

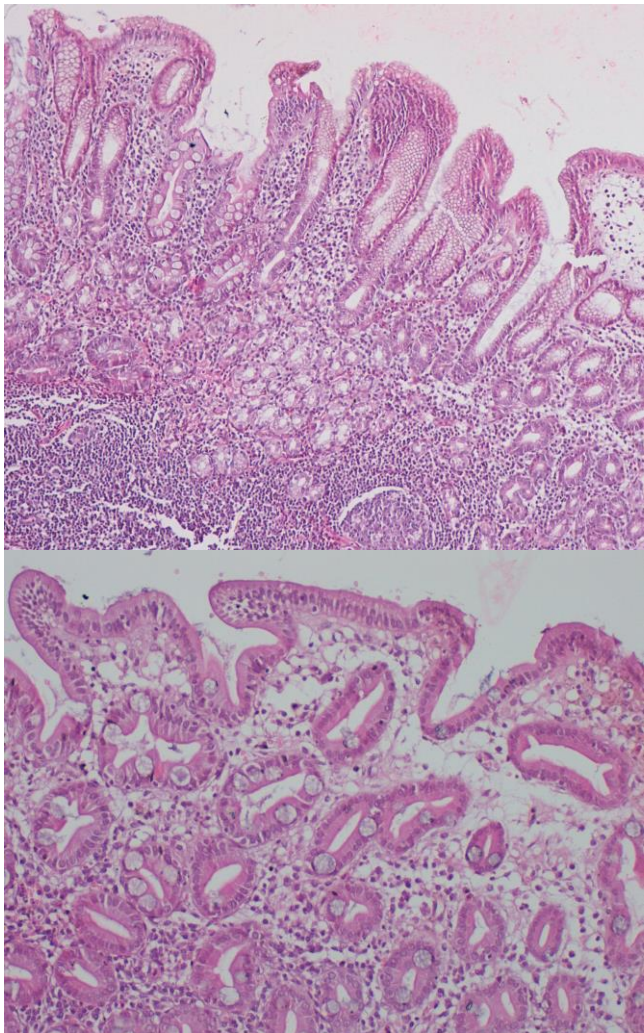
Slide section 2

Digestive System's Pathology

Slides:

- Chronic gastritis.
- Chronic peptic gastric ulcer.
- Gastric denocarcinoma.
- Chronic active hepatitis.
- Liver chirrhosis.

