

Inflammatory Disease of Stomach

GASTRITIS

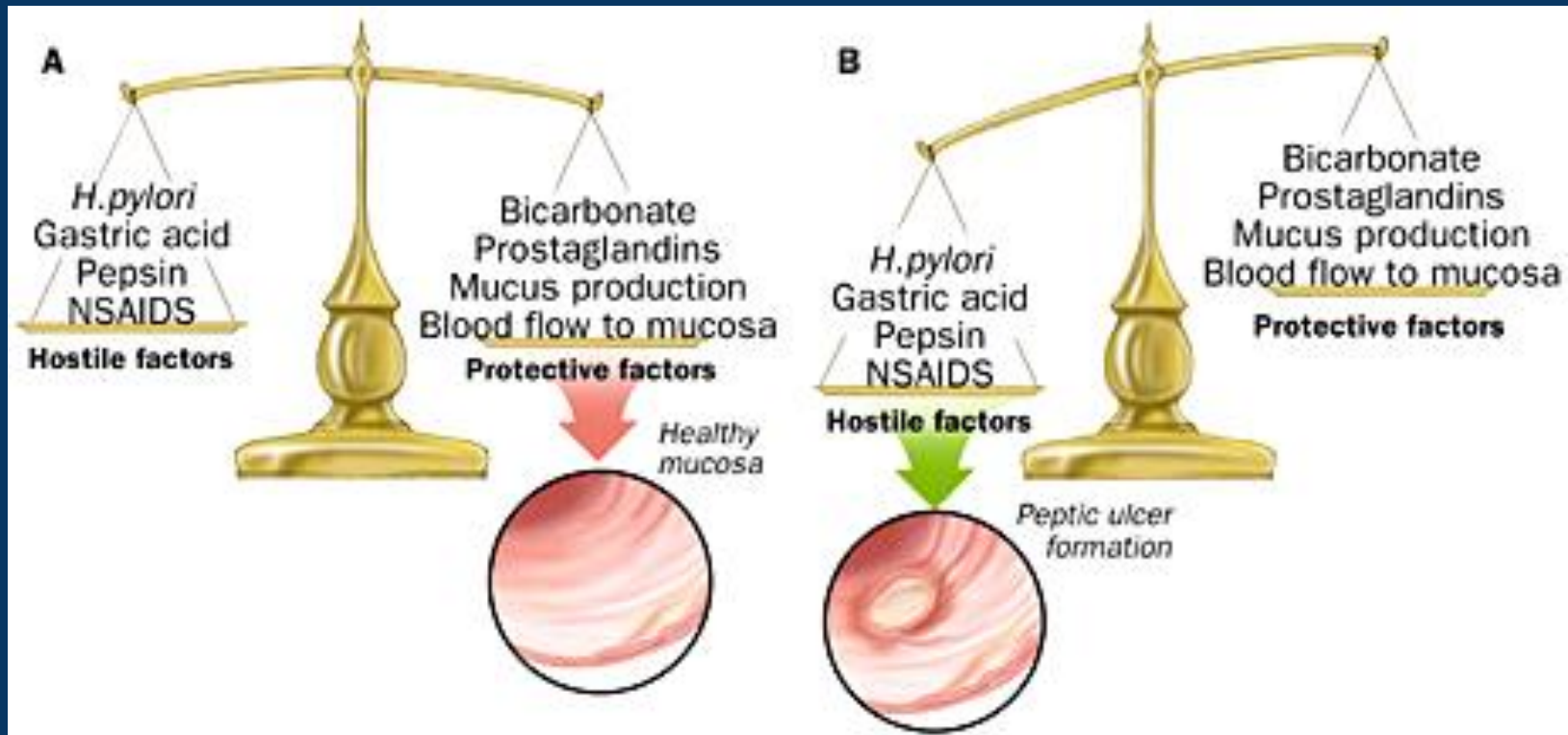
Objectives

- LO1:Definition of gastritis
- LO2:Pathophysiology of each types of gastritis
- LO3: Etiology of gastritis
- LO4:Types gastritis
- LO5:Staging of each type of gastritis
- LO6:Clinical features of gastritis

Definition:

- The term gastritis is used to denote inflammation associated with mucosal injury.
- Gastritis is mostly a **histological** term that needs biopsy to be confirmed.
- Epithelial cell damage and regeneration without associated inflammation is properly referred to as "gastropathy"
- Gastropathy may be referred without histological evidence and just according to gross appearance in endoscopy or radiology

