بسم الله الرحمن الرحيم

A peptic ulcer

definition

- A peptic ulcer is an excavation (hollowed-out area) that forms in the mucosal wall of the stomach, in the **pylorus** (opening between stomach and duodenum), in the **duodenum** (first part of small intestine), or in the **esophagus**.

Con

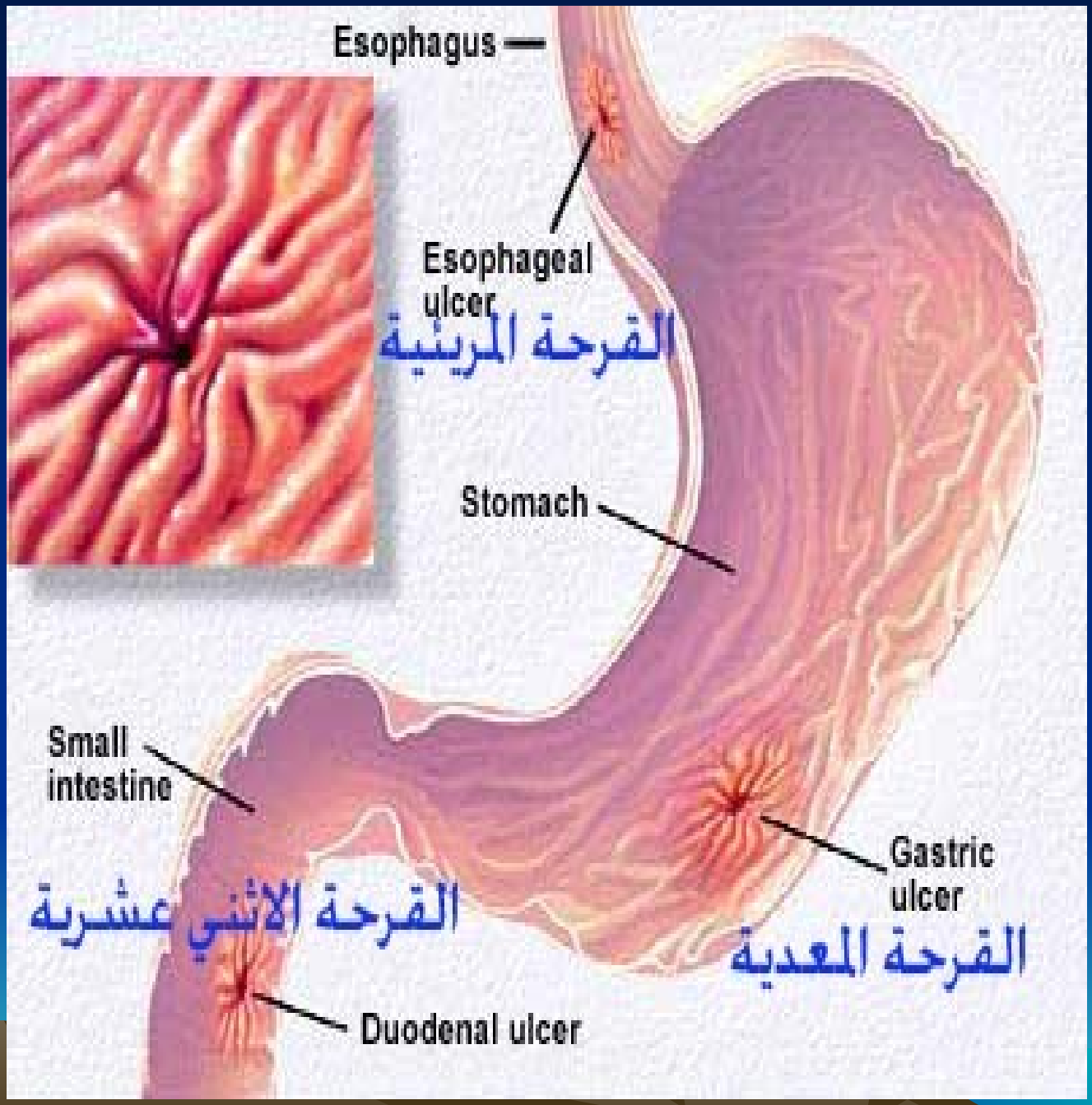
- A peptic ulcer is frequently referred to as a gastric, duodenal, or esophageal ulcer, depending on its location, or as peptic ulcer disease.

Pathophysiology

- Peptic ulcers occur mainly in the gastroduodenal mucosa because this tissue cannot withstand the digestive action of gastric acid (HCl) and pepsin.
- The erosion is caused by the increased concentration or activity of acid-pepsin, or by decreased resistance of the mucosa.

Pathophysiology

- A damaged mucosa cannot secrete enough mucus to act as a barrier against HCl.
- The use of NSAIDs inhibits the secretion of mucus that protects the mucosa.


Esophagus
Esophageal ulcer
القرحة المريئية
Stomach
Small intestine
القرحة الاثني عشرية
Gastric ulcer
القرحة المعدية
Duodenal ulcer

Causes

- Peptic ulcer development is also influenced by type of diets .
- which increases the harmful effects of *H. pylori.*
- alters protective mechanisms.
- decreases gastric blood flow.

predisposing factor

- Afurther genetic link is noted in the finding that people with blood type O .
- There also is an association between duodenal ulcers and chronic pulmonary disease or chronic renal disease.
- chronic use of NSAIDs .
- alcohol ingestion.
- excessive smoking.

Signs and Symptoms

- Symptoms vary with the location of the ulcer .
- Symptoms, including pain, may not be experienced with ulcer .

Signs and Symptoms

- If pain does occur, patients with gastric ulcers commonly experience aburning and pain in the high left epigastric region.
- There may be more pain with food ingestion or 1 to 2 hours after a meal.

