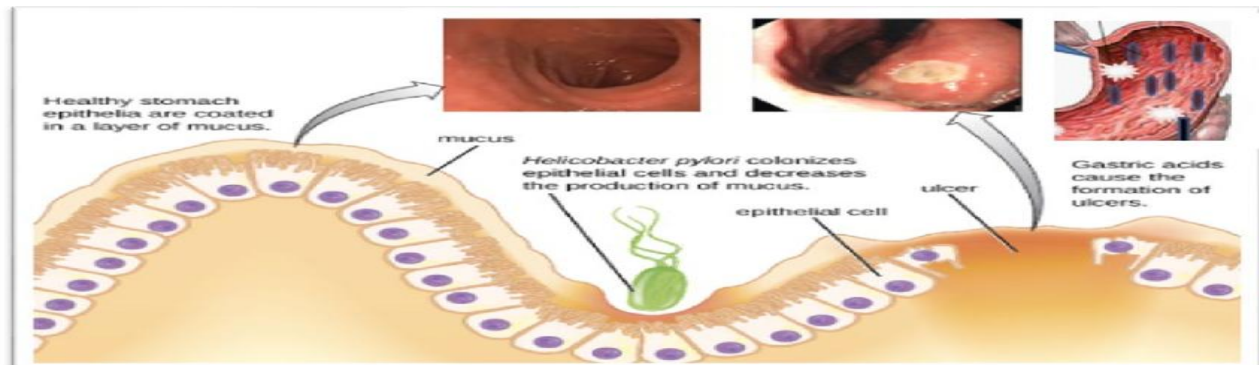


Lec title : Ulcers and Gastric Carcinoma

1. Peptic Ulcers



Definition

A **peptic ulcer** is an **open sore in the lining of the stomach or the upper part of the small intestine** caused by damage to the protective mucosal layer.

Types of Peptic Ulcers

1. **Gastric ulcer** – occurs in the stomach.
2. **Duodenal ulcer** – occurs in the first part of the small intestine (duodenum).

Causes

The most common causes include:

- Infection with **Helicobacter pylori (H. pylori)**
- Long-term use of **NSAIDs** (aspirin, ibuprofen)
- Excess **gastric acid**
- Smoking and alcohol
- Severe stress

Symptoms

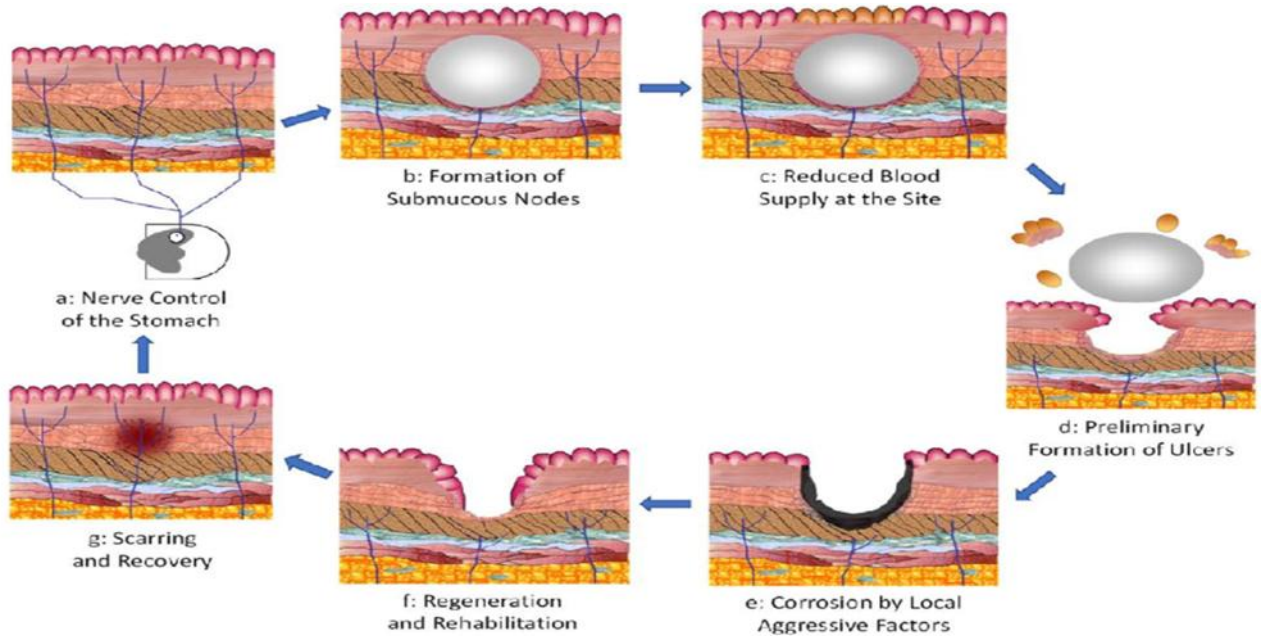
Common symptoms include:

- Burning or gnawing **stomach pain**
- **Nausea and vomiting**
- **Loss of appetite**
- **Weight loss**
- In severe cases: **bleeding ulcers**

Complications

If untreated, ulcers may cause:

- **Internal bleeding**
- **Perforation (hole in stomach wall)**
- **Gastric obstruction**



Treatment

Treatment usually includes:

- **Antibiotics** for *H. pylori* infection
- **Proton pump inhibitors (PPIs)** to reduce stomach acid
- Avoiding NSAIDs, alcohol, and smoking
- Healthy diet and lifestyle

Relevance to Cosmetic and Laser Practice

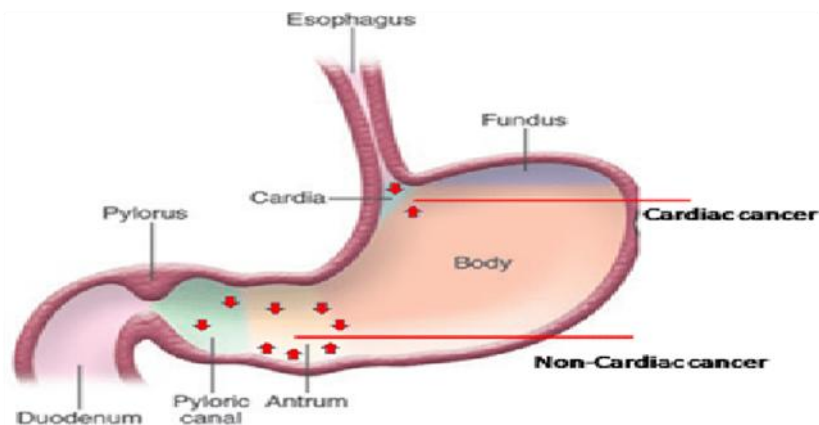
Patients with ulcers may have:

- **Poor nutrient absorption**
- **Delayed wound healing**
- Increased risk of **skin problems** due to nutritional deficiencies.

2. Gastric Carcinoma (Stomach Cancer)

Definition

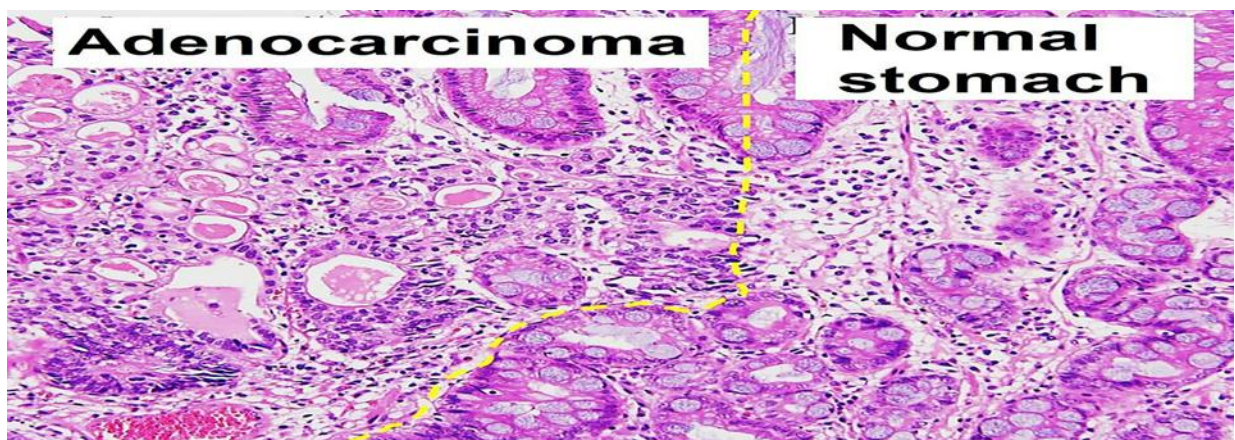
Gastric carcinoma is a malignant tumor that develops from the cells of the stomach lining. It is one of the most common cancers of the digestive system worldwide.