Pathophysiology



Imbalance of:

Aggressive factors:

And

Defensive factors:

Etiology of Gastritis

A) Normal

B) Increased Attack

* **HCl**

* **Pepsin.**

* **NSAIDs.**

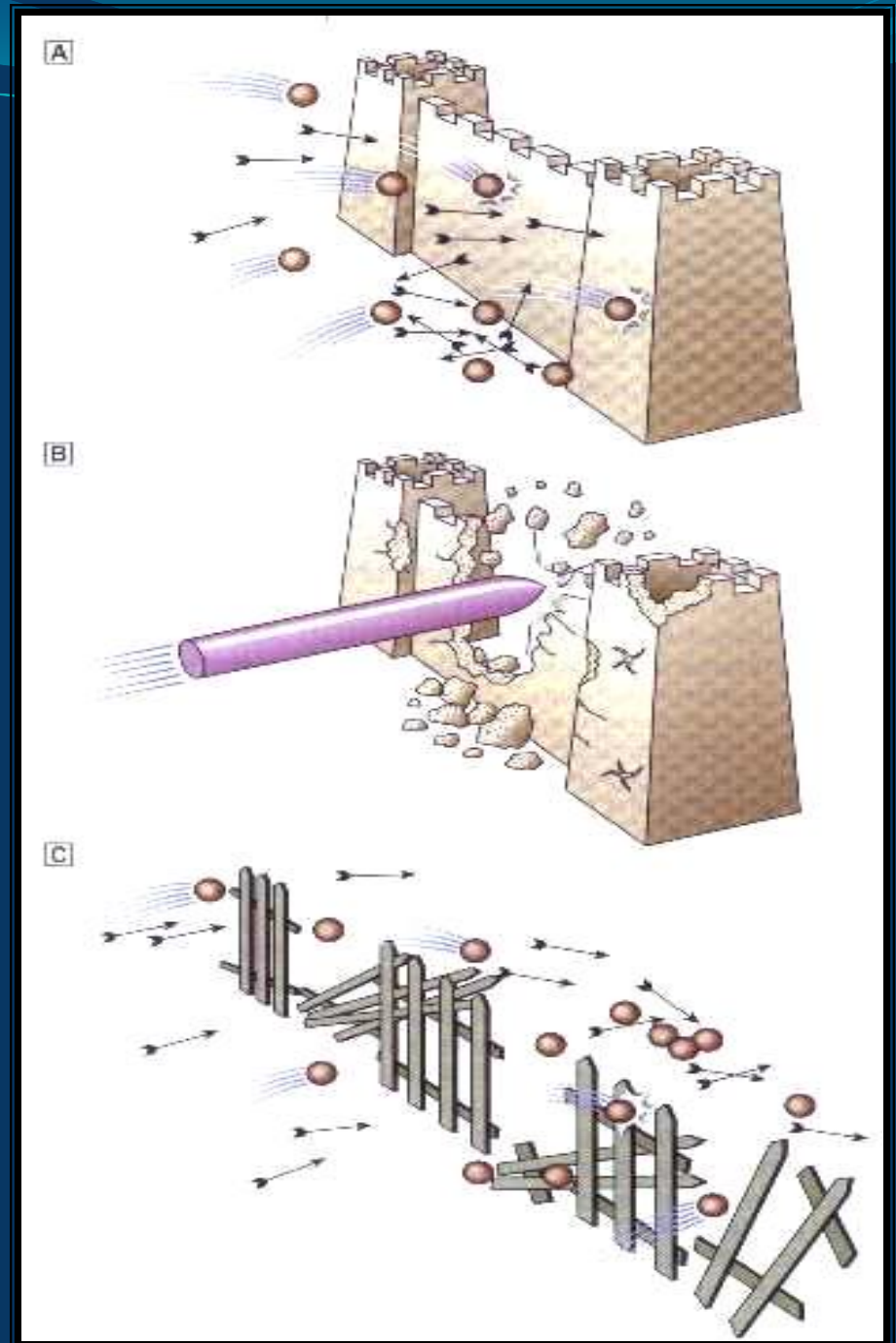
C) Weak defense

* **Helicobacter pylori.**

* **Stress.**

* **drugs.**

* **smoking.**



Gastritis

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graph TD; A[Gastritis] --> B[Acute]; A --> C[Chronic]
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The diagram is a simple tree structure. At the top is a box labeled 'Gastritis'. A vertical line descends from the bottom center of this box and connects to a horizontal line. From the left and right ends of this horizontal line, two vertical lines extend downwards to the top centers of two separate boxes. The left box is labeled 'Acute' and the right box is labeled 'Chronic'. All boxes have a white background with a blue border and a slight drop shadow.

