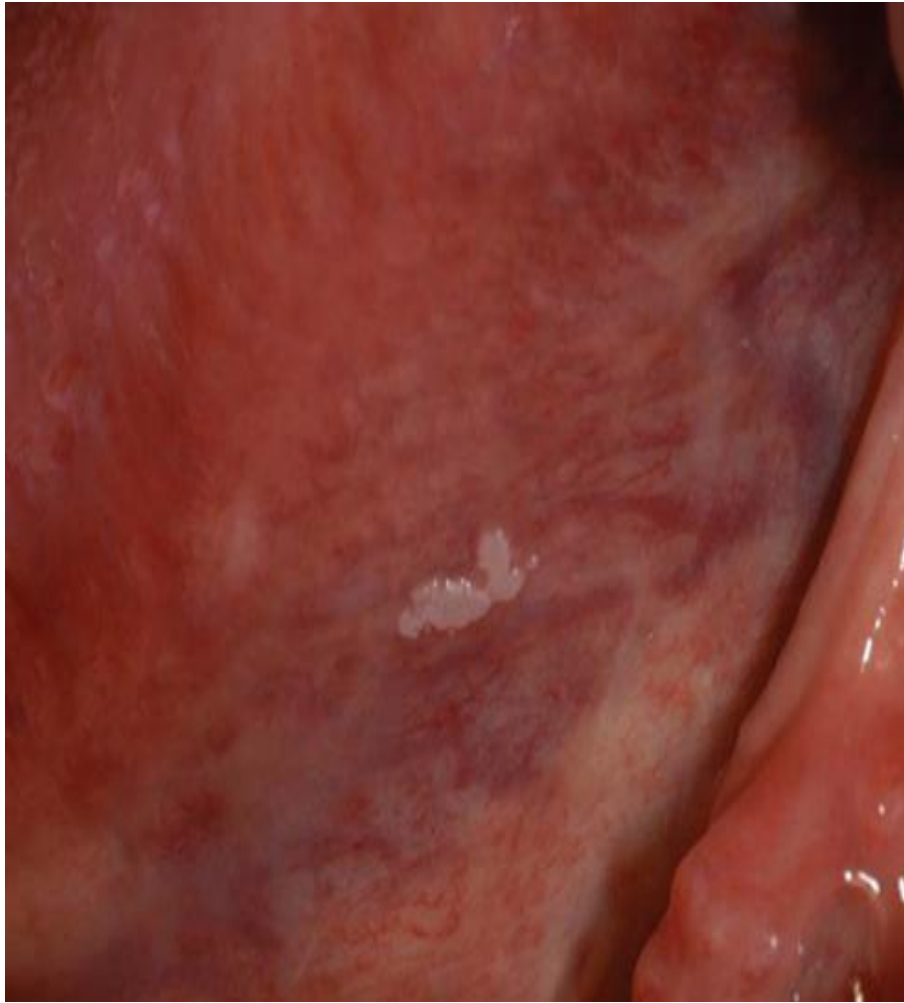
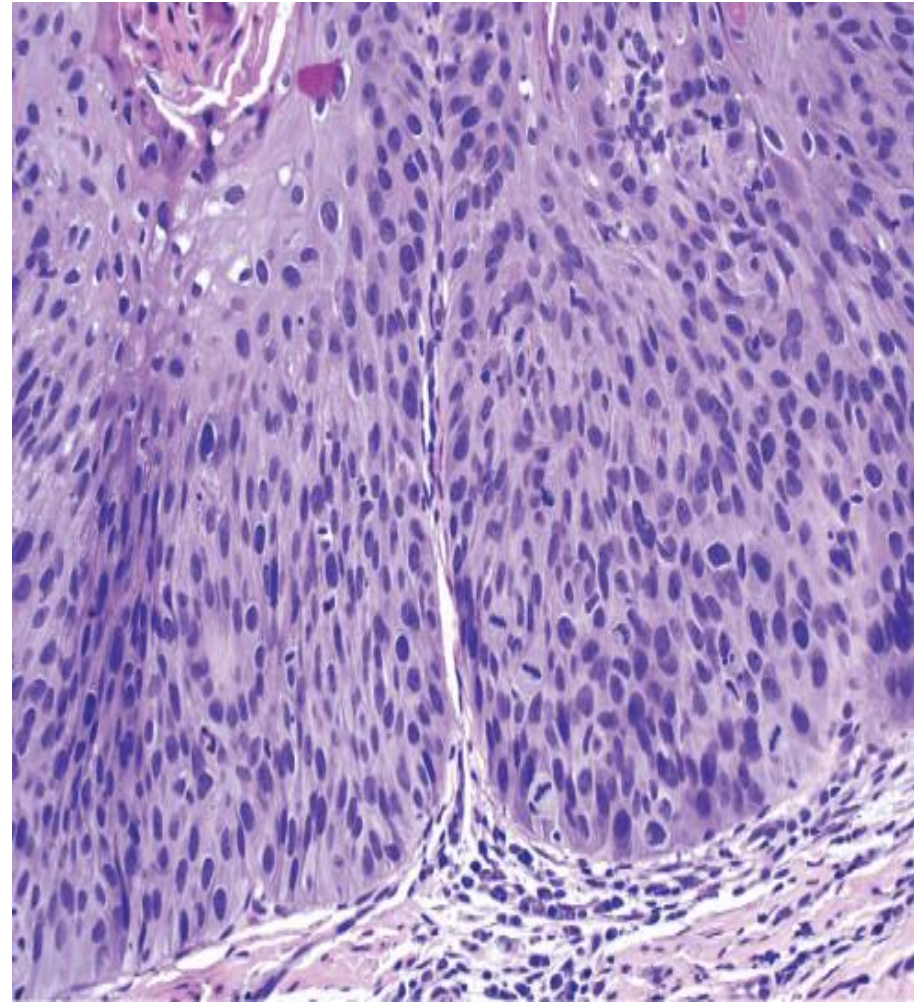


Leukoplakia



Leukoplakia



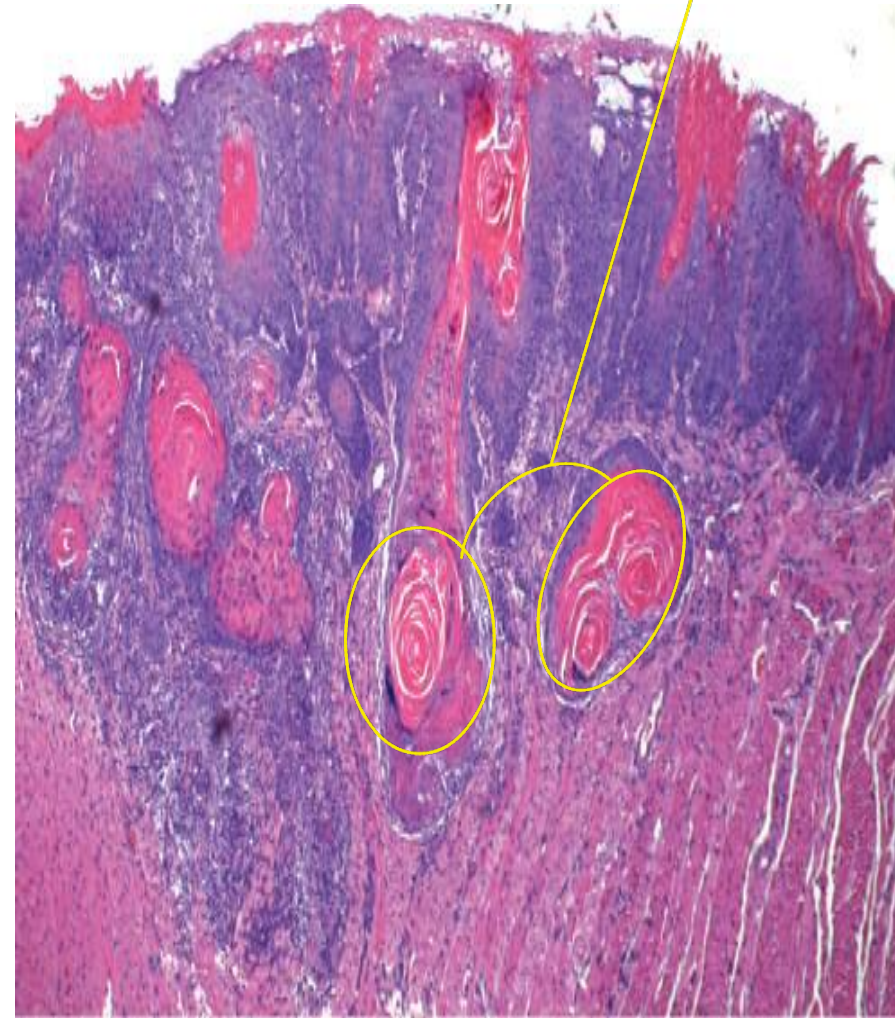
High Grade Dysplasia

Squamous Cell Carcinoma



"Red lesion"
"Erythmoplacia"

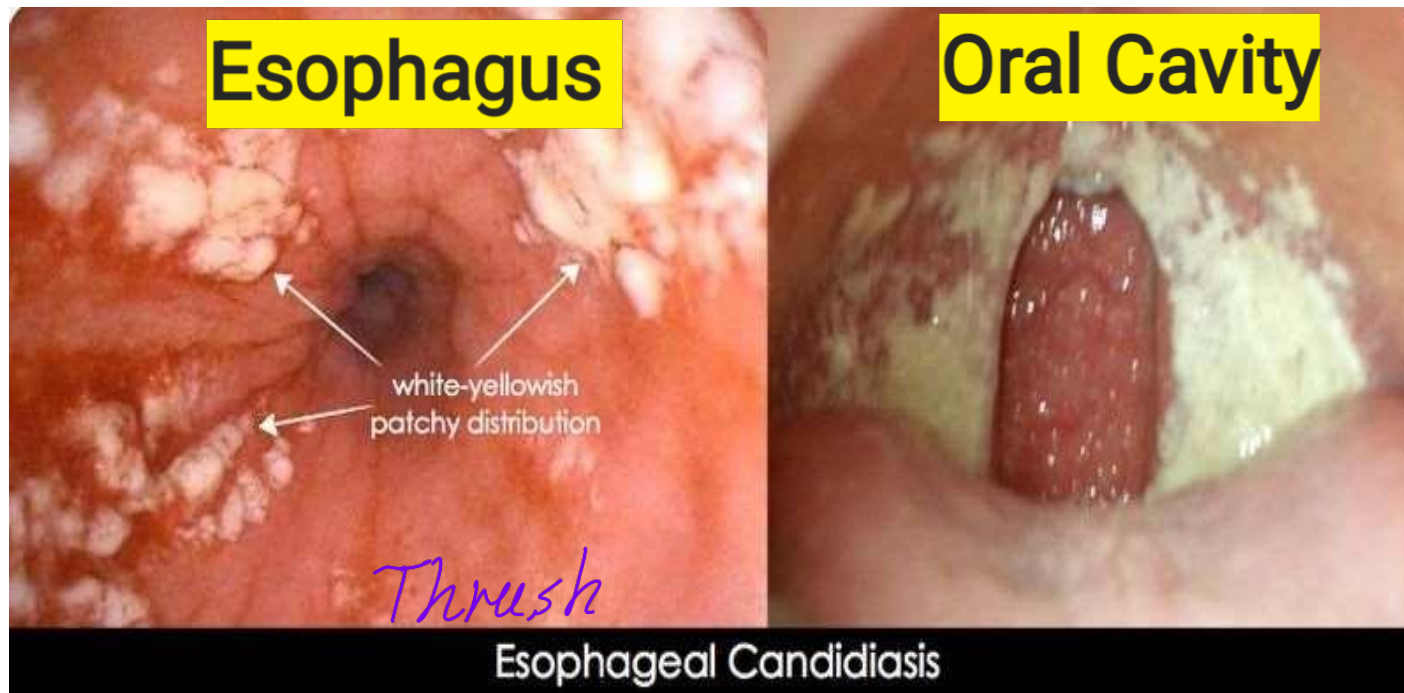
white
lesion



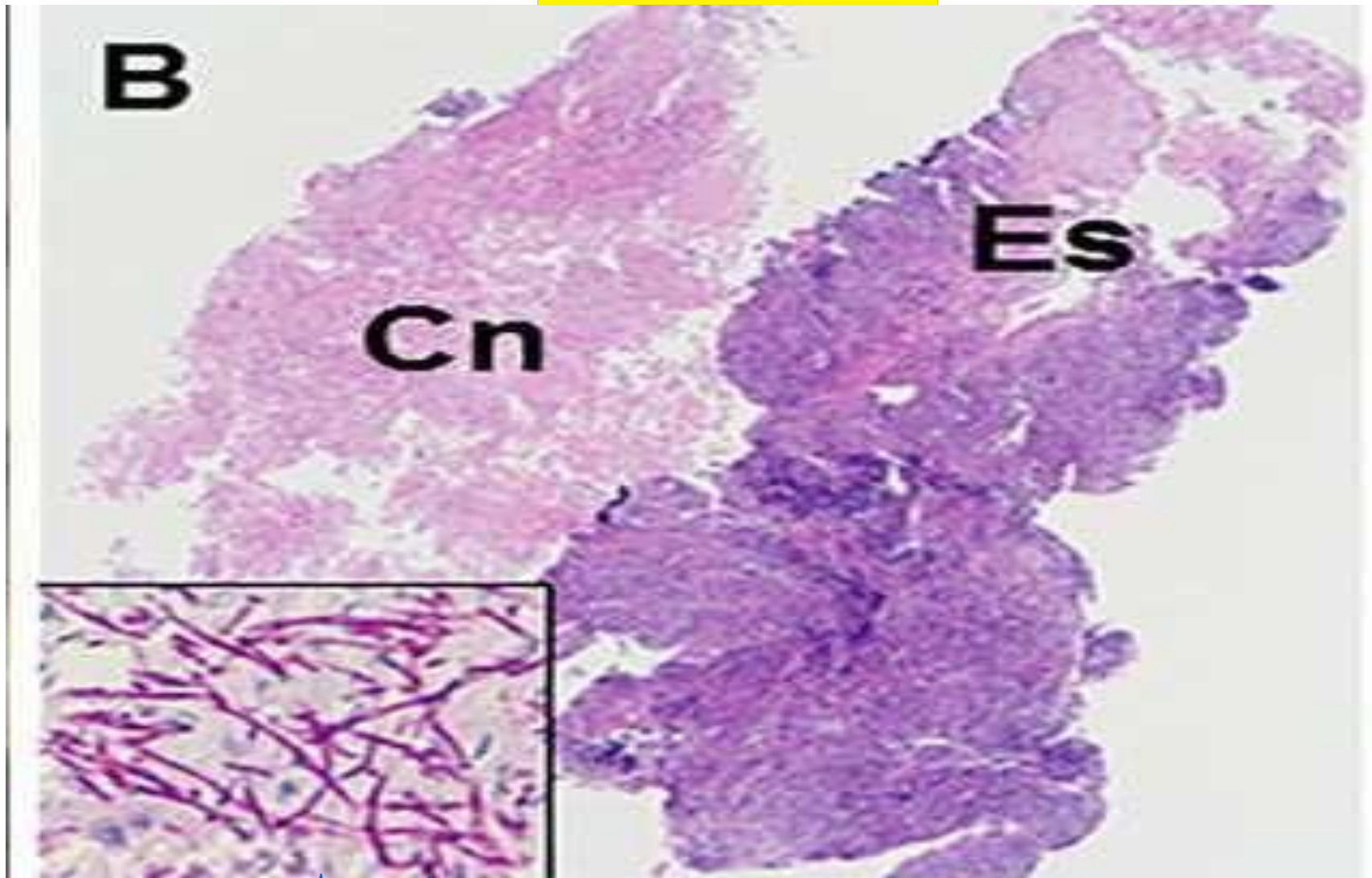
Keratin

Squamous Cell Carcinoma

- ▮ Candidiasis :
- ▮ Adherent.
- ▮ Gray-white pseudomembranes
- ▮ Composed of matted fungal hyphae and inflammatory cells