Stain: HE

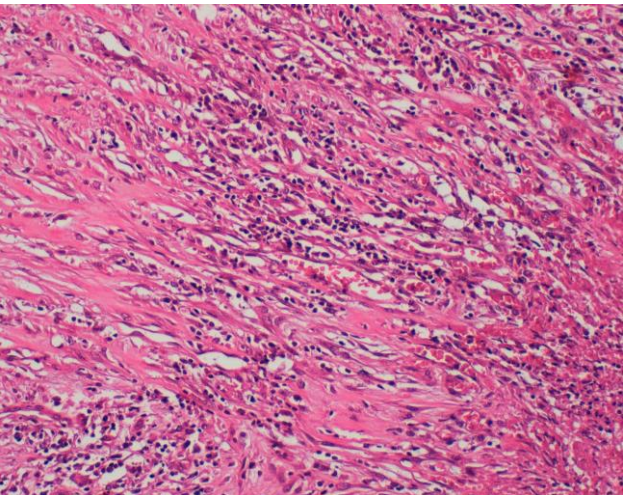
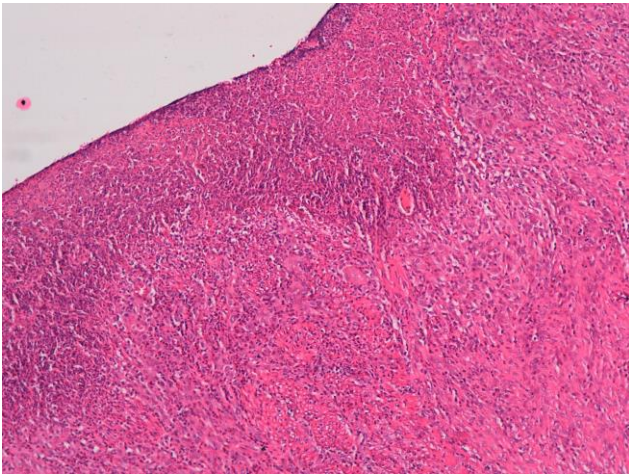
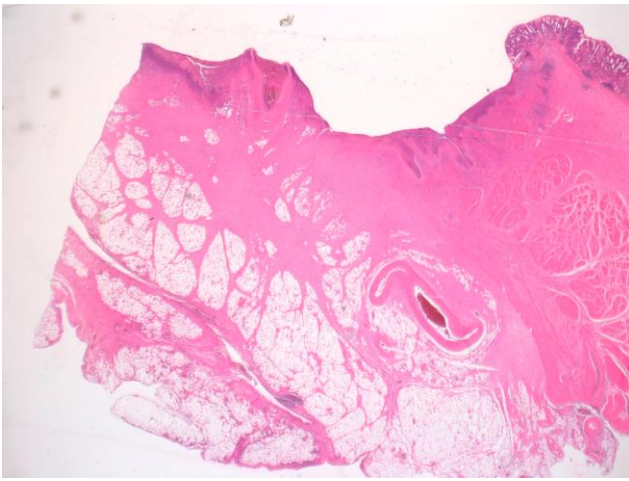


Organ: **Stomach / Gastric mucosa**

Lesion : **Chronic gastritis**

Definition: The presence of chronic mucosal inflammatory changes leading to mucosal atrophy and epithelial metaplasia in the absence of erosions.

- Proeminent chronic interstitial inflammation in the lamina propria towards muscularis mucosa: diffuse infiltration by lymphocytes, plasma cells; sometimes lymphoid cells are arranged in follicles; focal neutrophilic invasion.
- Reduction in the number of glands with focal replacement of the gastric epithelium with cells of intestinal type (goblet cells, enterocytes, Paneth cells) = *intestinal metaplasia*.



Organ: **Stomach**

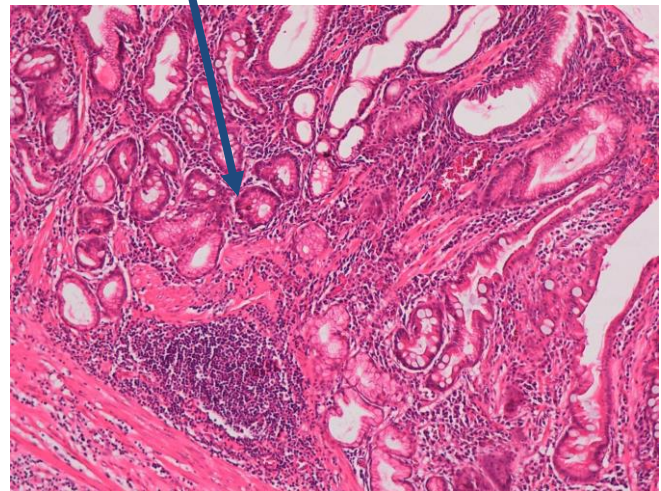
Lesion : **Chronic peptic gastric ulcer.**