Acute

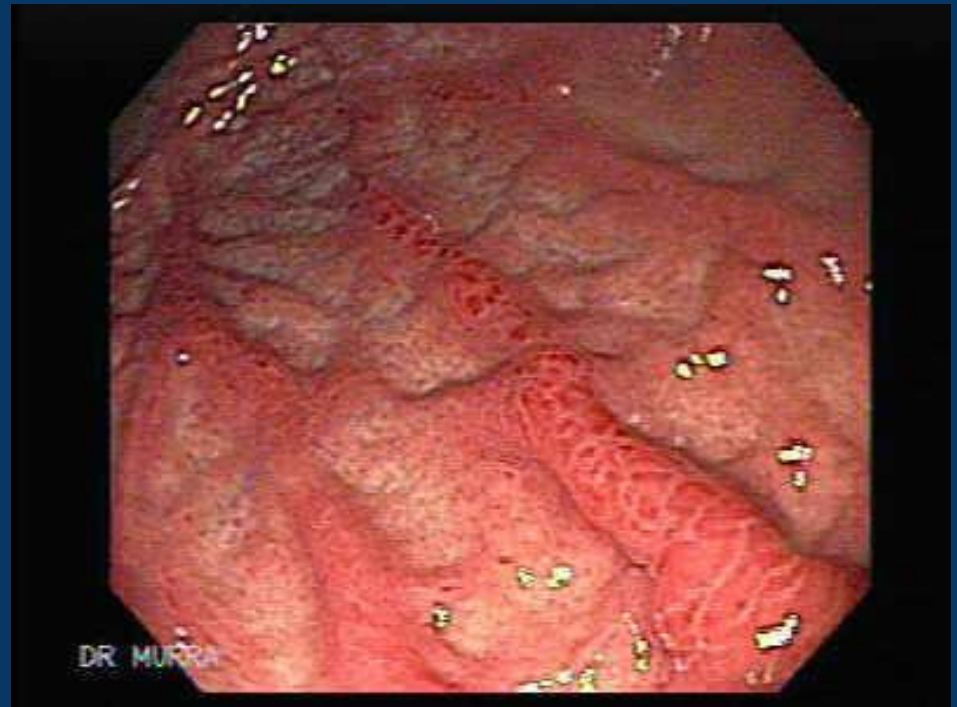
Chronic

Acute gastritis:

Refers to short term inflammation and neutrophilic infiltrate.



Chronic gastritis:
referring to long standing
form and mononuclear
cell infiltrate (lymphocyte
and macrophages)