Candidiasis

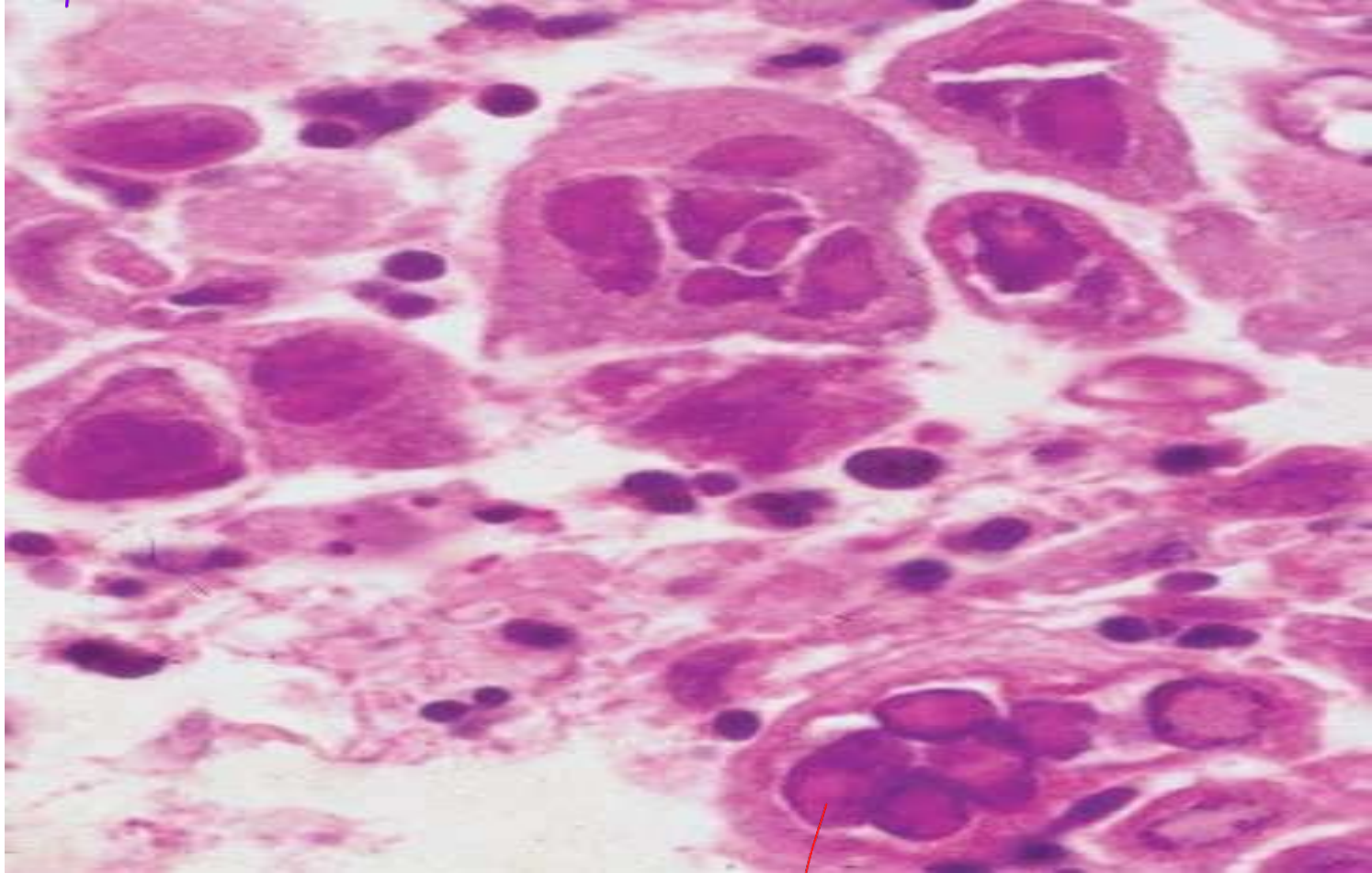


pseud hyphae

~~www.researchgate.net/publication/285369734_Esophageal_Candidiasis_as_the_Initial_Manifestation_of_Acute_Myeloid_Leukemia~~

- 1) Giant Cell
- 2) HSV-1
- 3) Inter Nuclear viral Inclusion
- 4) Eosinophilia

Herpes Simplex Virus



لونینہ
فحہ کلہ مکان فحہ لہ
GIT

Robbins Basic Pathology 10th edition

2
inclusions

CMV :

Shallower ulcerations.

Biopsy: nuclear and cytoplasmic inclusions in capillary
endothelium and stromal cells



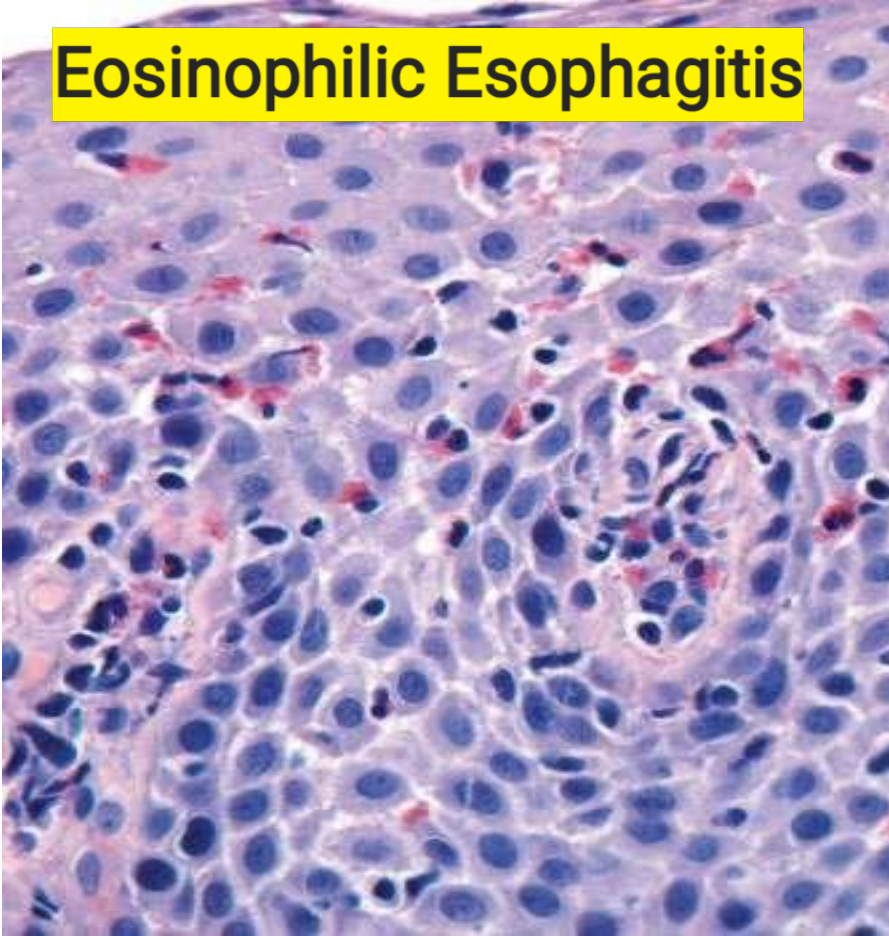
Indicate
Normal
cell

this is
Giant
cell

Cytoplasmic
Inclusion

مٹنہ بینکا و پیت Reflux

Eosinophilic Esophagitis



- 1-) Eosinophile
کثیر
- 2-) Spongiosis.

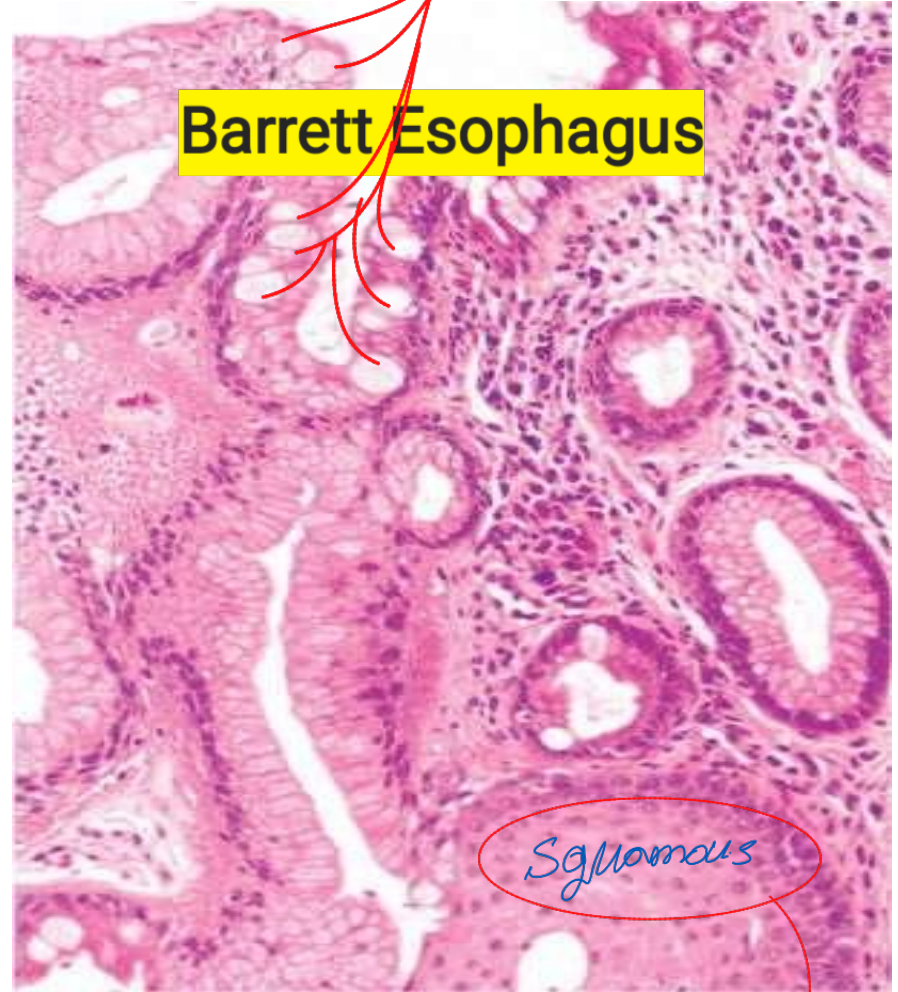
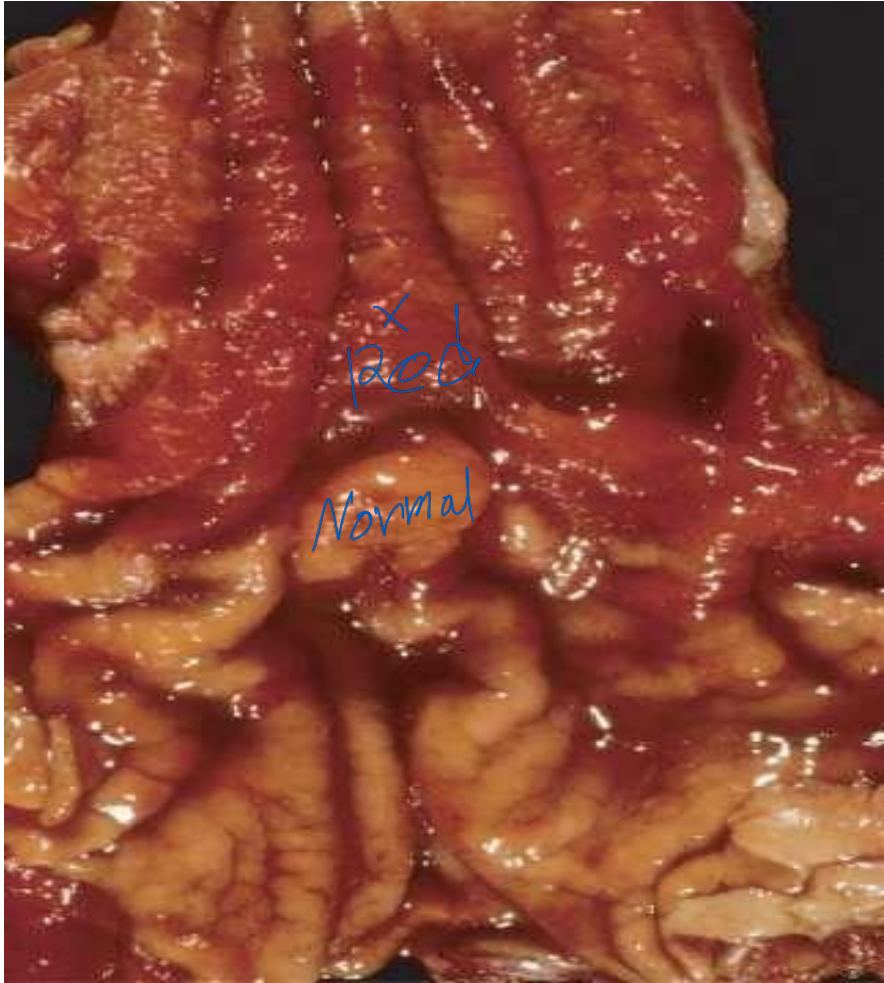
Eosinophilic Esophagitis