Types

The most common type is:

- **Adenocarcinoma** (about 90–95% of stomach cancers)



Risk Factors

Several factors increase the risk of gastric cancer:

- Chronic **H. pylori** infection
- **Smoking**
- Diet rich in **smoked or salty foods**
- **Chronic gastritis**
- Family history of gastric cancer
- Previous **stomach ulcers**

Symptoms

Early stages may show **no symptoms**, but later symptoms include:

- **Persistent stomach pain**
- **Unexplained weight loss**
- **Loss of appetite**
- **Nausea and vomiting**
- **Difficulty swallowing**
- **Fatigue**

Diagnosis

Doctors diagnose gastric carcinoma using:

- **Endoscopy**
- **Biopsy**
- **CT scan**
- **Histopathological examination**

Treatment

Treatment depends on the stage of cancer:

- **Surgery** (removal of part or all of the stomach)
- **Chemotherapy**
- **Radiotherapy**
- **Targeted therapy**

Importance for Cosmetic and Laser Students

Understanding systemic diseases such as gastric cancer is important because:

- Cancer patients may undergo **skin-related treatments**
- Treatments like chemotherapy may cause **skin changes**
- Patients may have **weak immunity and poor healing**

Summary

- **Peptic ulcers** are sores in the stomach or duodenum caused mainly by **H. pylori infection or NSAID use**.
- Symptoms include **burning stomach pain, nausea, and possible bleeding**.
- **Gastric carcinoma** is a malignant tumor of the stomach, commonly **adenocarcinoma**.
- Risk factors include **H. pylori infection, smoking, and chronic gastritis**.
- Understanding digestive diseases helps cosmetic practitioners evaluate **patient health, healing ability, and treatment safety**.

1. A peptic ulcer is defined as:

- A. A bacterial infection of the intestine
- B. An open sore in the lining of the stomach or duodenum
- C. A tumor in the stomach
- D. Inflammation of the liver
- E. A blockage of the intestine

Answer: B

2. The most common cause of peptic ulcer disease is infection with:

- A. Salmonella
- B. Escherichia coli
- C. Helicobacter pylori
- D. Staphylococcus aureus
- E. Mycobacterium tuberculosis

Answer: C

3. A gastric ulcer occurs in the:

- A. Small intestine
- B. Stomach
- C. Esophagus
- D. Colon
- E. Pancreas

Answer: B

4. A duodenal ulcer occurs in the:

- A. Stomach
- B. Esophagus
- C. Duodenum
- D. Colon
- E. Rectum

Answer: C

5. Which medication group commonly causes gastric ulcers?

- A. Antibiotics
- B. Antifungal drugs
- C. NSAIDs
- D. Antihistamines
- E. Vitamins

Answer: C

6. The most common symptom of peptic ulcer is:

- A. Fever
- B. Burning stomach pain
- C. Skin rash
- D. Hair loss
- E. Joint pain

Answer: B

7. Which lifestyle factor increases the risk of ulcers?

- A. Drinking water
- B. Smoking
- C. Eating vegetables
- D. Exercising
- E. Sleeping early

Answer: B

8. Helicobacter pylori mainly infects the:

- A. Liver
- B. Stomach lining
- C. Pancreas
- D. Kidney
- E. Small intestine

Answer: B

9. A serious complication of peptic ulcer is:

- A. Bone fracture
- B. Internal bleeding
- C. Vision loss
- D. Hair loss
- E. Hearing loss

Answer: B

10. A perforated ulcer means:

- A. Infection of blood

- B. A hole in the stomach wall
- C. Acid reflux
- D. Thick stomach wall
- E. Reduced acid production

Answer: B

11. Drugs used to reduce stomach acid include:

- A. Antibiotics
- B. Antidepressants
- C. Proton pump inhibitors
- D. Antihistamines
- E. Steroids

Answer: C

12. The stomach protective layer is mainly formed by:

- A. Bile
- B. Mucus
- C. Saliva
- D. Blood
- E. Hormones

Answer: B

13. Gastric carcinoma is:

- A. A benign tumor
- B. A malignant tumor of the stomach
- C. A bacterial infection
- D. A liver disease
- E. A kidney disease