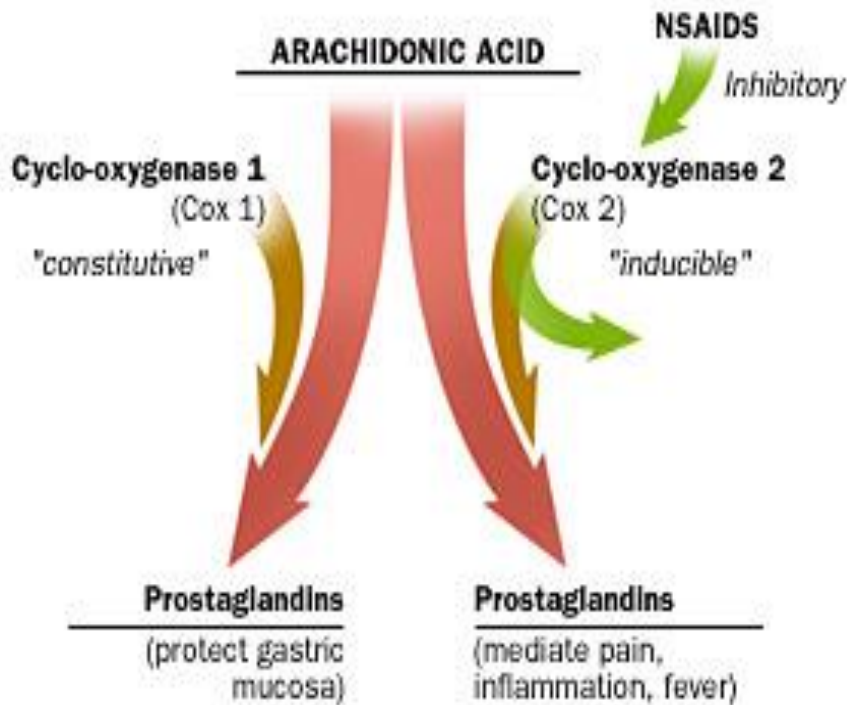


Etiology:

Frequently associated with each others:

NSAIDS

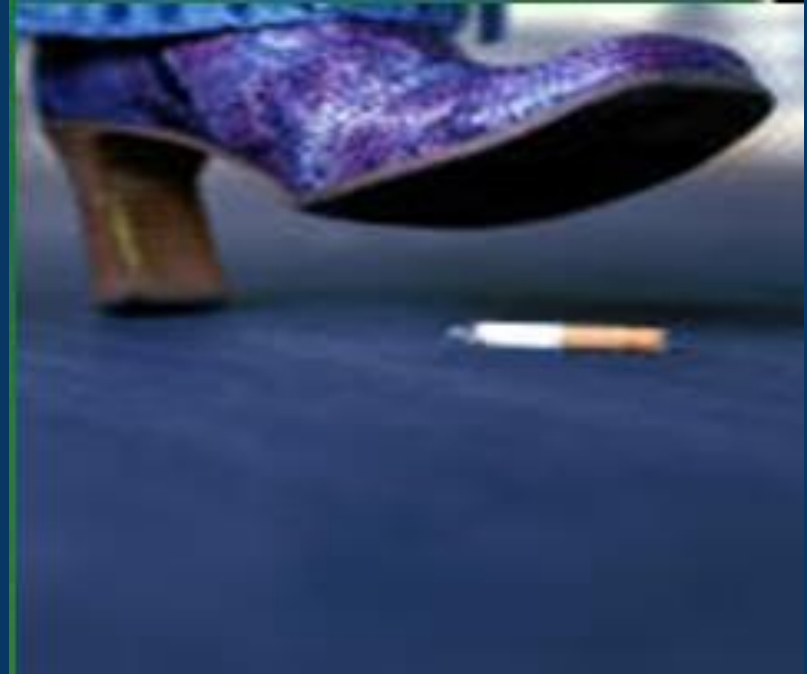
Aspirin



Heavy smoking

Mechanisms

- **Stimulate gastric acid secretion.**
- **Stimulate bile salt reflux.**
- **Causes alteration in mucosal blood flow.**
- **Decrease mucus secretion.**
- **Reduces prostaglandin synthesis.**
- **Decrease pancreatic bicarbonate secretion.**