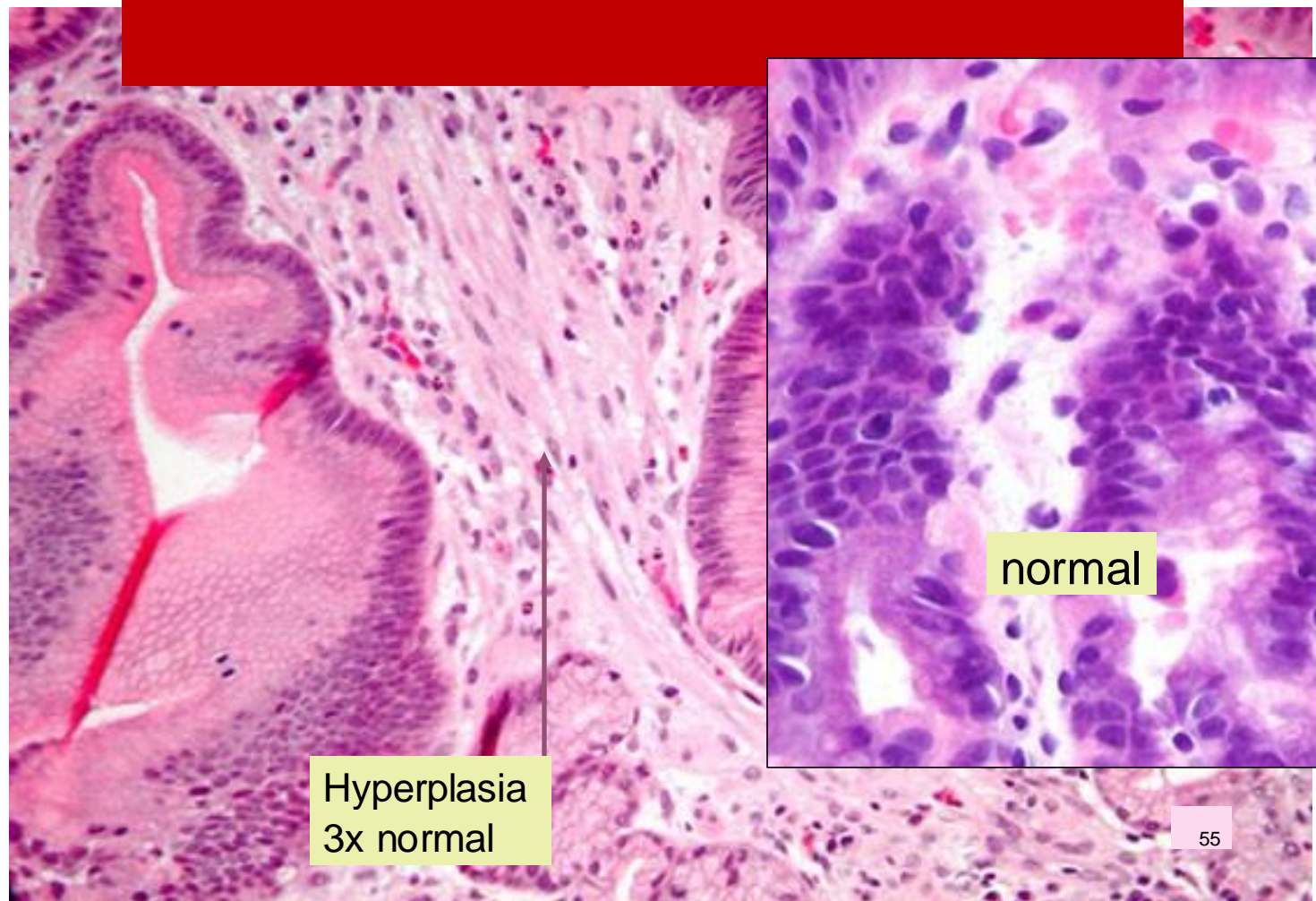
Ring like / Trachea like
Robbins Basic Pathology 10th edition

مستطوي مكمل
Complete
Barrett
"Goblet Cells" فيه

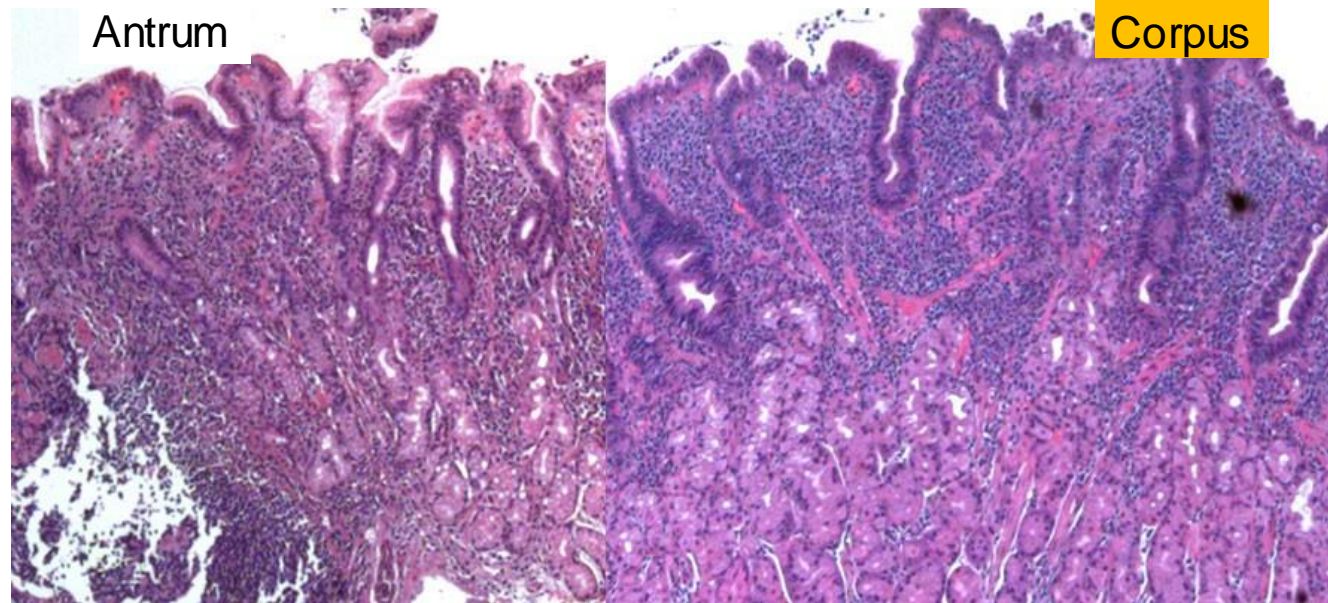
Intestinal with
Goblet Cells



Reactive Chemical Gastropathy



And *later* H. Pylori Gastritis



Pan-Gastritis with deeper inflammation in ! corpus

علسانہ

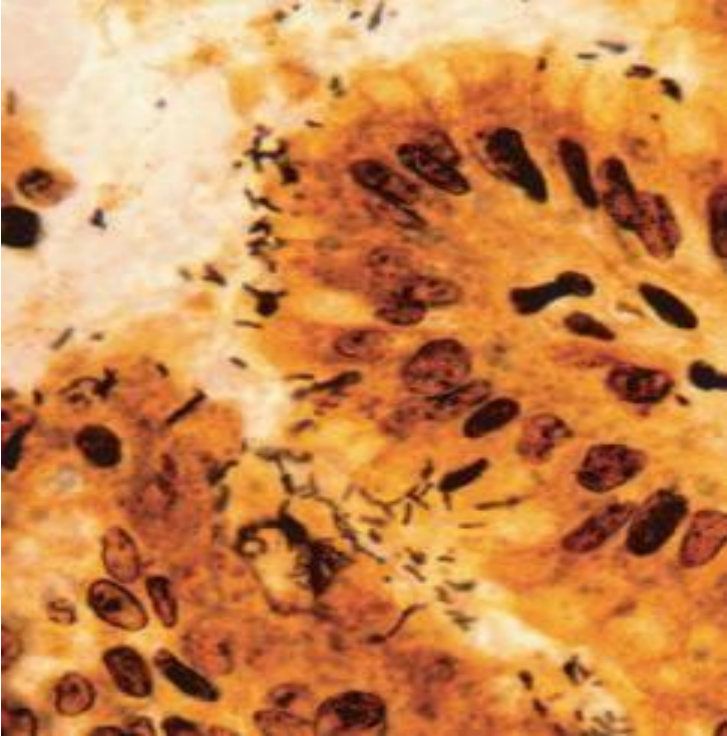
نہرفہ اڈا

حیتوں کے ایک

Cancer

اور

Gastritis

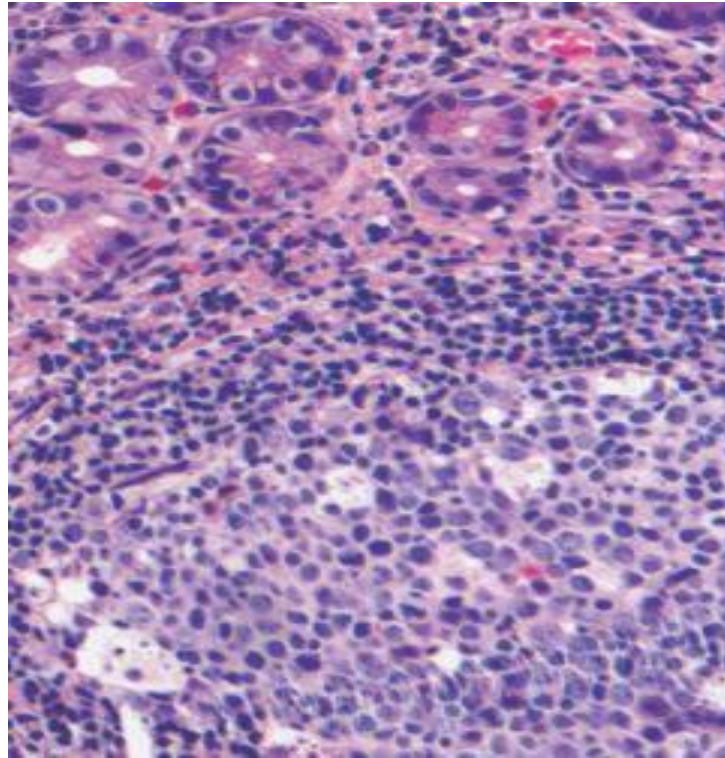


Martini Stain

S?

warfin

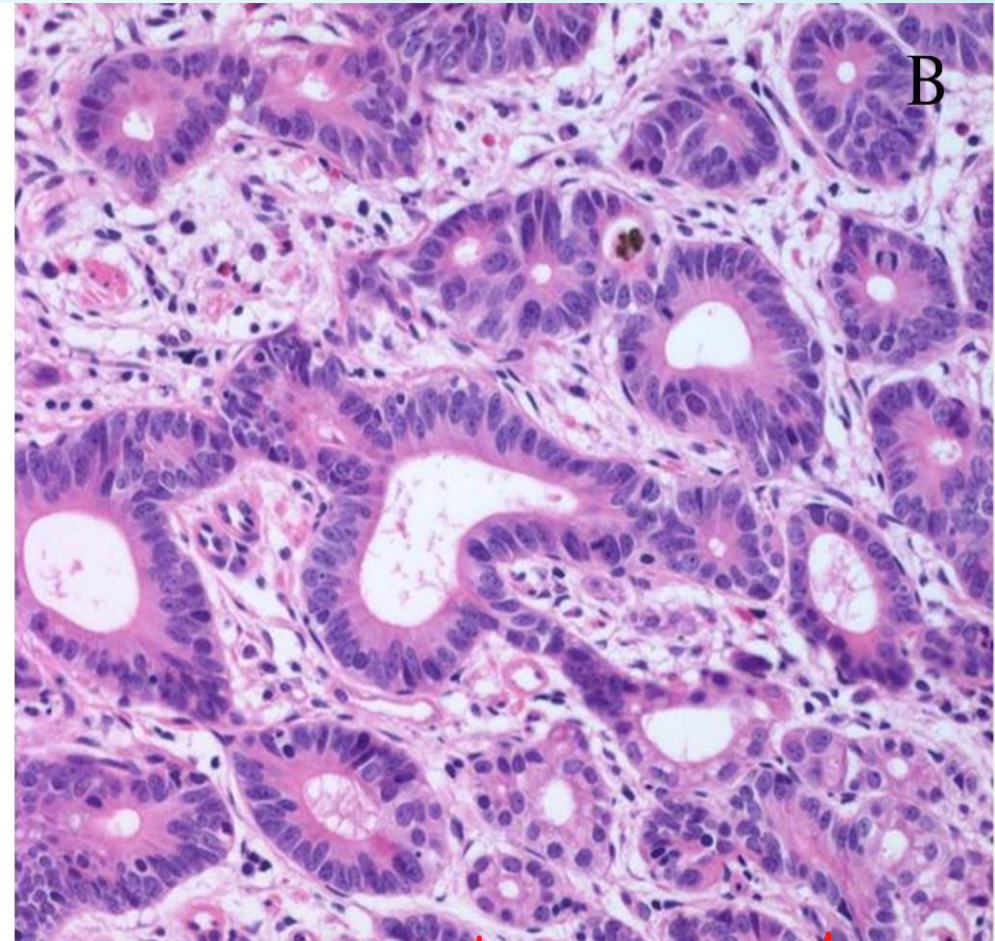
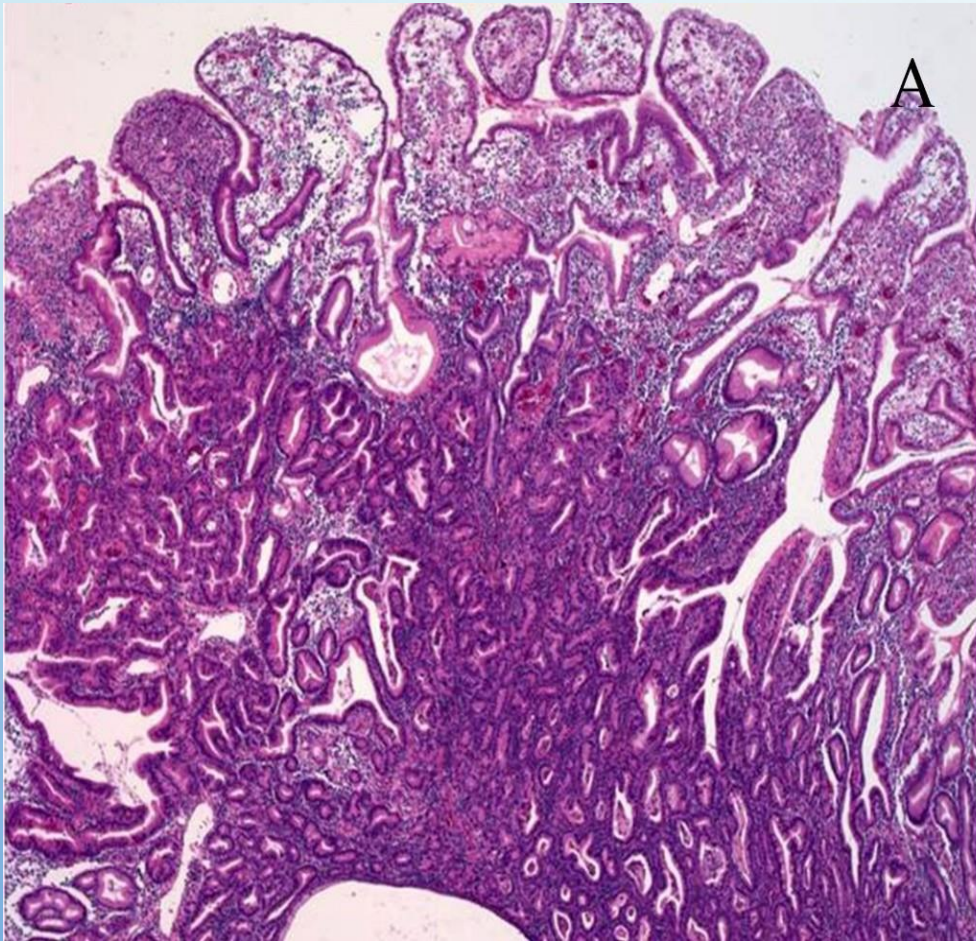
??