Answer: B

14. The most common type of gastric cancer is:

- A. Sarcoma
- B. Lymphoma
- C. Adenocarcinoma
- D. Melanoma
- E. Osteosarcoma

Answer: C

15. Gastric carcinoma usually develops from the:

- A. Stomach lining cells
- B. Muscle cells
- C. Bone cells
- D. Blood cells
- E. Nerve cells

Answer: A

16. One major risk factor for gastric cancer is:

- A. Drinking water
- B. H. pylori infection
- C. Exercise
- D. Sunlight
- E. Calcium intake

Answer: B

17. Smoking increases the risk of:

- A. Gastric carcinoma
- B. Asthma only
- C. Diabetes only
- D. Eye diseases only
- E. Bone diseases only

Answer: A

18. Diets high in which foods may increase gastric cancer risk?

- A. Fresh fruits
- B. Smoked and salty foods
- C. Milk
- D. Vegetables
- E. Fish

Answer: B

19. An early symptom of gastric carcinoma may be:

- A. Severe pain immediately
- B. No symptoms
- C. Skin rash

- D. Hair loss
- E. Fever

Answer: B

20. A common symptom of advanced gastric cancer is:

- A. Weight loss
- B. Hair growth
- C. Vision improvement
- D. Hearing improvement
- E. Bone growth

Answer: A

21. Difficulty swallowing may occur in:

- A. Gastric carcinoma
- B. Kidney stones
- C. Arthritis
- D. Asthma
- E. Diabetes

Answer: A

22. The most common diagnostic procedure for stomach cancer is:

- A. X-ray
- B. Endoscopy
- C. ECG
- D. Ultrasound of bone
- E. Blood pressure test

Answer: B

23. During endoscopy, doctors may take a:

- A. Blood sample
- B. Urine sample
- C. Biopsy
- D. Saliva sample
- E. Skin sample

Answer: C

24. A biopsy is used to:

- A. Measure blood pressure
- B. Examine tissue under microscope
- C. Measure oxygen levels
- D. Test vision
- E. Measure temperature

Answer: B

25. Surgery for gastric cancer may involve:

- A. Removing part of the stomach
- B. Removing the kidney
- C. Removing the lung
- D. Removing the pancreas
- E. Removing bone

Answer: A

26. Chemotherapy is used to:

- A. Kill cancer cells
- B. Increase stomach acid
- C. Improve digestion
- D. Produce hormones
- E. Reduce blood pressure

Answer: A

27. Radiotherapy works by:

- A. Using radiation to destroy cancer cells
- B. Producing insulin
- C. Increasing stomach acid
- D. Absorbing nutrients
- E. Producing bile

Answer: A

28. Chronic gastritis may lead to:

- A. Gastric carcinoma
- B. Eye diseases
- C. Kidney stones
- D. Arthritis
- E. Asthma

Answer: A

29. Persistent stomach pain should be:

- A. Ignored
- B. Evaluated medically
- C. Treated with cosmetics
- D. Treated with vitamins only
- E. Treated with exercise only

Answer: B

30. Loss of appetite may be a symptom of:

- A. Gastric carcinoma
- B. Skin allergy
- C. Eye infection
- D. Bone fracture
- E. Hearing loss

Answer: A

31. Patients with stomach disease may experience:

- A. Nutritional deficiency
- B. Strong immunity
- C. Increased hair growth
- D. Strong bones
- E. Better vision

Answer: A

32. Poor nutrition may affect:

- A. Skin healing
- B. Eye color
- C. Bone shape
- D. Ear structure
- E. Tooth size

Answer: A

33. Cosmetic procedures require patients to have:

- A. Good digestive health

- B. High blood sugar
- C. Low oxygen levels
- D. Weak immunity
- E. Bone disease

Answer: A

34. Gastric bleeding from ulcers may cause:

- A. Anemia
- B. Asthma
- C. Arthritis
- D. Diabetes
- E. Hypertension

Answer: A

35. Vomiting blood may indicate:

- A. Peptic ulcer bleeding
- B. Eye infection
- C. Skin allergy
- D. Bone disease
- E. Hearing loss

Answer: A

36. Black stool in ulcer patients may indicate:

- A. Gastric bleeding
- B. Lung infection
- C. Skin disease
- D. Eye disease
- E. Bone disease

Answer: A

37. H. pylori infection can damage the:

- A. Stomach mucosa
- B. Kidney tissue
- C. Bone marrow
- D. Brain tissue
- E. Lung tissue