- **Systemic infection and seriously ill patients.**

- **Severe stress e.g. trauma, burns Multiple injured patient.**

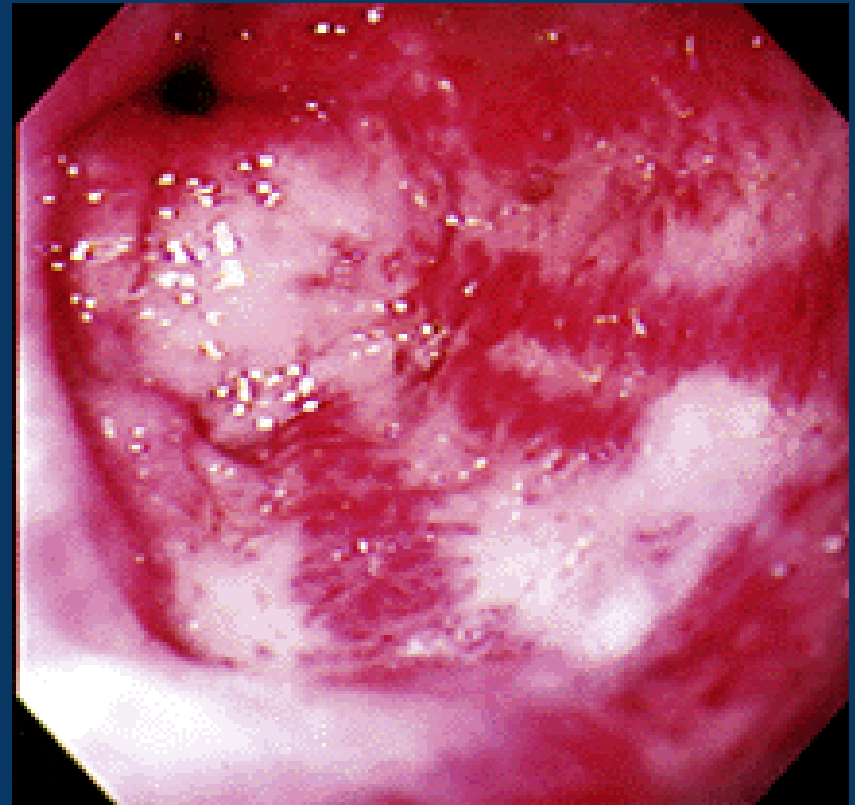
- **Surgery.**

- **Ischemia.**

- **Unrecognized until bleeding started.**

- **Difficult to Rx.**

- **Better to prevent?**



Excessive alcohol consumption.

Often, idiopathic

Stages of Acute Gastritis

Acute superficial gastritis.

An acute mucosal inflammation of superficial gastric mucosa that is usually **transient.**



Acute erosive gastritis

Destruction of multiple small zones of superficial mucosa.

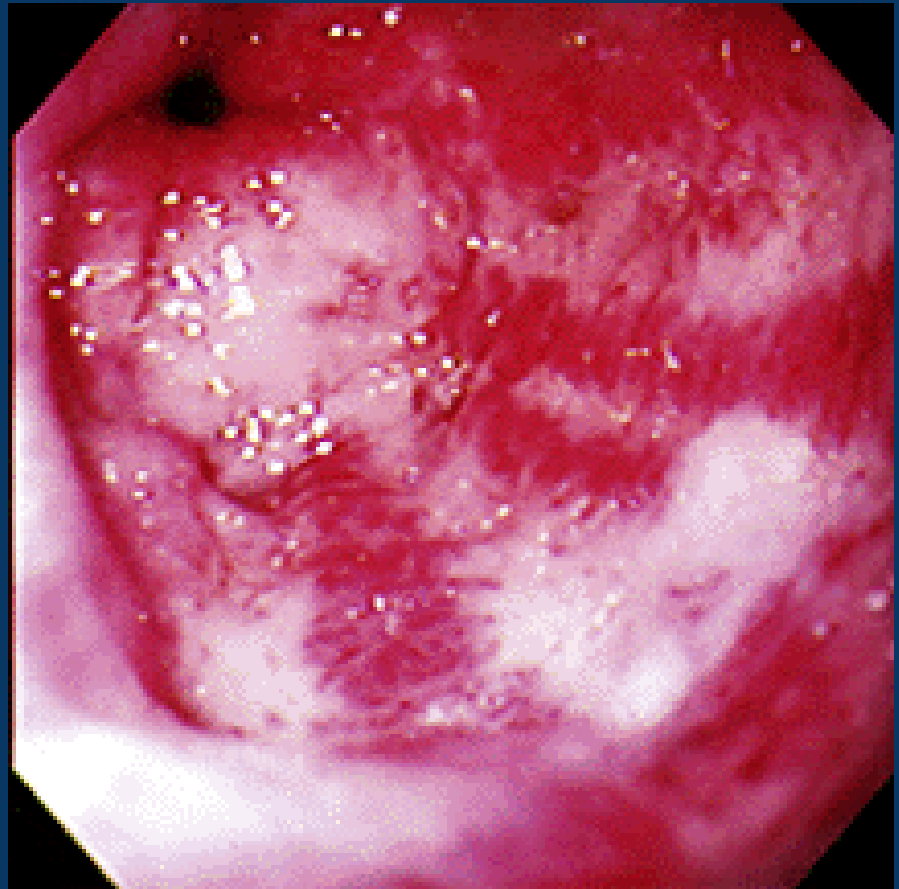
There may be hemorrhage or sloughing



Acute Gastric Ulceration

**Destruction of full
thickness of
mucosa**

**It is an important
cause of severe GI
bleeding.**



Acute Gastritis

Clinical Features

- **broad range of symptoms and signs that depend on the severity of the condition.**
 - **Asymptomatic.**
 - **Epigastric pain.**
 - **Nausea & vomiting.**
 - **Hemorrhage, massive hematemesis, Melena.**
 - **Or fatal blood loss.**