Signs and Symptoms

- Duodenal ulcers produce cramping or burning pain in the midepigastric or upper abdominal area.
- The pain occurs 2 to 4 hours after meals or in the middle of the night .
- This intermittent pain may be relieved by the ingestion of food or antacids.

Signs and Symptoms

- Anorexia and nausea and vomiting may also occur with either ulcer location.
- Bleeding may occur with massive hemorrhaging .
- Patients often have low hemoglobin levels, and gastric or fecal occult blood may be found, depending on where the ulcers are located.

Assessment and Diagnostic

- A physical examination may reveal pain, epigastric tenderness, or abdominal distention.
- A barium study of the upper GI tract may show an ulcer.
- endoscopy is the preferred diagnostic procedure because it allows direct visualization of inflammatory changes, ulcers, and lesions.

Assessment and Diagnostic

- Through endoscopy, a biopsy of the gastric mucosa and of any suspicious lesions can be obtained.
- Endoscopy may reveal lesions that are not evident on x-ray studies because of their size or location.
- Stools may be tested periodically until they are negative for occult blood.

medication

Antibiotics eg tetracycline metronidazole -

Inhibitors acid secreation eg ranitidine - (zantac) cimetidine (tagamet)

Decrease acid secreation eg omeprazole -

SURGICAL MANAGEMENT

- Gastric bypass and vertical banded gastroplasty are the current operations of choice.
- These procedures may be performed laparoscopically or by an open surgical technique.

NURSING DIAGNOSES

- Based on the assessment data, the patient's nursing diagnoses may include the following:-
- Acute pain related to the effect of gastric acid secretion on damaged tissue.

NURSING DIAGNOSES

- Anxiety related to coping with an acute disease.
- Imbalanced nutrition related to changes in diet.
- Deficient knowledge about prevention of symptoms and management of the condition .

COMPLICATIONS

- Potential complications may include the following:
- Hemorrhage
- Perforation
- Penetration
- Pyloric obstruction (gastric outlet obstruction)

Planning and Goals

- relief of pain.
- reduced anxiety.
- maintenance of nutritional requirements.
- knowledge about the management and prevention of ulcer recurrence.
- and absence of complications.

Nursing Interventions

- **RELIEVING PAIN**
- Pain relief can be achieved with prescribed medications. The patient should avoid causes and risk factors .
- meals should be eaten at regularly paced intervals in a relaxed setting.
- patients benefit from learning relaxation.

REDUCING ANXIETY

- The nurse assesses the patient's level of anxiety.
- Patients with peptic ulcers are usually anxious, but their anxiety is not always obvious.
- Appropriate information is provided at the patient's level of understanding, all questions are answered.

Complication

- Inserting a peripheral IV line for the infusion of saline or lactated Ringer's solution and blood products.
- The nurse may need to assist with the placement of artery.

Complication

- catheter for hemodynamic monitoring. Blood component therapy is initiated if there are signs of shock (eg, tachycardia, sweating, coldness of the extremities).
- Monitoring the hemoglobin to assist in evaluating blood loss.

Complication

- Inserting an NG tube to distinguish fresh blood from “coffee grounds” material, to aid in the removal of clots and acid, to prevent nausea and vomiting, and to provide a means of monitoring further bleeding.
- Administering a room-temperature lavage of saline solution or water.

Complication

- some authorities recommend using ice lavage .
- Inserting an indwelling urinary catheter and monitoring urinary output
- Monitoring vital signs and oxygen saturation and administering oxygen therapy.

Complication

- Placing the patient in the recumbent position with the legs elevated to prevent hypotension.
- to prevent aspiration from vomiting, placing the patient on the left side
- Treating hemorrhagic shock.

perforation

- Signs and symptoms of perforation include the following:
- Sudden, severe upper abdominal pain (persisting and increasing in intensity).
- pain may be referred to the shoulders, especially the right shoulder, because of irritation of the phrenic nerve in the diaphragm.

perforation

- Vomiting and collapse (fainting)
- Extremely tender and rigid (boardlike)
- Hypotension and tachycardia, indicating shock.

peritonitis

- assesses the patient for peritonitis or localized infection
- (increased temperature, abdominal pain, paralytic ileus, increased or absent bowel sounds, abdominal distention).
- Antibiotic therapy is administered parenterally as prescribed.

Pyloric Obstruction

- Pyloric obstruction, also called gastric outlet obstruction (GOO).
- occurs when the area distal to the pyloric sphincter becomes scarred and stenosed from spasm or edema or from scar tissue that forms when an ulcer alternately heals and breaks down.

Pyloric Obstruction

- The patient has nausea and vomiting, constipation, epigastric fullness, anorexia, and, later, weight loss.

In treating

- the patient with pyloric obstruction, the first consideration is to insert an NG tube to decompress the stomach.
- Confirmation that obstruction is the cause of the discomfort is accomplished by assessing the amount of fluid aspirated from the NG tube.

In treating

- A balloon dilatation of the pylorus via endoscopy may be beneficial.
- If the obstruction is unrelieved by medical management, surgery (in the form of a vagotomy and **antrectomy** or gastro jejunostomy) may be required.

MAINTAINING NUTRITION

- The nurse assesses the patient for malnutrition and weight loss.
- After recovery from an acute phase of peptic ulcer disease.
- the patient is advised about the importance of complying with the medication regimen and dietary restrictions.

Teaching Patients Self-Care

- To manage ulcer disease successfully, the patient is instructed about the factors that will help or aggravate the condition .
- The nurse reviews information about medications to be taken.
- Avoids irritating foods and beverages.
- Feels less anxiety by avoiding stress.

Thank you