Eosinophills



GASTRIC ADENOMA



Displastic Gland

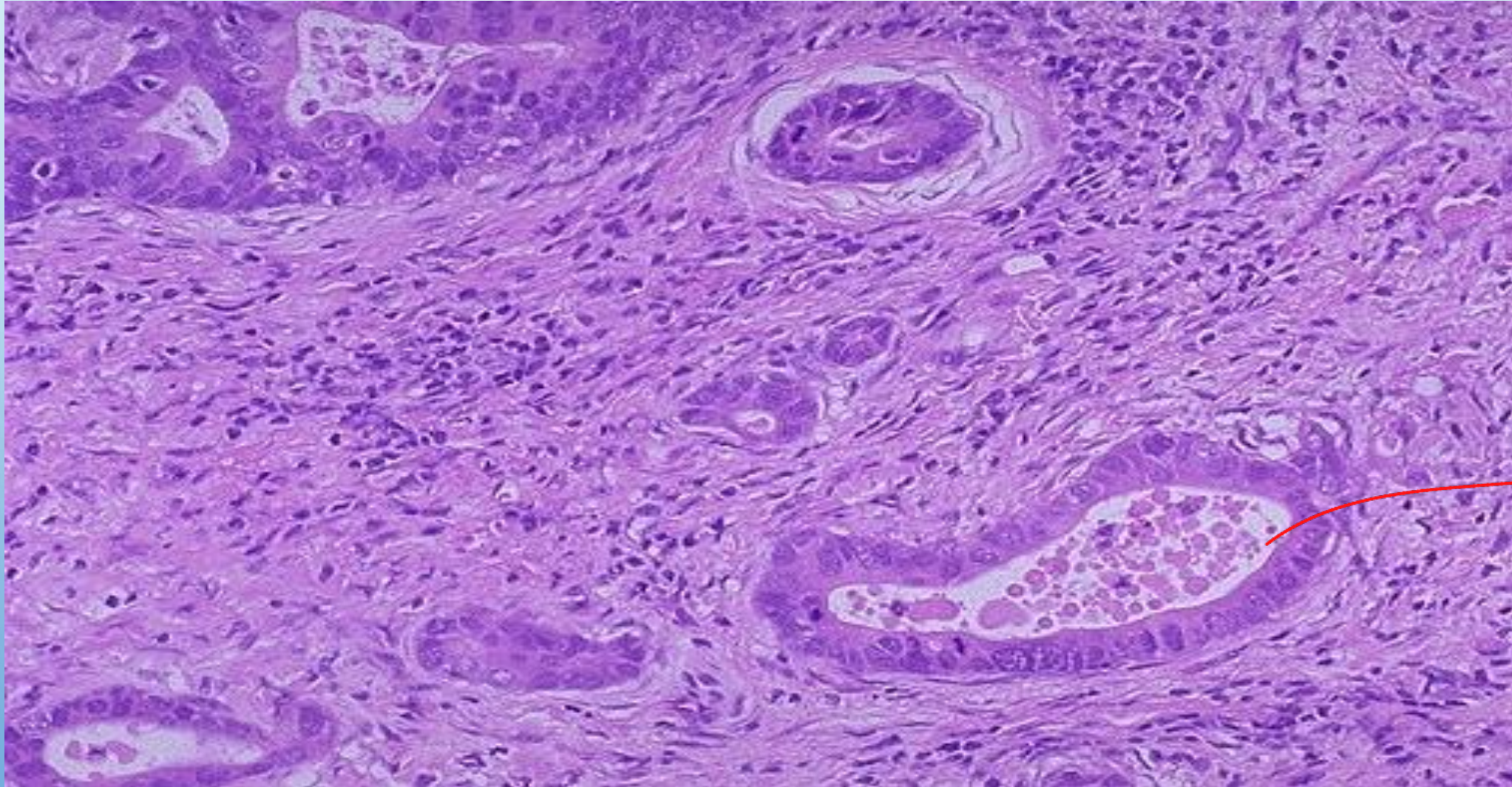
Elderly

INTESTINAL TYPE

بعض Mass
وليس تخليق



INTESTINAL TYPE



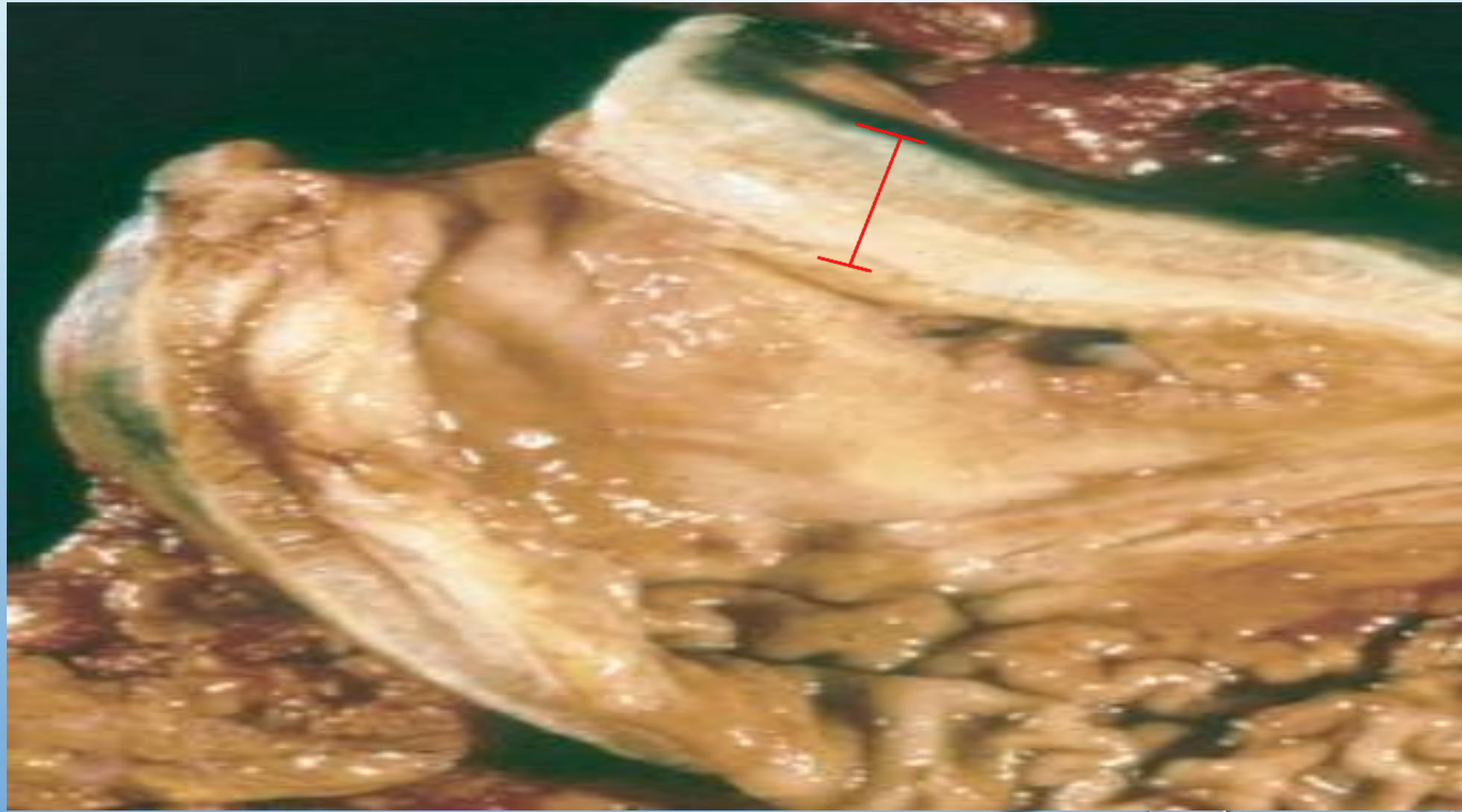
Malignant
Gland

بعض الكائنات
وليس Mass

young

LINITIS PLASTICA

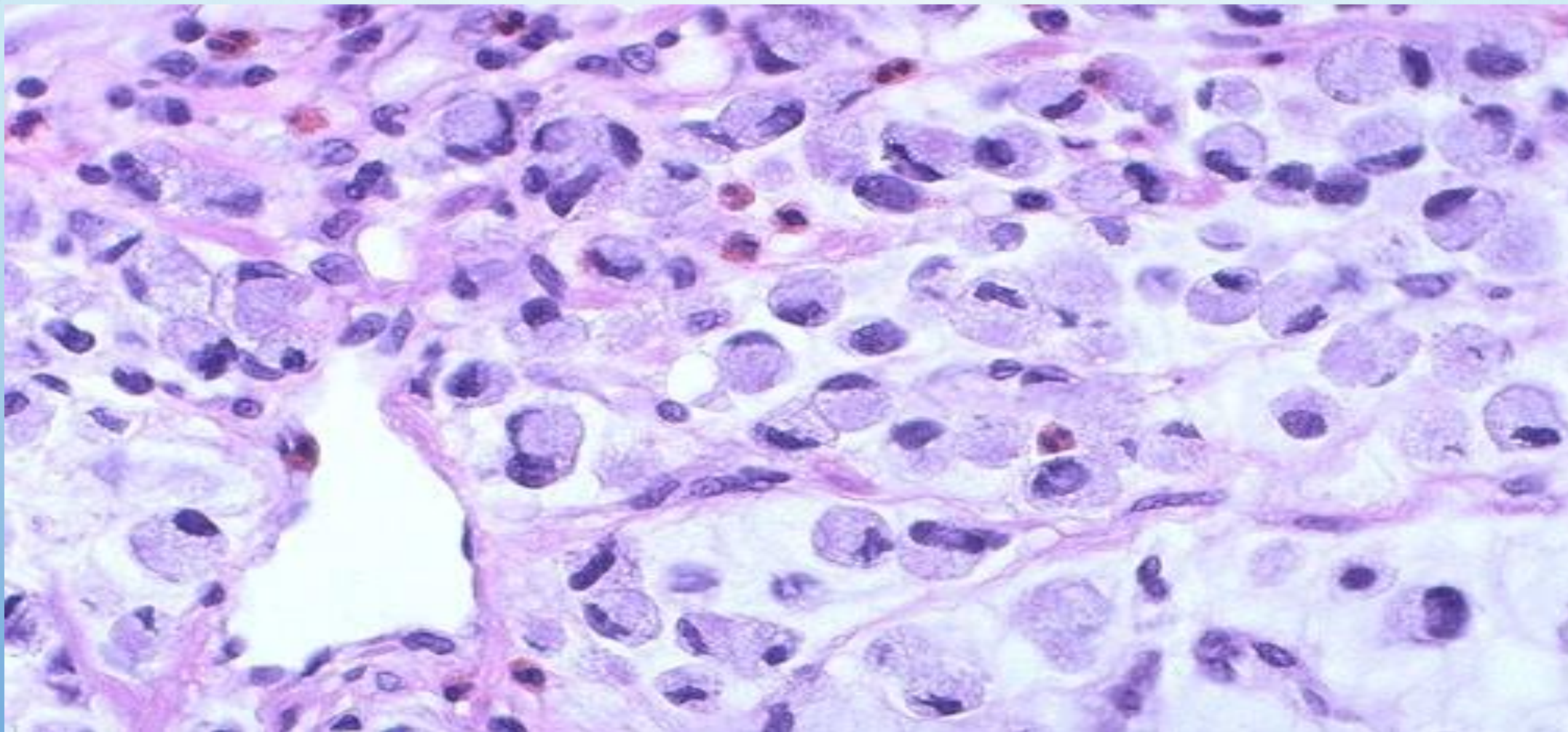
بطانة Line



DIFFUSE TYPE, SIGNET RING CELLS

precursor

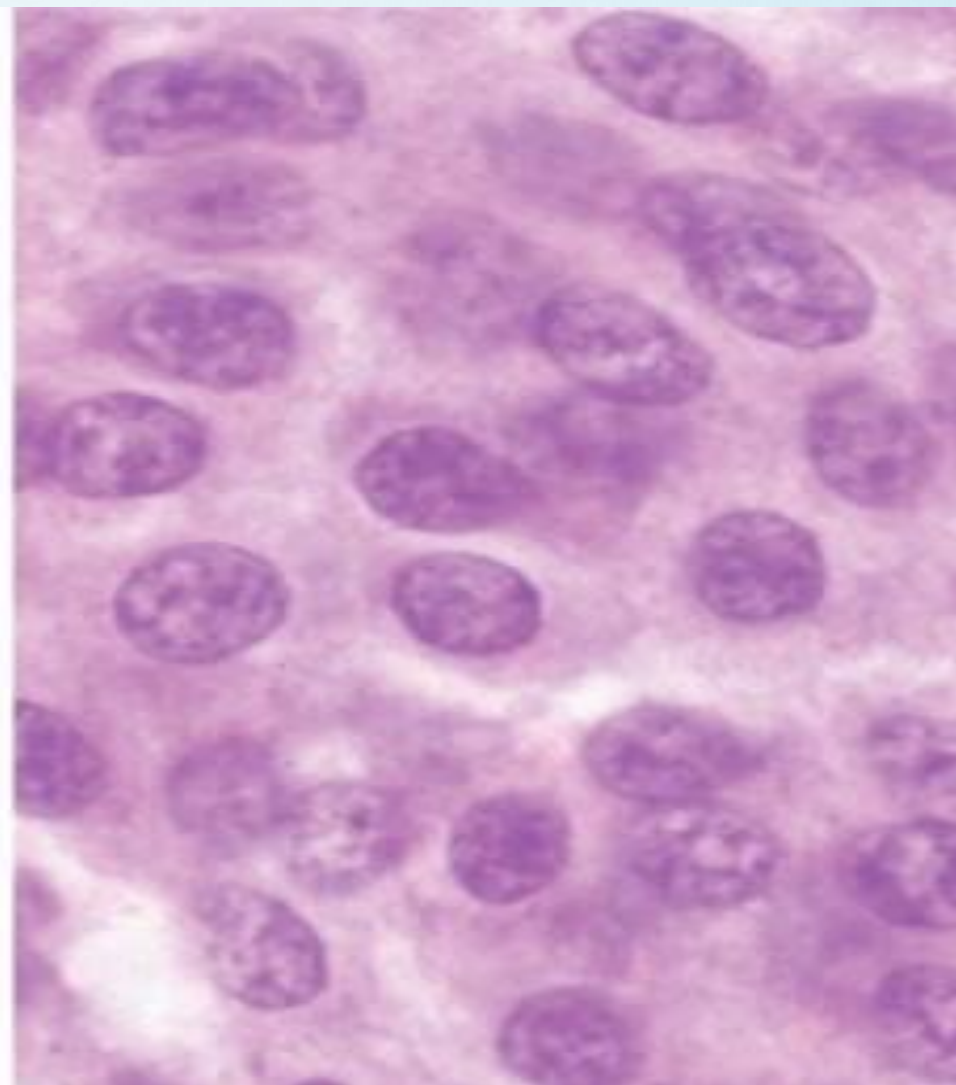
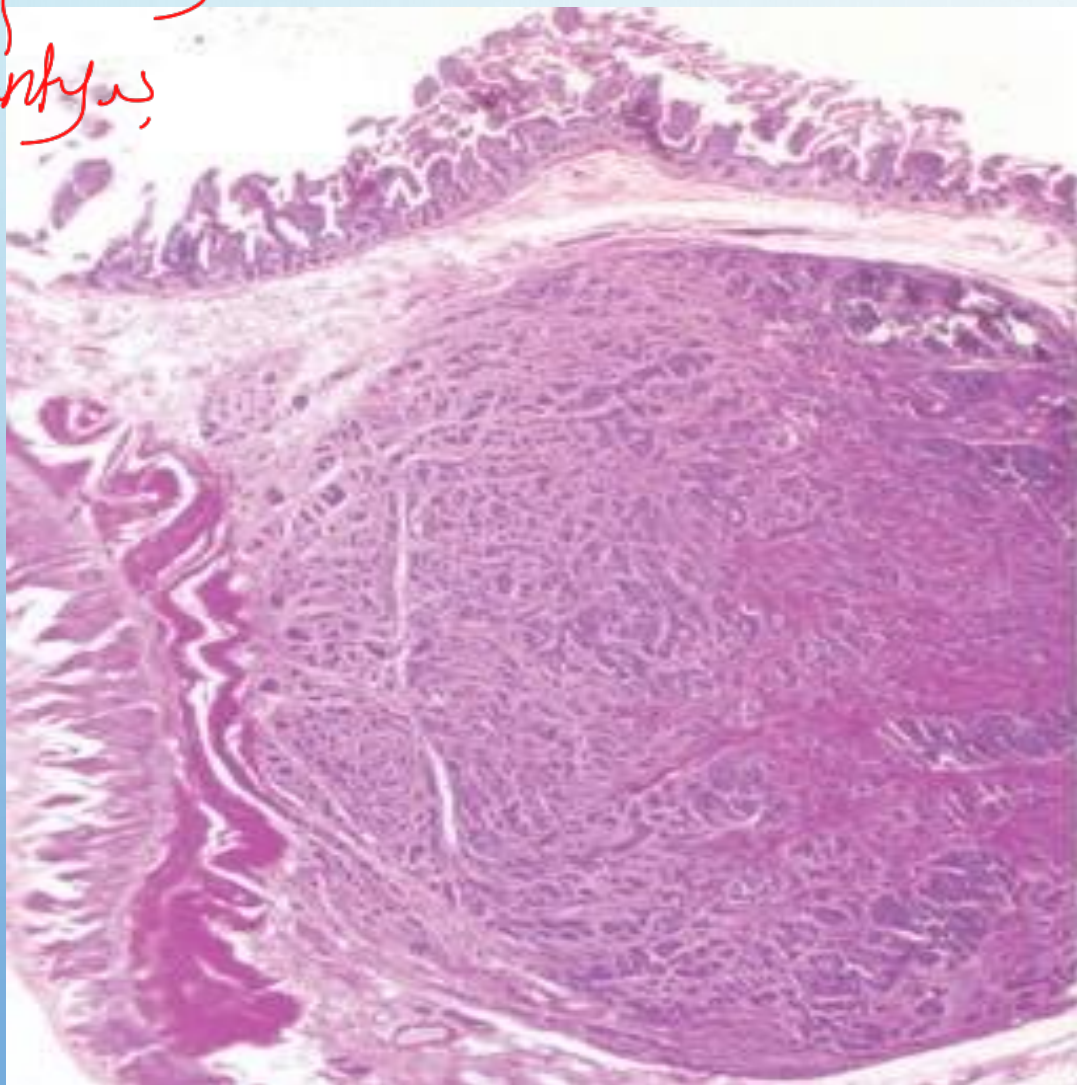
4/3 6



E cadherin loss

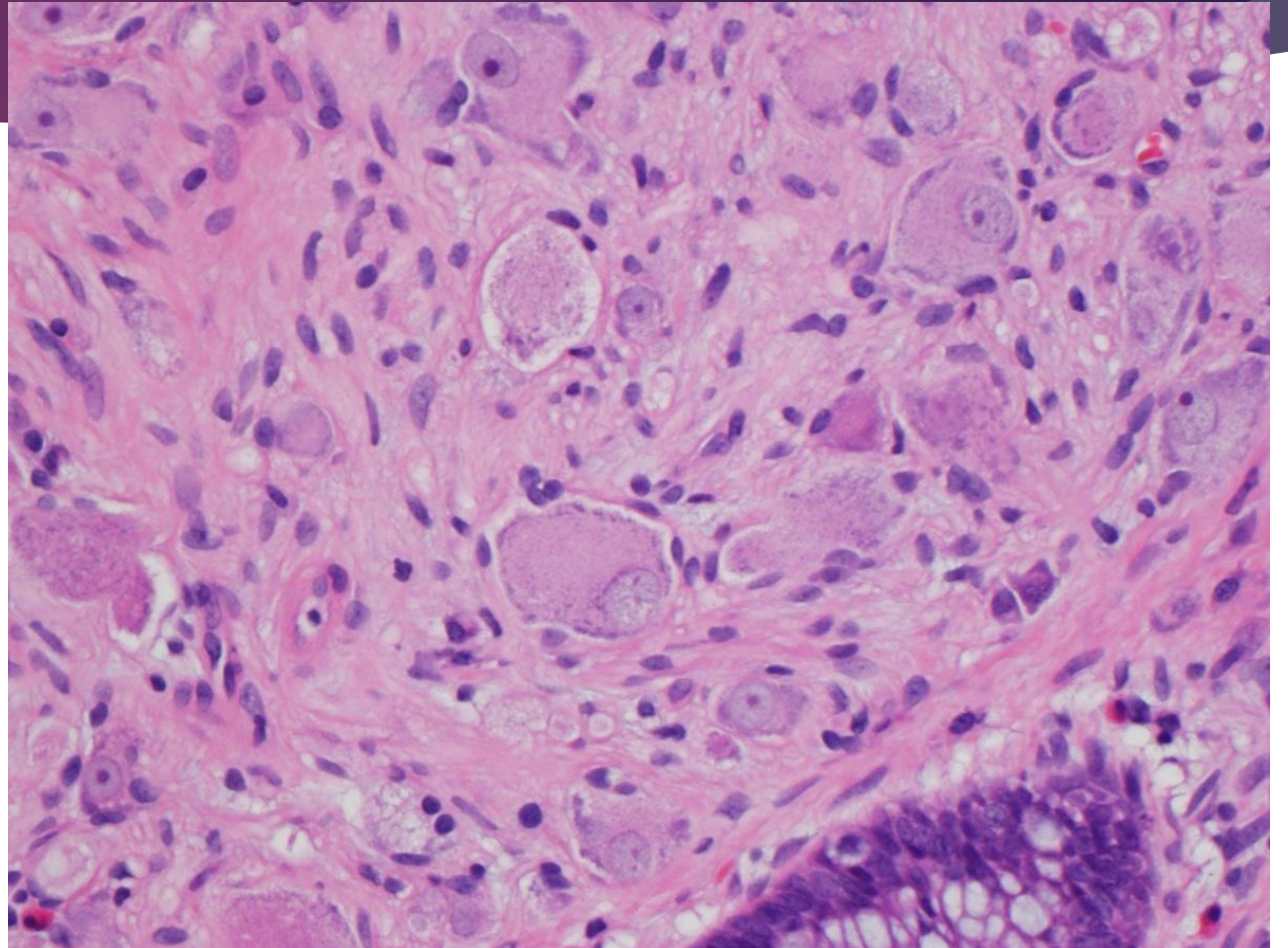
الجزء العلوي
طبيعي