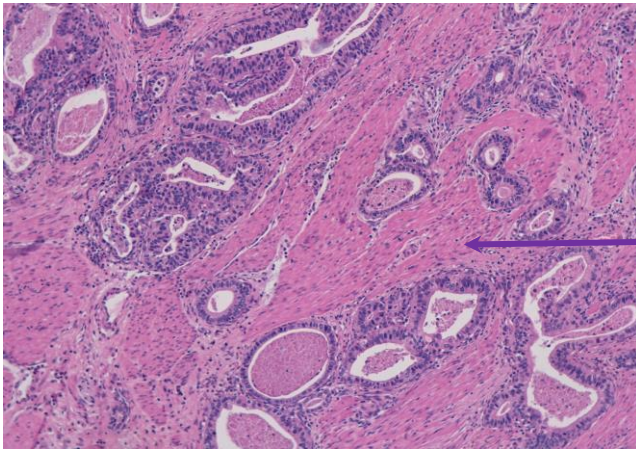
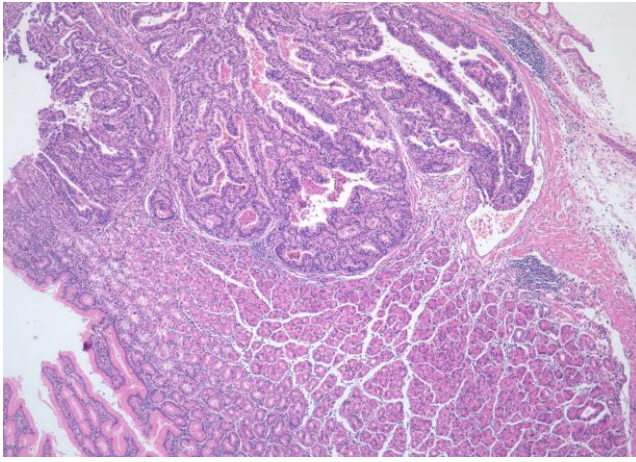
Definition: a break in the mucosa of the stomach that involves the muscular coat.

The base of the ulcer presents from the lumen outward 4 zones:

- Fibrino-purulent debris.
- Necrotic material (fibrinoid necrosis).
- Granulation tissue and inflammatory mononuclear infiltrate.
- Fibrotic / scar tissue interrupting the muscular layer (not visible on most slides).

The mucosa at the margins of the ulcer presents chronic gastritis.





Organ: **Stomach**

Lesion : **Adenocarcinoma.**

Definition: Malignant glandular proliferation that originates from mucous cells of the superficial epithelium of the stomach or from areas of intestinal metaplasia.

The tumor presents crowded, malignant glands lined by more than one layer of malignant cells (atypical cells with large, pleomorphic, hyperchromatic nuclei) and irregular lumen due to numerous papillary projections.

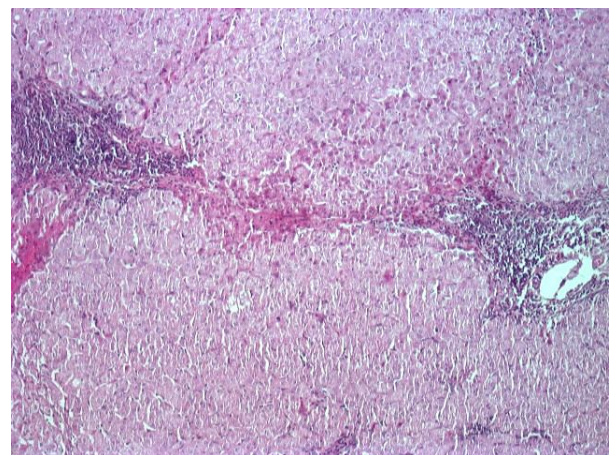
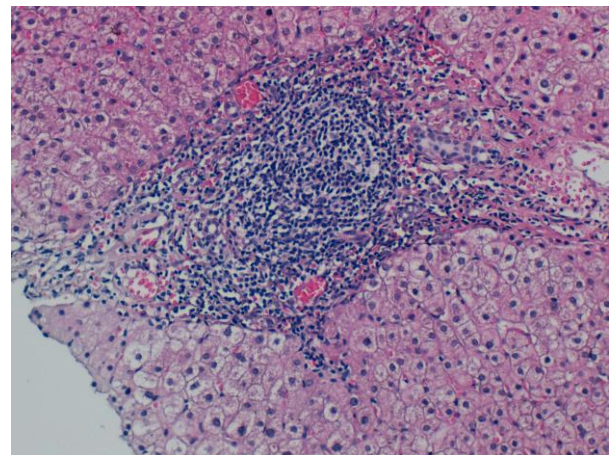
The smooth muscle bundles are fragmented and distorted by adenocarcinomatous broad invasion.