Answer: A

38. Long-term untreated ulcers may increase risk of:

- A. Gastric cancer
- B. Eye diseases
- C. Skin burns
- D. Bone fractures
- E. Hearing loss

Answer: A

39. Early detection of gastric carcinoma improves:

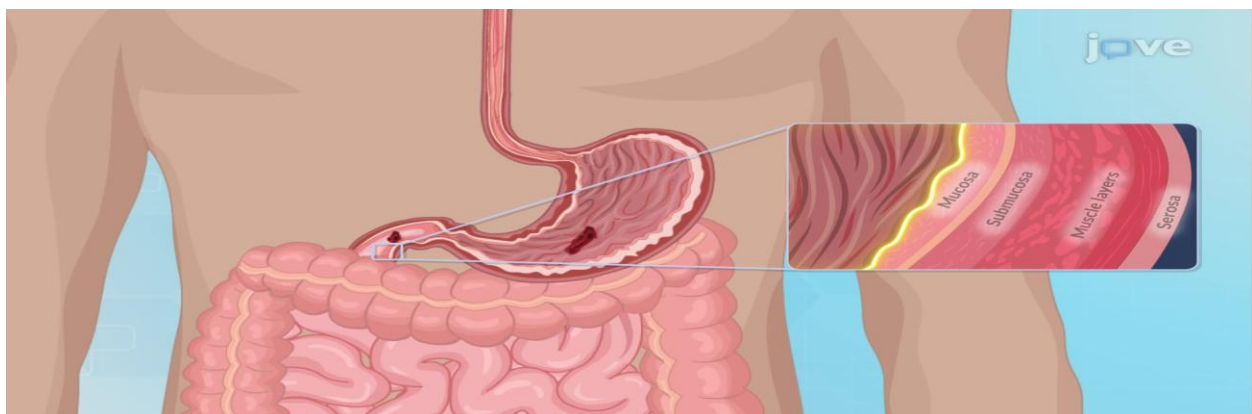
- A. Treatment success
- B. Eye color
- C. Hair growth
- D. Bone size
- E. Hearing ability

Answer: A

40. Maintaining a healthy diet helps reduce risk of:

- A. Peptic ulcer and gastric cancer
- B. Eye color change
- C. Hair color change
- D. Bone shape change
- E. Hearing loss

Answer: A



The lesion labeled in the stomach in the image represents:

- A. Gastric polyp
- B. **Peptic ulcer**
- C. Liver cyst

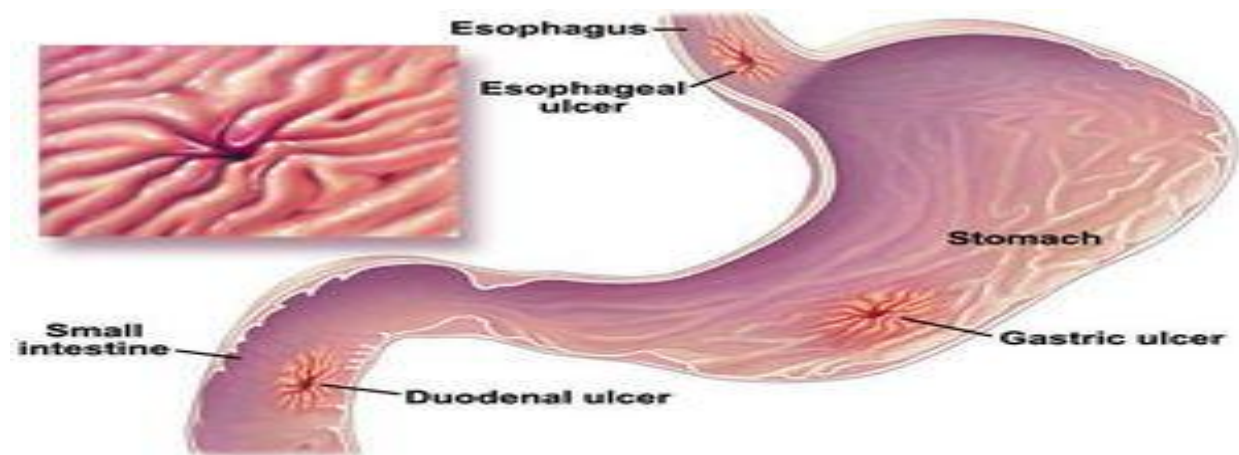
- D. Intestinal tumor
- E. Pancreatic lesion

Correct Answer: B

Which bacterium is most commonly associated with ulcers shown in the figure?