وانقسم عنه
بد Scanty

Islands, trabeculae, strands, glands, or sheets of uniform cells with scant, pink granular cytoplasm and salt and pepper chromatin.



ganglion cells

Large
Abundant Cytoplasm
Eccentric Nucleus



Normal



Celiac Disease



Count the Enterocyte
Every 100 cell, CD8⁺ Must be
less than twenty

flat villi
Atrophic villi

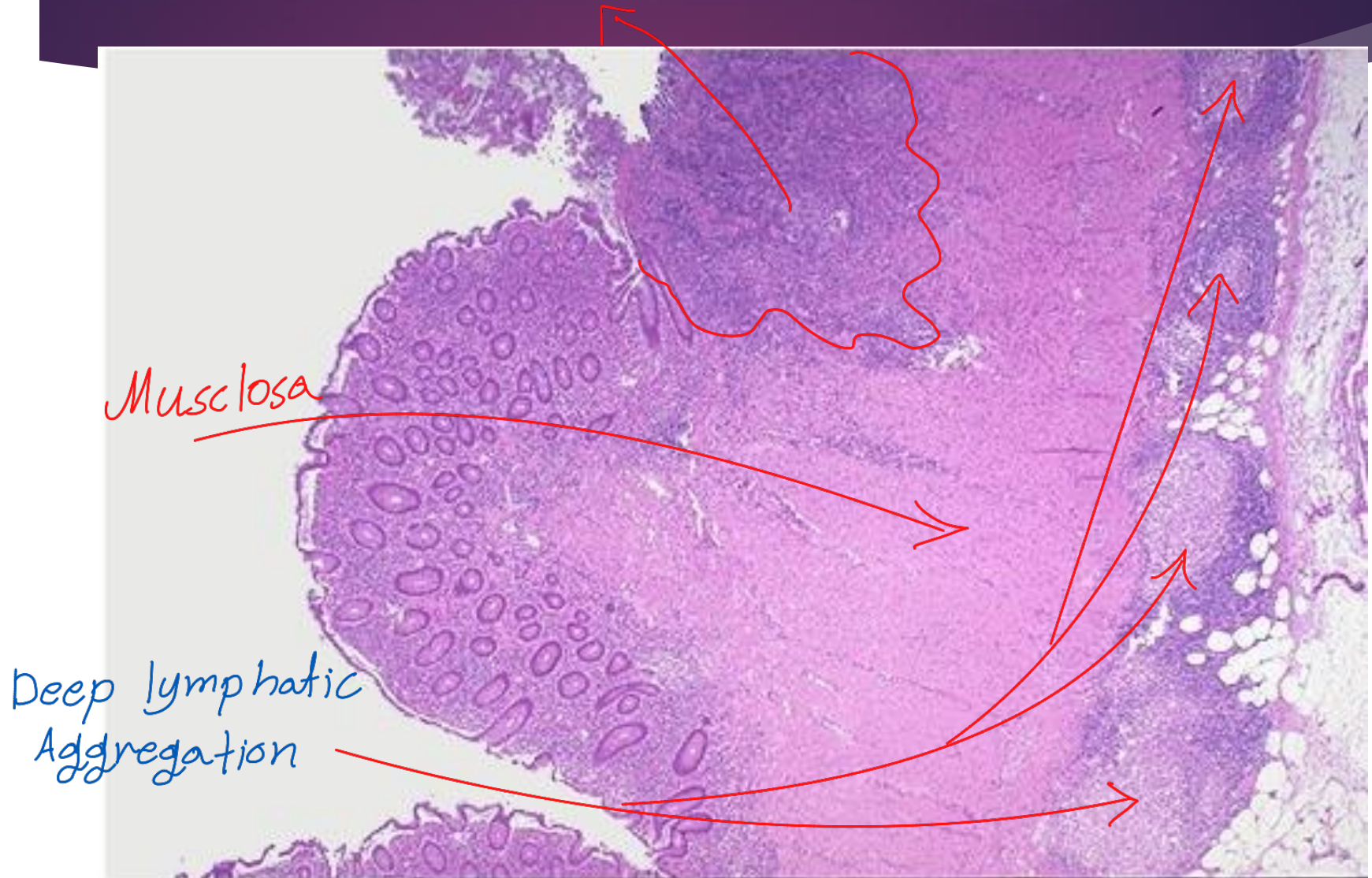
1-) Crypt Hyperplasia.
2-) flattened.

Dermatitis herpetiformis.



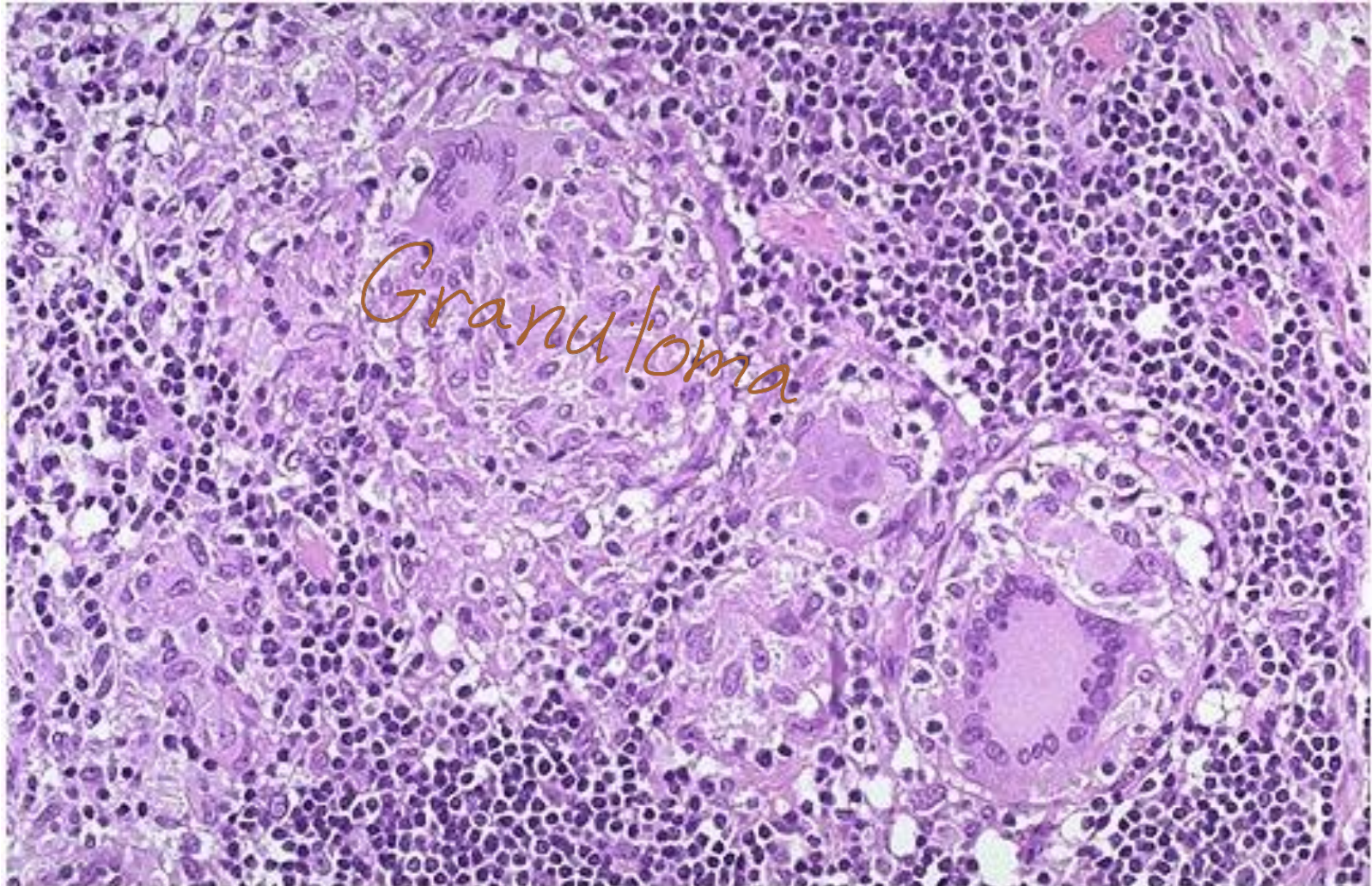
حساسية
الشمع

Transmural inflammation.



