respond quickly to eliminate symptoms and the causes, like *H. pylori* and NSAIDs.

## COMPLICATIONS

- ❖ Internal bleeding. Bleeding can occur as slow blood loss that leads to anemia or as severe blood loss that may require hospitalization or a blood transfusion.
- ❖ Infection. Peptic ulcers can eat a hole through the wall of your stomach or small intestine, putting you at risk of serious infection of your abdominal cavity (peritonitis).
- ❖ Scar tissue. Peptic ulcers can also produce scar tissue that can obstruct passage of food through the digestive tract, causing you to become full easily, to vomit and to lose weight.

## HOME REMEDY FOR PEPTIC ULCER

- ❖ The most effective home remedy for treating peptic ulcer is to eat bananas every day. It is an excellent way to neutralize the hyperacidity of the gastric juices. Banana milk shake is also beneficial in curing peptic ulcer.
- ❖ Having cold milk, without sugar, is effective in reducing the acid, thereby providing relief from burning sensation one encounters in peptic ulcer.
- ❖ Prepare a paste of 10 grams drumsticks leaves and water. Mix this paste in half a cup of yoghurt. Have this mixture every day, to cure peptic ulcer.
- ❖ In 250 ml of water, soak 15 grams leaves of wood apple and keep it overnight. Strain this concoction in the morning and have it.
- ❖ Applying a hot pack over the abdomen region is one of the effective ways of curing peptic ulcer.
- ❖ Cabbage and carrot, when mixed as juices, have been found to be beneficial in treating peptic ulcer. In half a liter of water, boil 250 grams cabbage until it is reduced to half. In a similar way, prepare carrot juice. Now, combine 125 ml of each juice. Once cool, drink it two times in a day.
- ❖ Tea made from fenugreek seeds is effective in curing peptic ulcer. When coated with water, fenugreek seeds become slightly mucilaginous, which helps in treating the ulcer.
- ❖ Combining carrot juice with spinach (or beet) and cucumber is effective in treating peptic ulcer. You can either mix 300ml carrot juice and 200 ml spinach juice or combine 300 ml carrot juice and 100 ml each of beet and cucumber juice, to make 500 ml of juice. Consume this daily.
- ❖ Blanch 5 almonds every day and extract their milk. Drink this milk every day, as it provides protein and also binds the acid in stomach.
- ❖ Drinking raw goat milk is effective in peptic ulcers treatment. For best results, drink this juice three times a day.
- ❖ Lime is beneficial in curing peptic ulcer. The citric acid and mineral salts present in it help treat the ulcer. You can either have lime juice or use it in salads.

## CONCLUSION

As community Pharmacist becomes a consultant for patients who are put on therapy. He counsels the patients about the disease process and simultaneously role of drugs. He informs the patient of drug interactions and adverse reactions. He advises the doctors about the dosage forms and dosage regimen, In the context of rendering better services to patients, the physicians have recognised a role of community pharmacist in clinical aspects. Peptic ulcers are breaks in

the lining of the digestive tract caused by the action of gastric juices. There are two types of peptic ulcer: duodenal and gastric (stomach). They cause pain, bloating, wind, vomiting and other forms of abdominal upset and discomfort. Ulcers may be short- or long-term, single or multiple, deep or superficial. More effective remedies for reducing acid levels in the stomach have become available over recent years and peptic ulcers are now uncommon. The current therapy of choice for all *Helicobacter pylori*-associated ulcer disease is eradication therapy. Although adequate therapeutic regimens are currently available, often still ineffective therapies are tried. Cure of the infection essentially eliminates the ulcer diathesis. Cure of the infection is especially indicated in complicated/recalcitrant ulcer disease. Sadly, at present only a minority of peptic ulcer disease patients receive adequate eradication therapy. Cure of the infection does not equal full resolution of dyspeptic symptoms. A variable percentage of patients continues acid suppressant therapy for ongoing or newly developed dyspeptic or reflux symptoms. Acid-suppressant therapy, both for healing and for maintenance, remains the cornerstone of peptic ulcer therapy in all other circumstances (*H. pylori*-negative ulcer, aspirin/NSAID-induced ulceration, hyperacidity related ulcer etc.). Proton pump inhibitors are superior to H<sub>2</sub>RAS both for healing and for maintenance. Whether higher doses are occasionally necessary in *H. pylori*-negative ulcers, requires further study. Acid-suppressant therapy, even when prolonged, so far appears safe and well tolerated. Proton pump medications (PPI). Proton pump medications reduce acid levels and allow the ulcer to heal. They include Prilosec, Prevacid, Aciphex, Protonix, and Nexium. Antibiotics. If you have *H. pylori* infection, then antibiotics are used. There are multiple combinations of antibiotics that are taken for one to two weeks along with a PPI. Some doctors also recommend taking Pepto-Bismol. Upper Endoscopy. Some bleeding ulcers can be treated through the endoscope. Surgery. Sometimes an operation is needed if the ulcer has created a hole in the wall of the stomach or if there is serious bleeding. Even with medications, many lifestyle factors, including making changes in your diet, are important. Plus, certain herbs, acupuncture, or homeopathy may prove to be a useful addition to usual medical care, especially to help relieve symptoms or prevent recurrence. A peptic ulcer is a sore in the lining of your stomach or your duodenum, the first part of your small intestine. A burning stomach pain is the most common symptom. The pain may come and go for a few days or weeks, may bother you more when your stomach is empty. Usually goes away after you eat. Peptic ulcers happen when the acids that help you digest food damage the walls of the stomach or duodenum. The most common cause is infection with a bacterium called *Helicobacter pylori*. Another cause is the long-term use of nonsteroidal anti-inflammatory medicines (NSAIDs) such as aspirin and ibuprofen.

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