- A. Staphylococcus aureus
- B. Salmonella typhi
- C. **Helicobacter pylori**
- D. Mycobacterium tuberculosis
- E. Escherichia coli

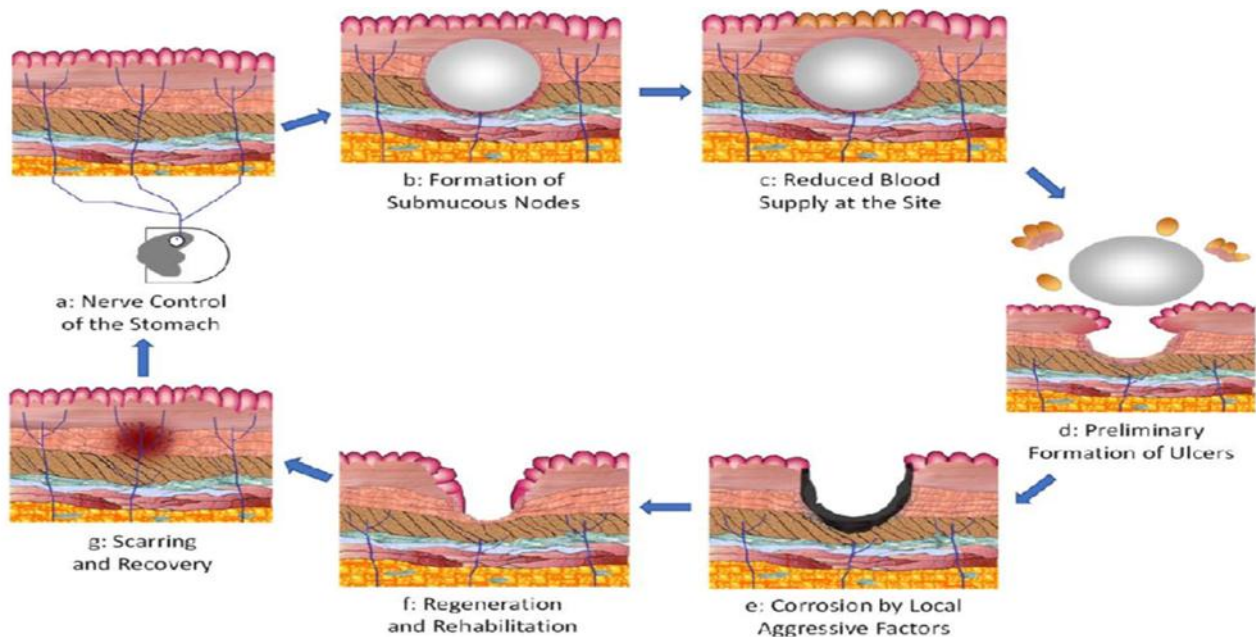
Correct Answer: C



The region labeled **duodenum** in the image is the:

- A. First part of the small intestine
- B. Last part of the large intestine
- C. Upper part of the stomach
- D. Lower part of the esophagus
- E. Middle part of the colon

Correct Answer: A



1. What is the first stage shown in the ulcer formation diagram?
 - a) Tissue regeneration
 - b) Ulcer formation
 - c) Reduced blood supply
 - d) Nerve control of the stomach**
 - e) Tissue corrosion
2. The formation of **submucous nodes** in the stomach wall mainly leads to:
 - a) Increased oxygen supply
 - b) Tissue regeneration
 - c) Reduced blood supply at the site**
 - d) Increased nerve activity
 - e) Increased mucus secretion
3. Reduced blood supply in the stomach wall results primarily in:
 - a) Immediate healing
 - b) Increased immunity
 - c) Preliminary formation of ulcers**
 - d) Increased digestion
 - e) Increased mucus production
4. The stage labeled “**Corrosion by local aggressive factors**” mainly refers to damage caused by:
 - a) Vitamin deficiency
 - b) Hormones
 - c) Gastric acid and digestive enzymes**
 - d) Oxygen deficiency only
 - e) Bile salts
5. The final healing stage after ulcer damage in the diagram is:
 - a) Tissue necrosis
 - b) Bacterial invasion

- c) Ulcer enlargement
- d) **Scarring and recovery**
- e) Blood clot formation