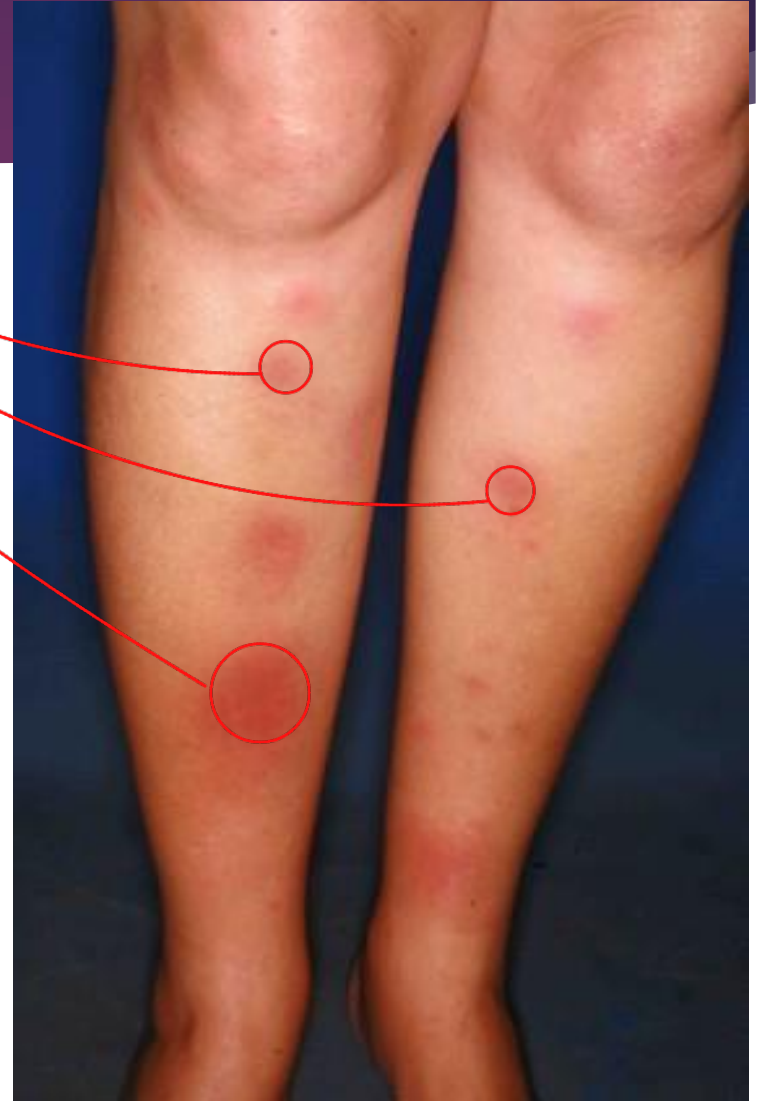
Crohn's Disease

Non-caseating granuloma.



Erythema nodosum

Extra intestinal
Manifestation of
Crohn's Disease



تذكیر
بسیار، بهشتی
عنه حوری ال Celiac D.

Neurology

Crypt abscesses.

Active IBD
"UC"



Abrupt transition b/w normal
and disease segment.



Peutz-Jeghers polyp

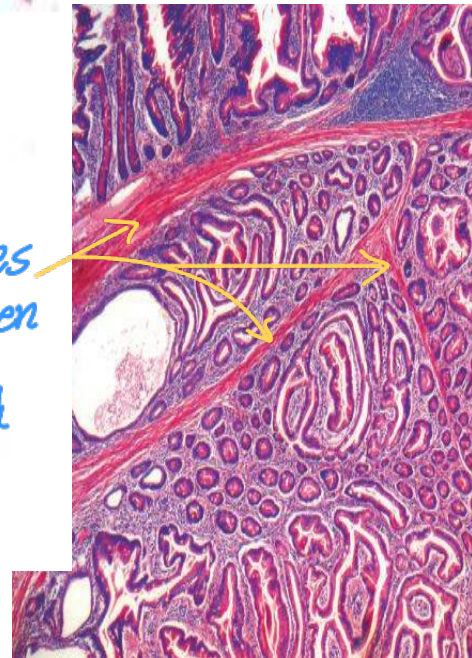
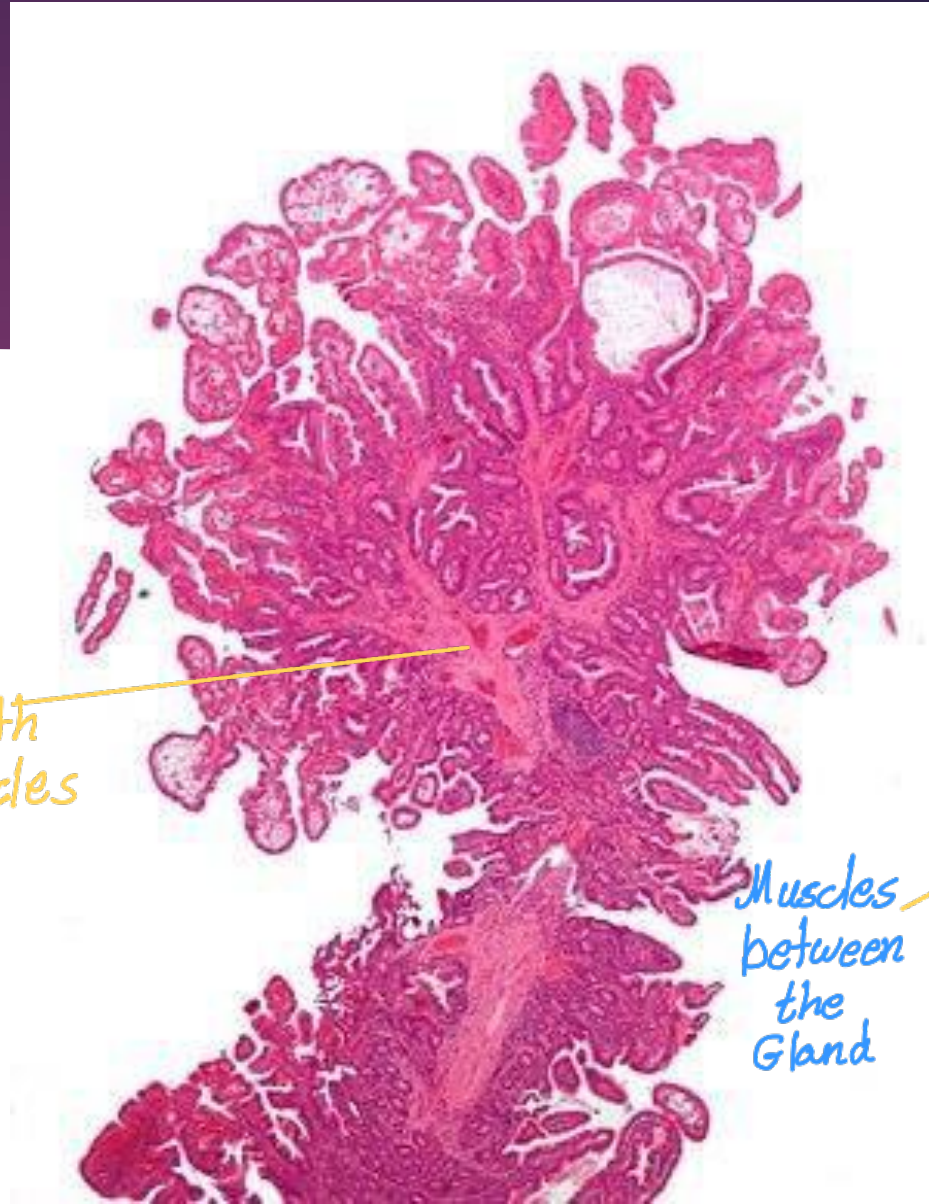
- ▶ Large.

شجرة ▶ Arborizing network of connective tissue, smooth muscle, lamina propria

- ▶ Glands lined by normal-appearing intestinal epithelium
- ▶ Christmas tree pattern.

Smooth
Muscles

Muscles
between
the
Gland



Mucocutaneous pigmentation

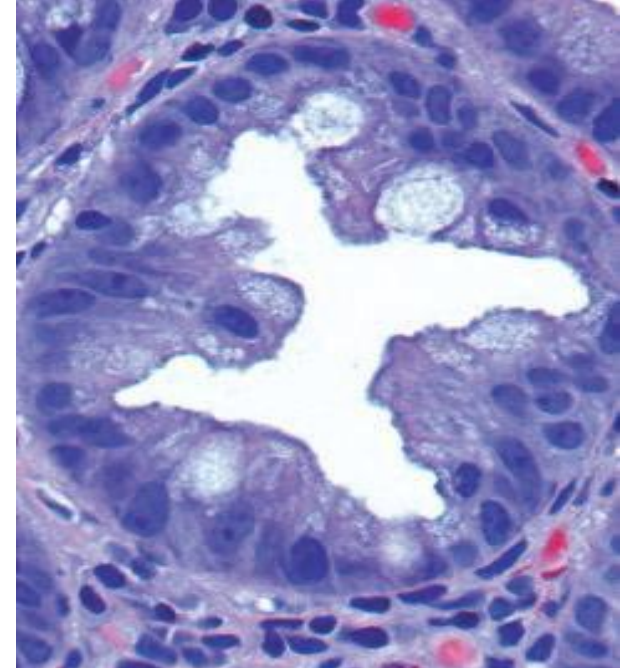
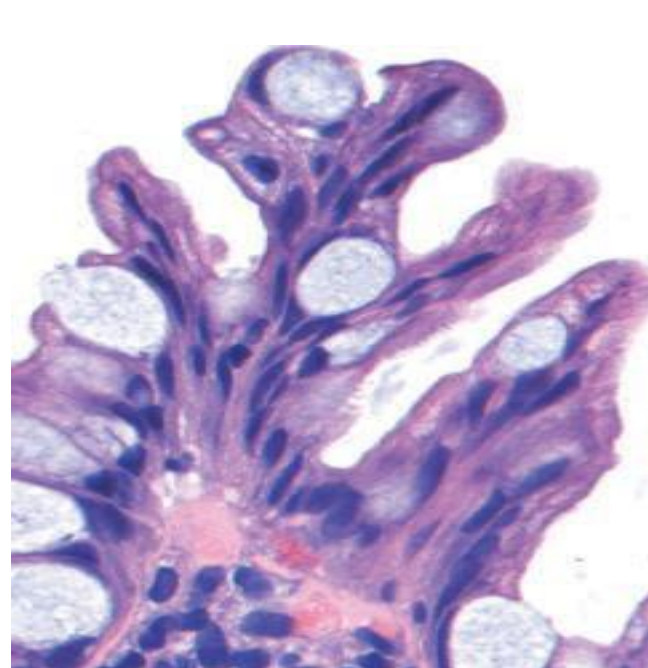
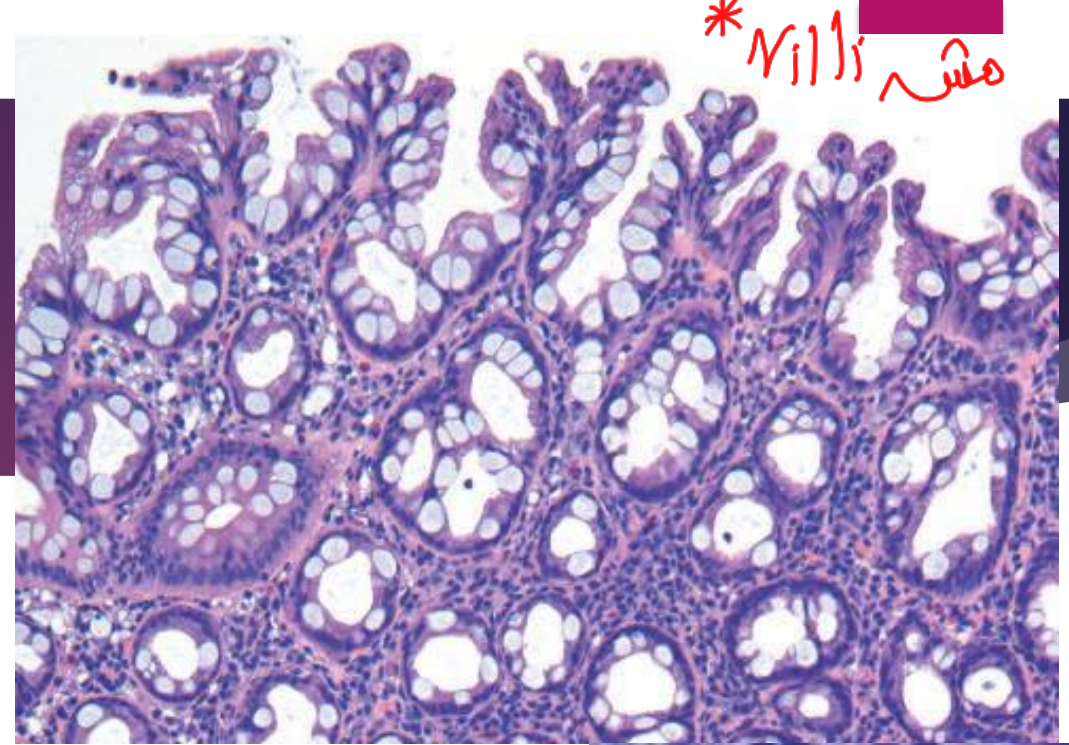