Chronic Gastritis

1- Type A Gastritis:

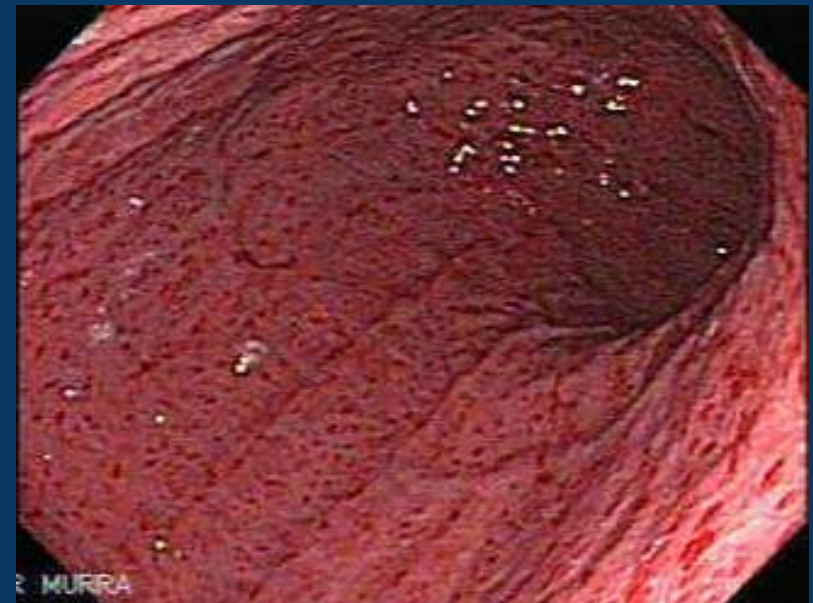
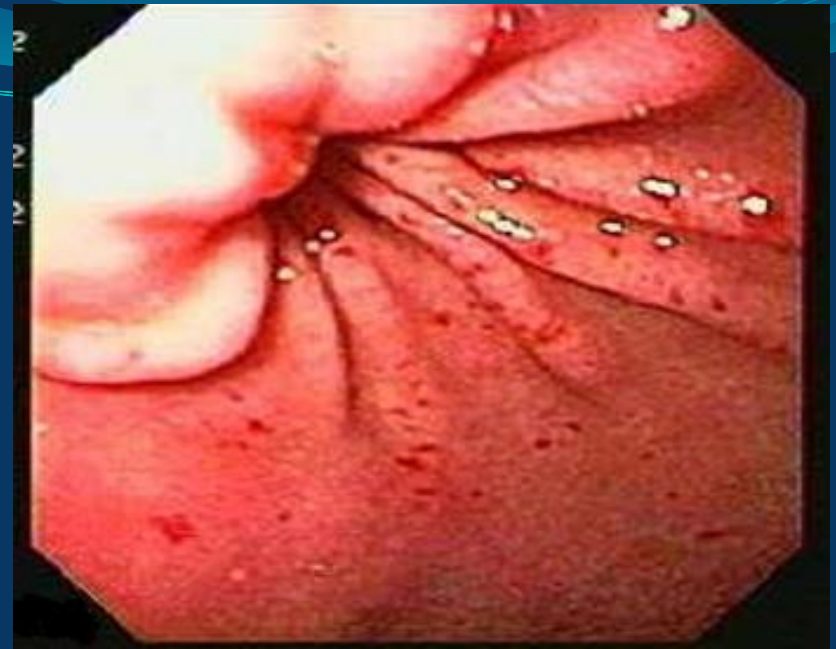
- Autoimmune antibodies against parietal cells.
- No HCl.... Achlorhydria
- No IF..... Pernicious anemia
B12 malabsorption.
- Hypergastrinemia...
- Microadenoma ECL cell.
- Premalignant.



Chronic Gastritis

2- Type B Gastritis:

- H. pylori associated.
- Mostly affect antrum.
- patients prone to peptic ulcer.
- Those with pangastritis prone to cancer.
- Pangastritis.. Metaplasia dysplasia...CA.