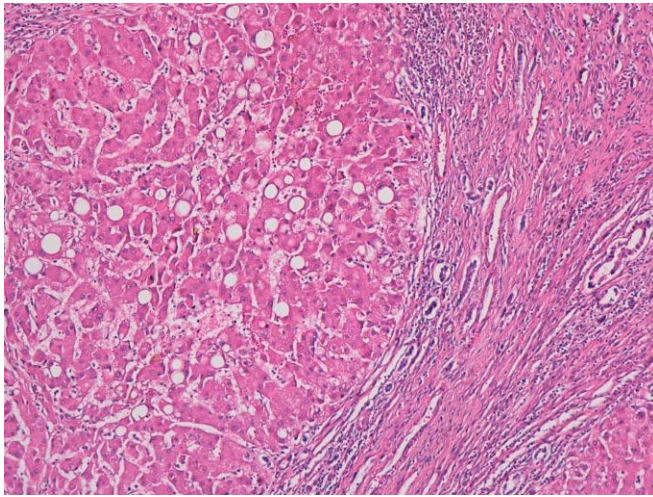
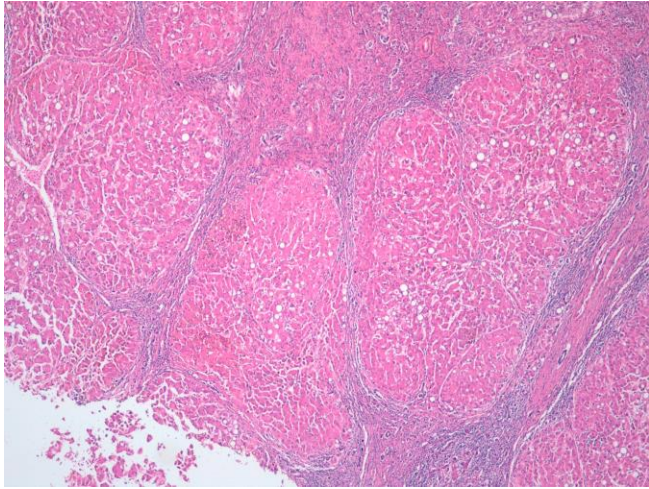
Organ: **Liver**

Lesion : **Chronic active hepatitis.**

Definition: A necrotizing inflammatory disease that may progress to cirrhosis.

- The portal tracts are densely infiltrated by lymphocytes, macrophages and sometimes plasma cells.
- The inflammation penetrates the limiting plate and surrounds individual hepatocytes and groups of hepatocytes on the borders of the portal tracts, that may become necrotic = *piecemeal necrosis / interface hepatitis*.
- There is scanty intralobular inflammatory infiltrate, periportal single-cell necrosis and hydropic swelling of hepatocytes.
- A striking aspect is the presence of inflamed connective tissue (lymphocytes + collagen fibers) disposed in strands between adjacent portal tracts and central veins = *bridging necrosis*. This represents an obvious sign of rapid progression to cirrhosis.





Organ: Liver

Lesion : Cirrhosis.

Definition: A destruction of the normal hepatic architecture by fibrous septa that encompass regenerative nodules of hepatocytes.

- The normal and portal architecture has disappeared.
- The surviving hepatocytes proliferate randomly, some presenting fatty change.
- The connective septa separating the nodules are wide, irregular, containing numerous mononuclear inflammatory cells, fibroblasts, collagen fibres and proliferated bile ductules.