Hyperplastic polyp

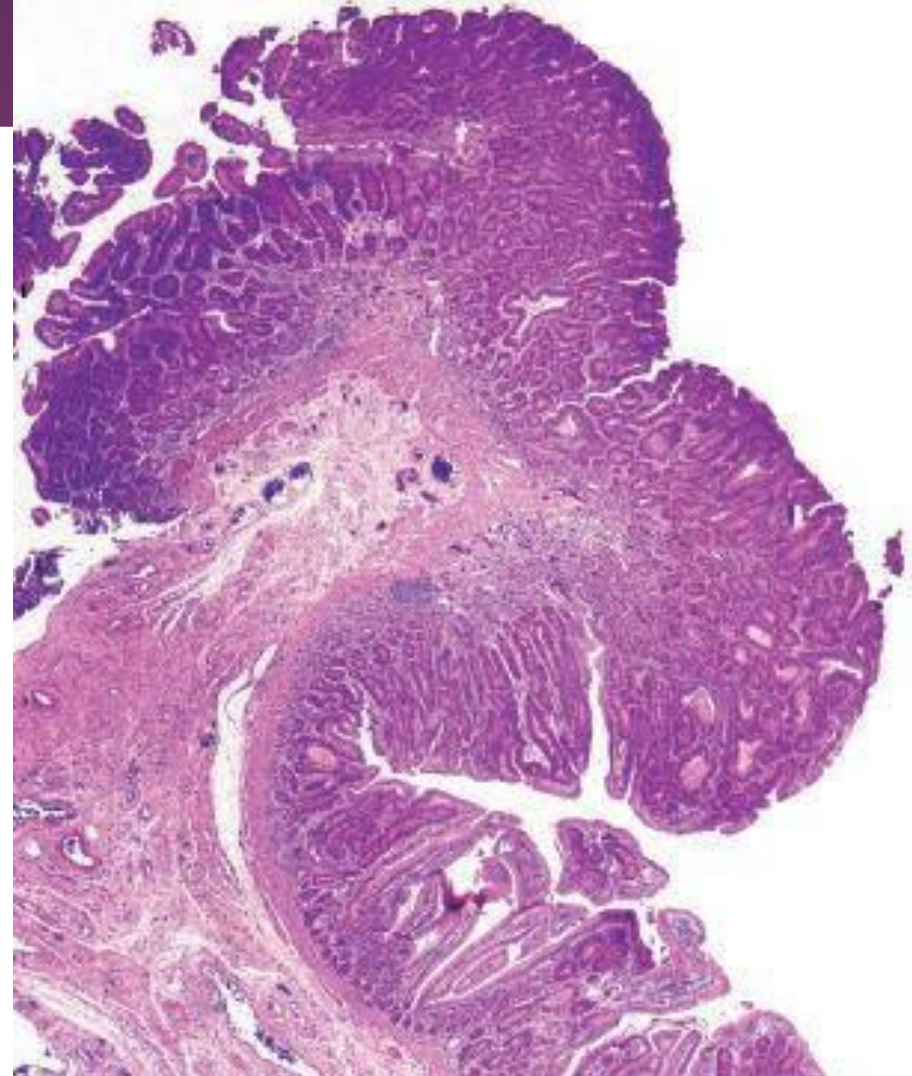
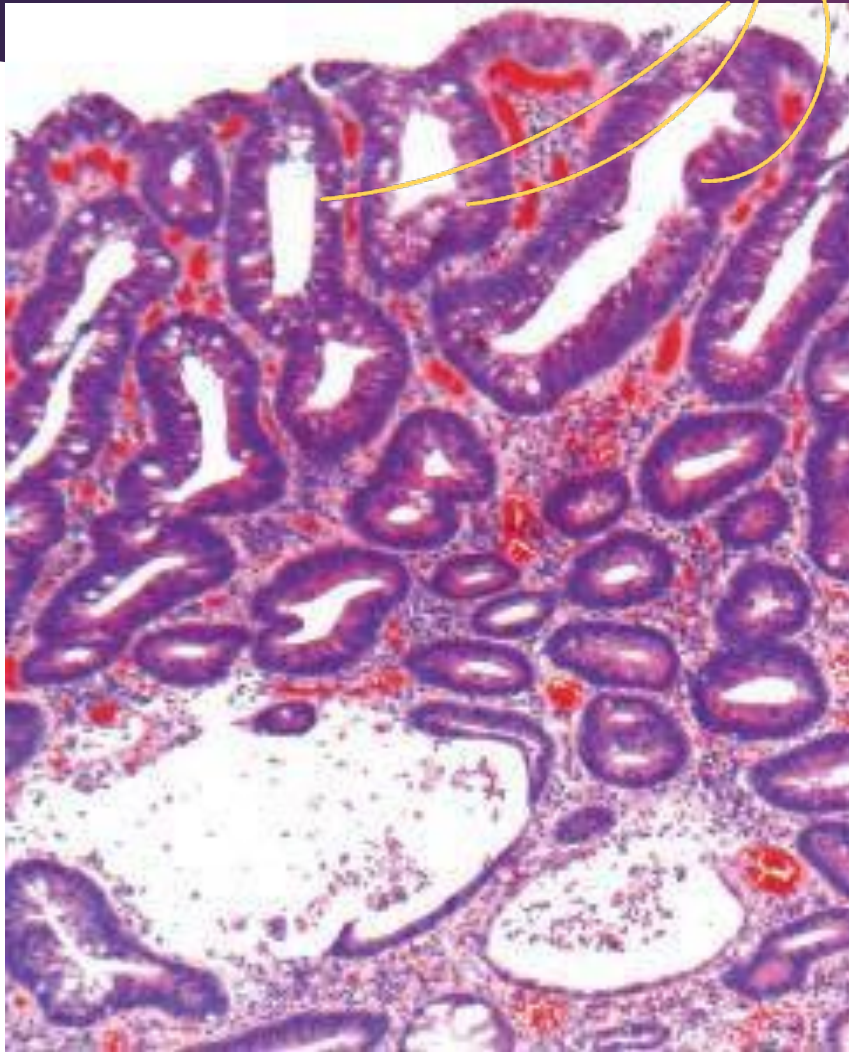
Benign

- ▶ Left colon
- ▶ Rectosigmoid.
- ▶ Small < 5 mm
- ▶ Multiple
- ▶ Crowding of goblet & absorptive cells.

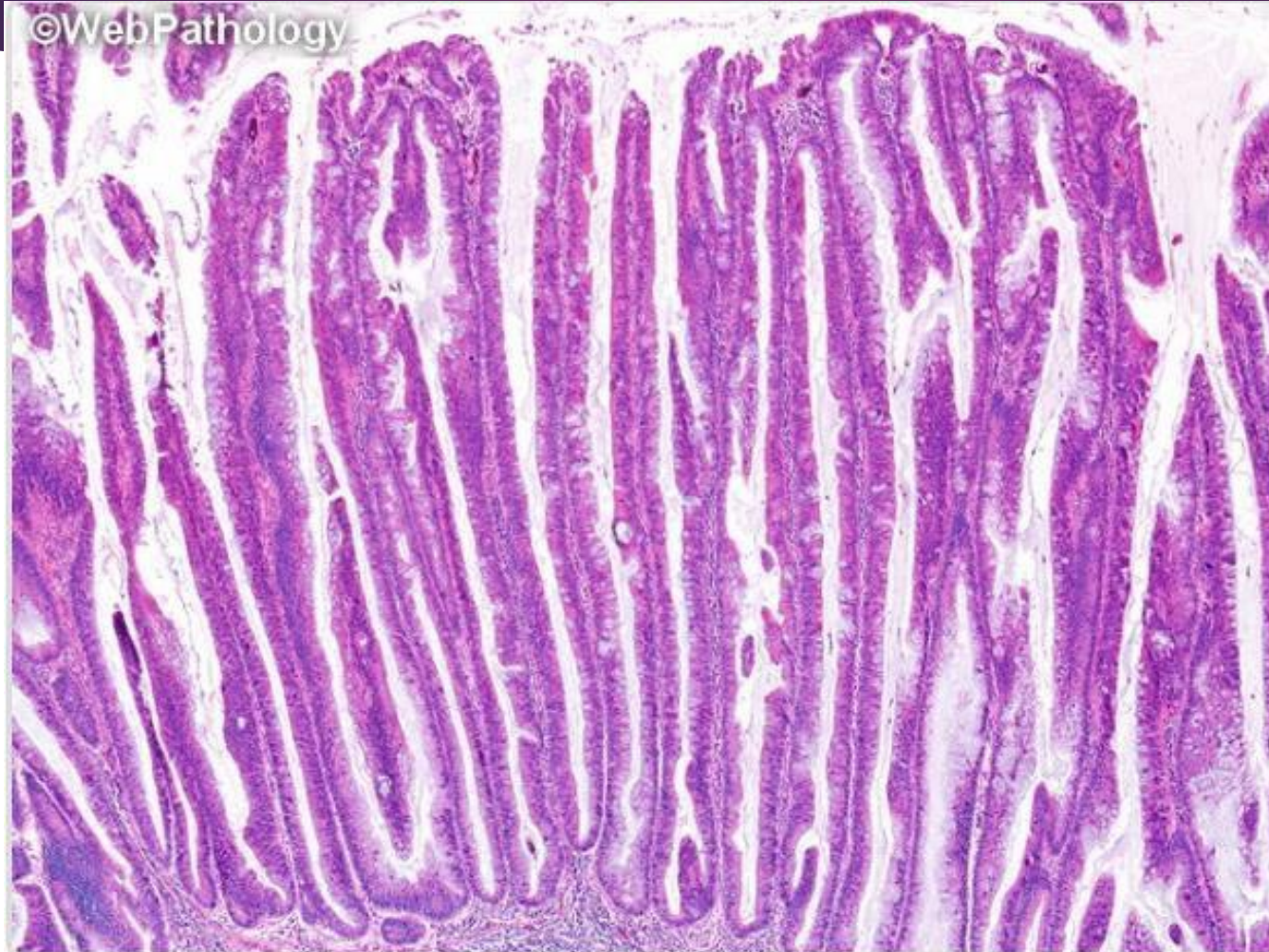
الأفام



Tubular adenoma



Villous adenoma

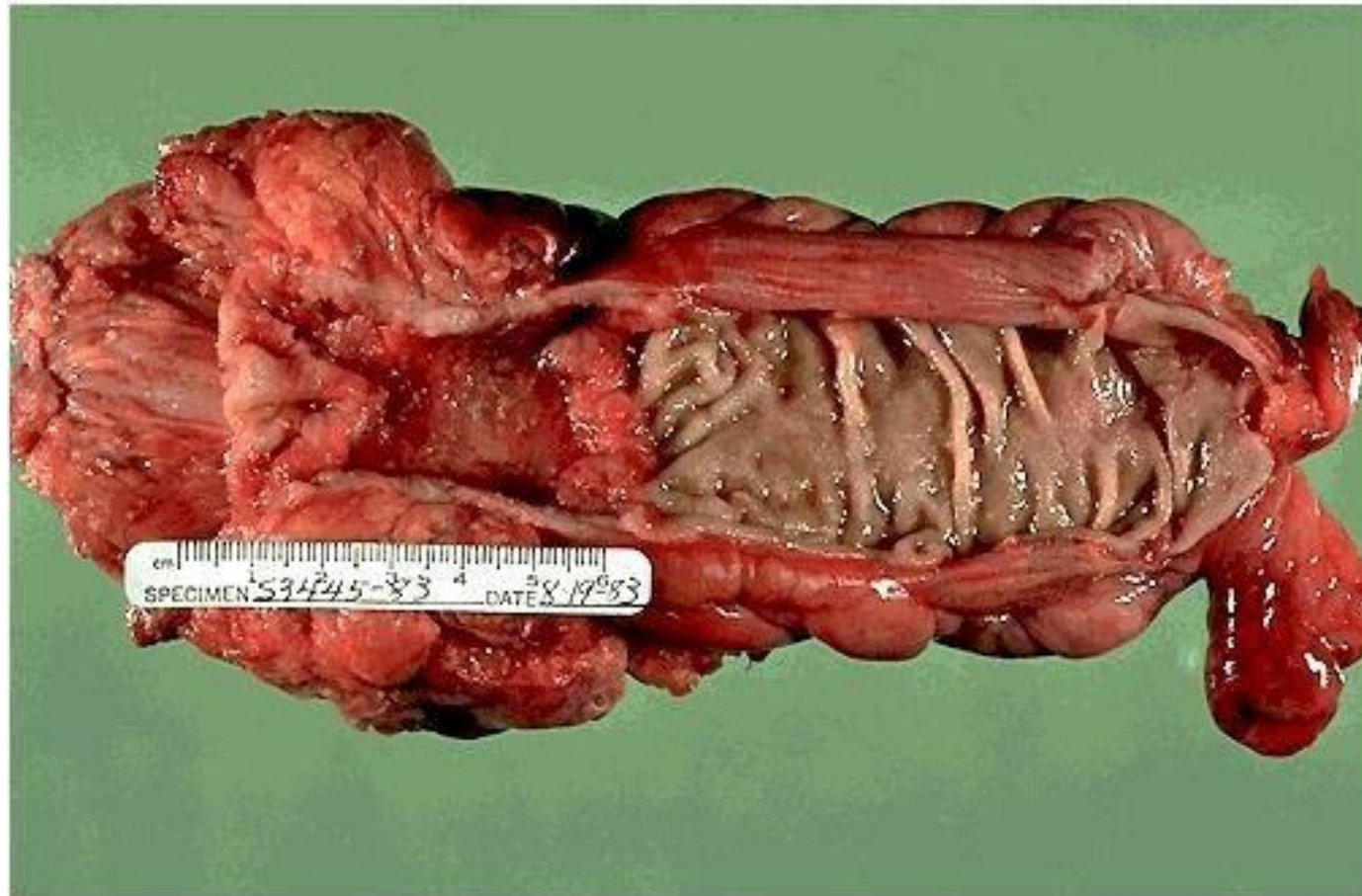


Cecal polyps in HNPCC.