Chronic Gastritis

3- Reflux Gastritis:

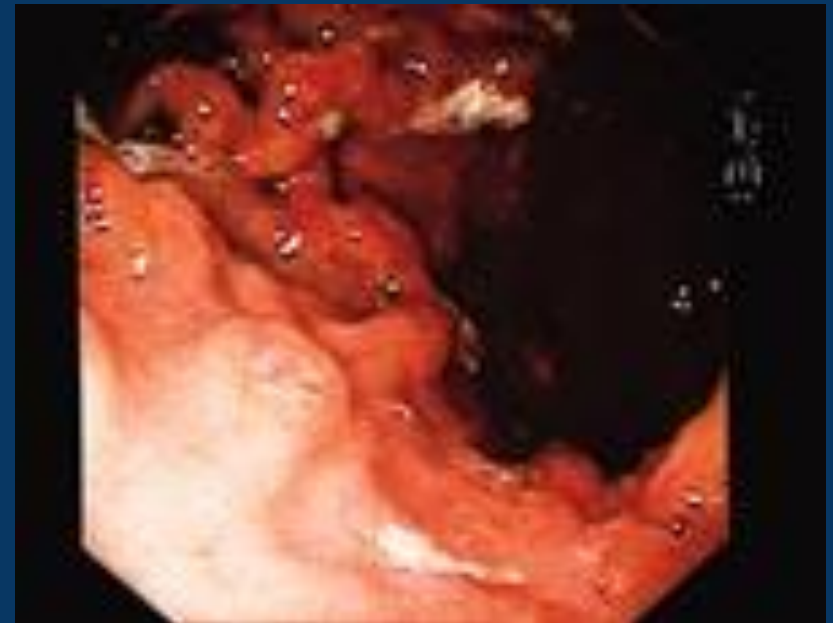
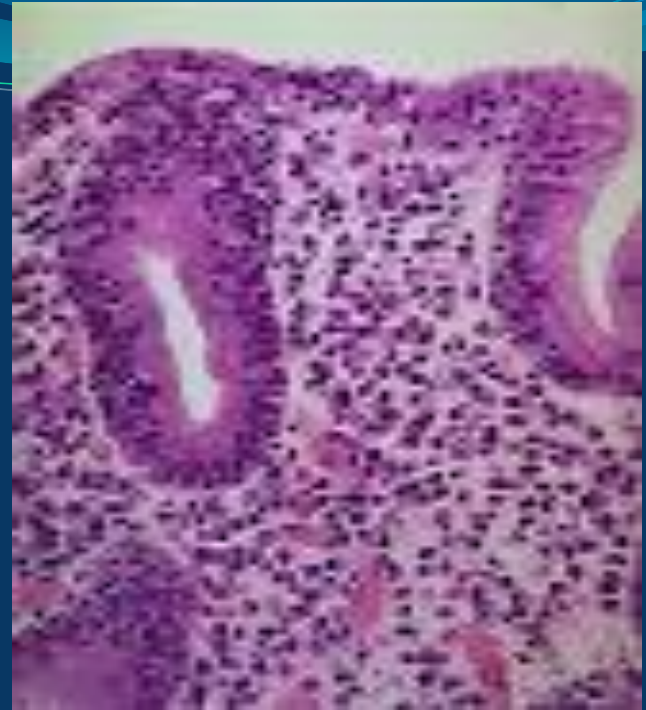
- Caused by enterogastric reflux.
- After destructive gastric surgery.
- After cholecystectomy.
- Occasionally no surgery.
- Rx.
 - Bile chelating agents.
 - prokinetic agents, domperidone
 - Surgery: severe non responsive patients.



Chronic Gastritis

4- Lymphocytic gastritis

- Rare.
- T cell infiltration.
- Probably H pylori infection.



Other Gastritis

- **Eosinophilic gastritis: allergic basis . Treated by steroid, cromoglycate.**
- **Granulomatous Gastritis: in Crohn's and Tuberculosis.**
- **AIDS Gastritis: Cryptosporidium.**
- **Phlegmonous Gastritis: bacterial**

Clinical Features of chronic gastritis:

Usually only a few symptoms:

- **Nausea.**
- **Vomiting.**
- **Upper abdominal discomfort.**

Hypertrophic gastritis

➤ **What is hypertrophic gastritis?????????**

➤ **Types???????**