Polyps
نقطة

Rectosigmoid adenocarcinoma, napkin ring



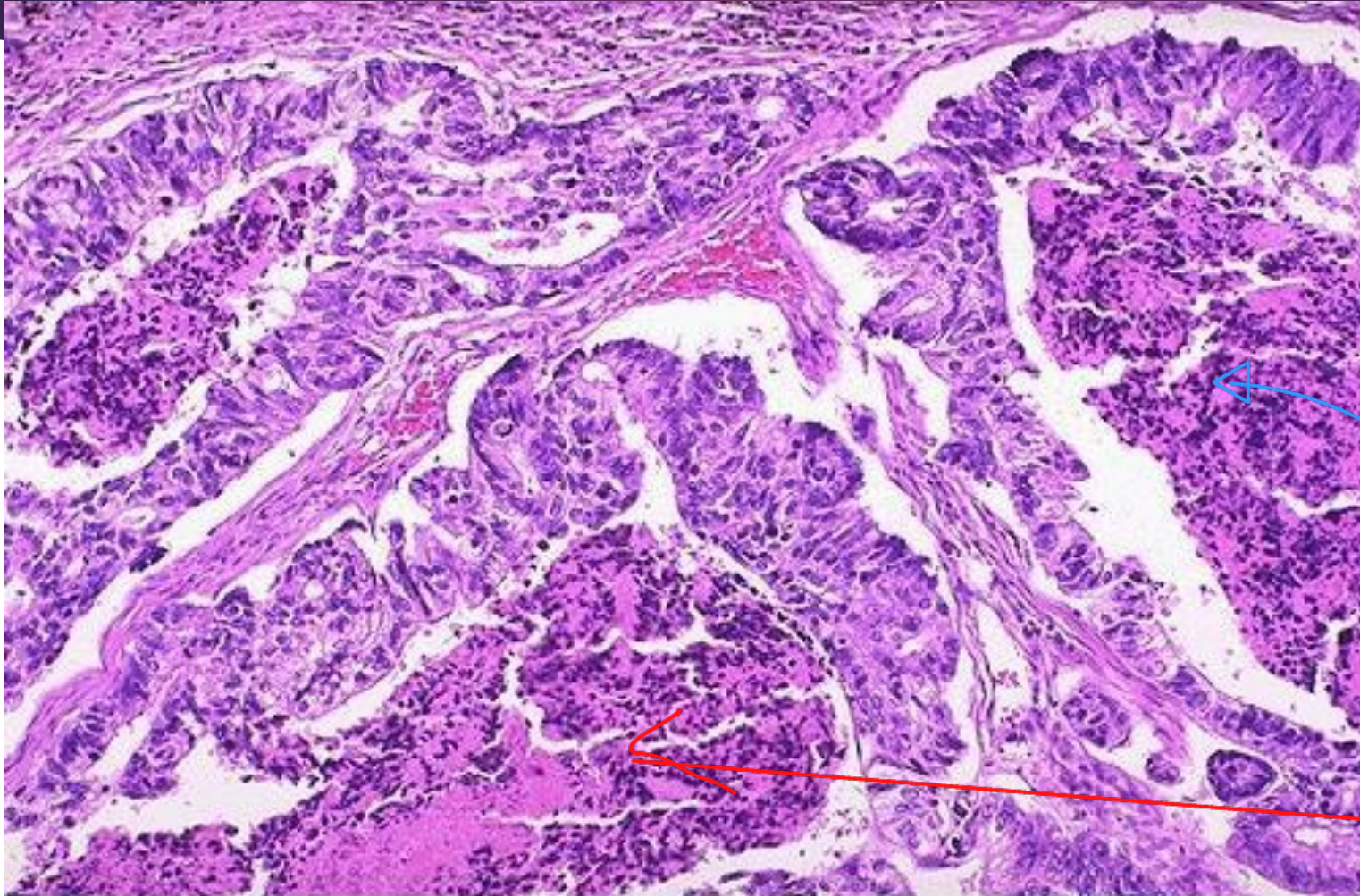
lef colon
Canser

أخيلة

واسع Ring أخيلة

Adenocarcinoma with necrosis

Colo rectal



Denty
Background

Necrosis

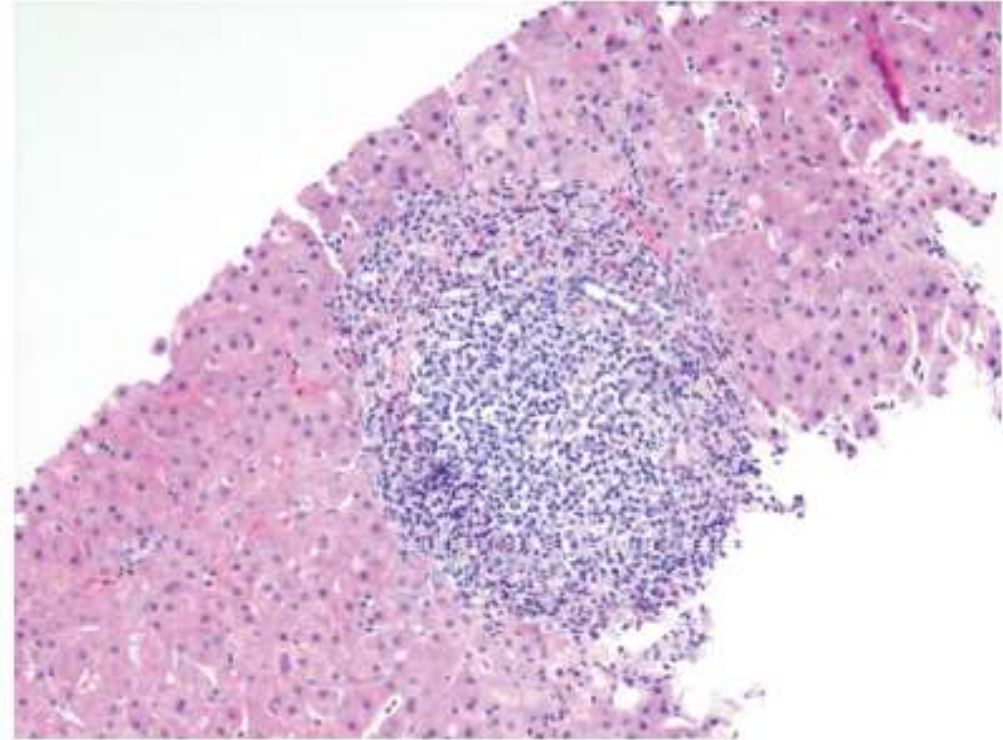


Fig. 16.15 Chronic viral hepatitis due to HCV, showing characteristic portal tract expansion by a dense lymphoid infiltrate.

Lymphocyte + Fatty Change

HBV AntiBody
stain

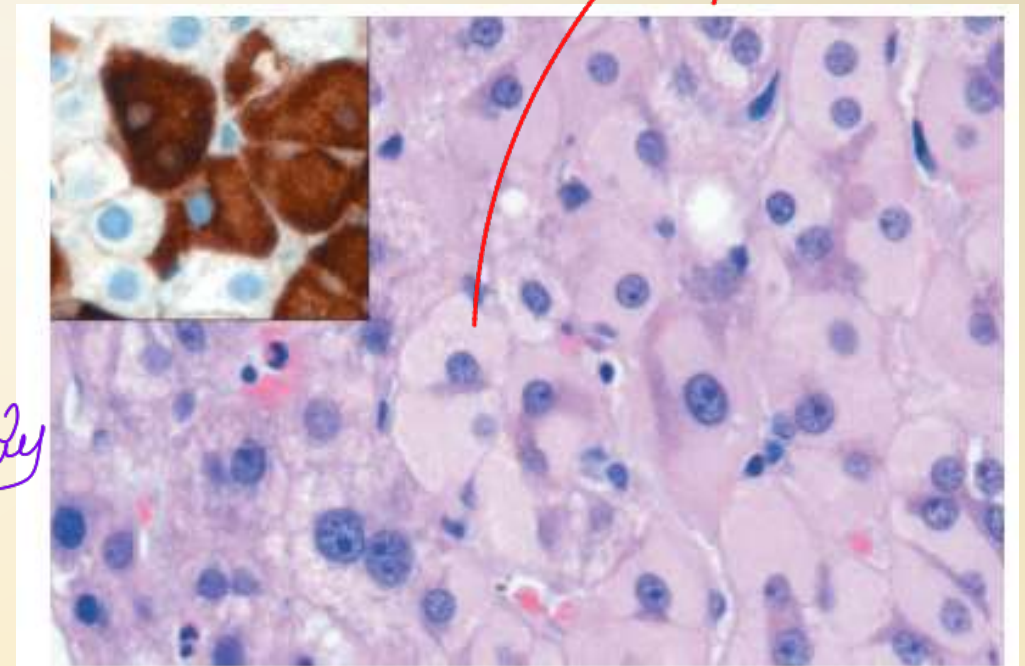
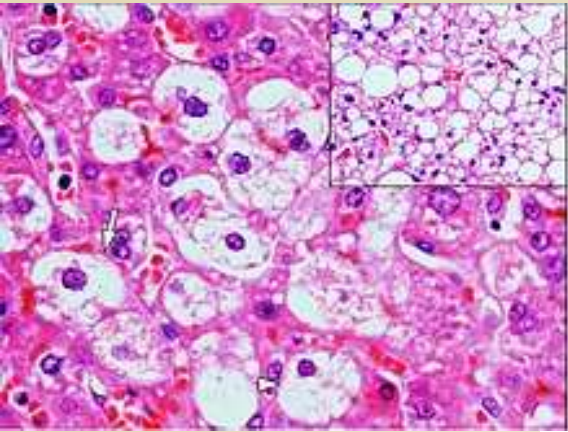
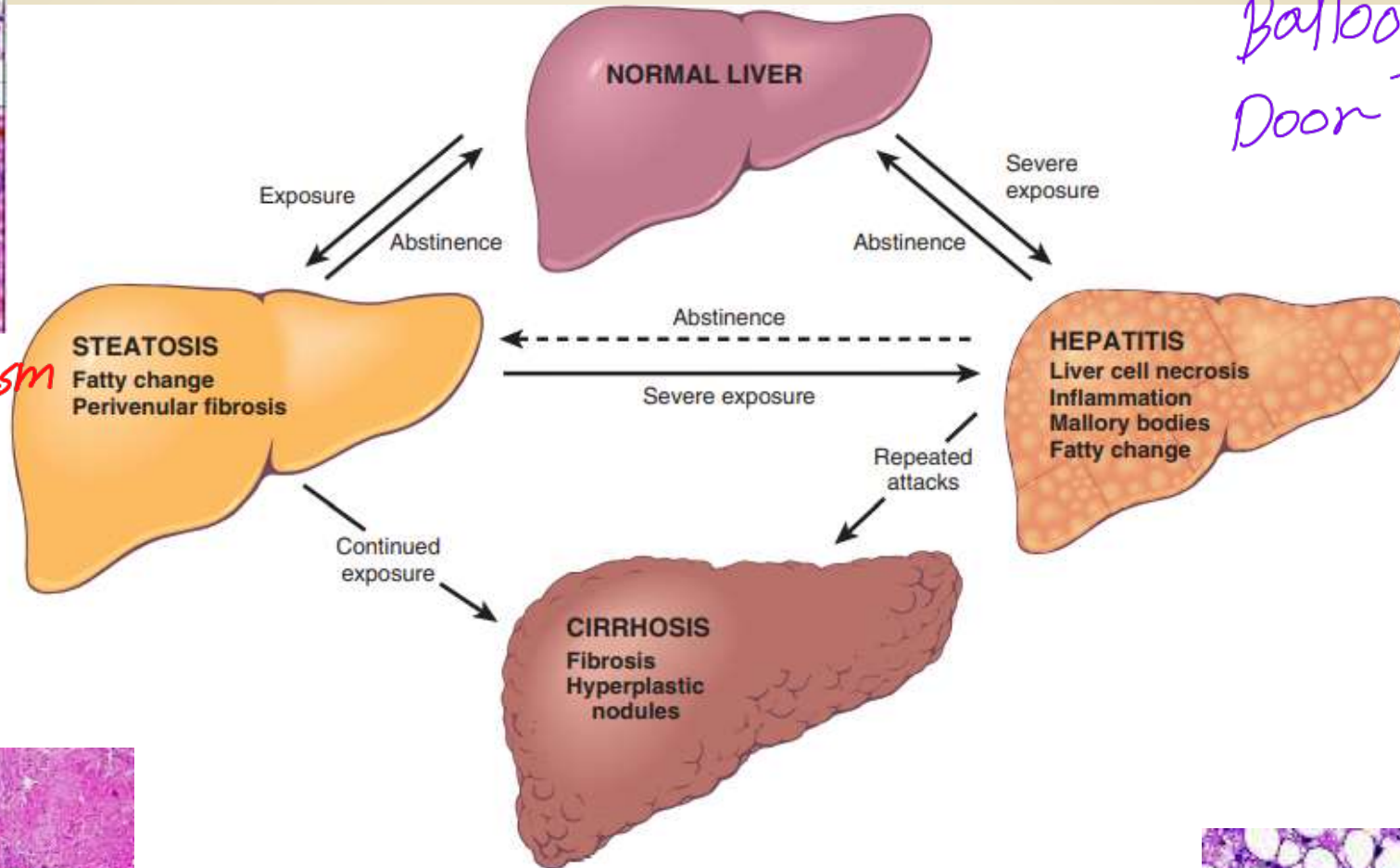


Fig. 16.14 Ground-glass hepatocytes in chronic hepatitis B, caused by accumulation of hepatitis B surface antigen. Hematoxylin-eosin staining shows the presence of abundant, finely granular pink cytoplasmic inclusions; immunostaining (inset) with a specific antibody confirms the presence of surface antigen (brown).

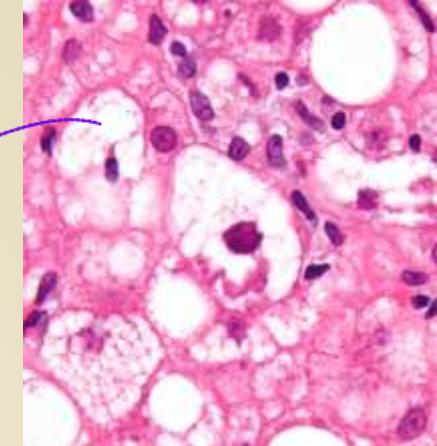
Ground
Glass
Apearance pale



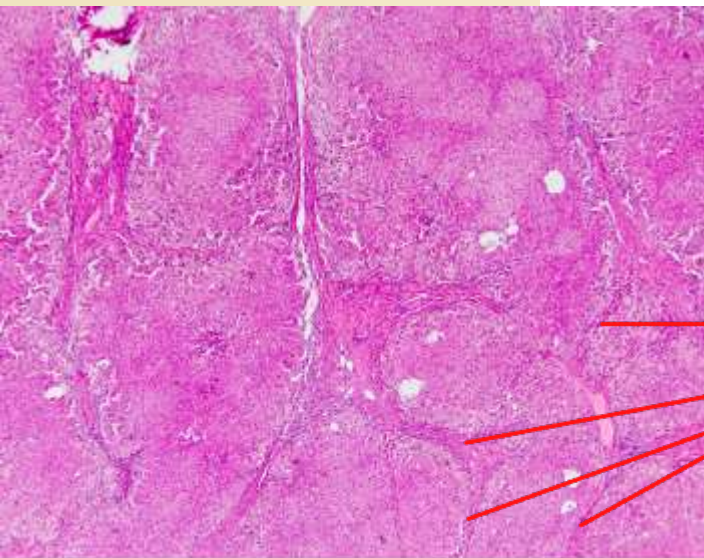
Smooth pink cytoplasm
Become clear
cytoplasm



Balloon
Door

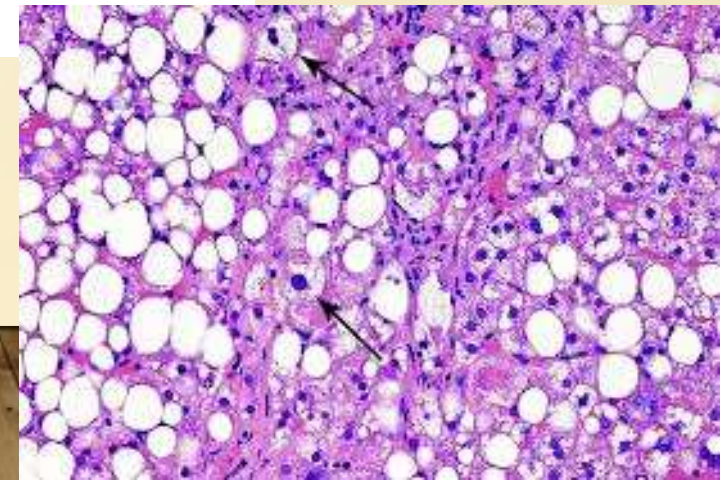


Liver cell necrosis
Inflammation
fatty changes
Mallory: Misfolded
protein



fibrous Band

Nodule



HISTOPATHOLOGY

- *diffuse transformation of the entire liver into regenerative parenchymal nodules surrounded by fibrous bands.

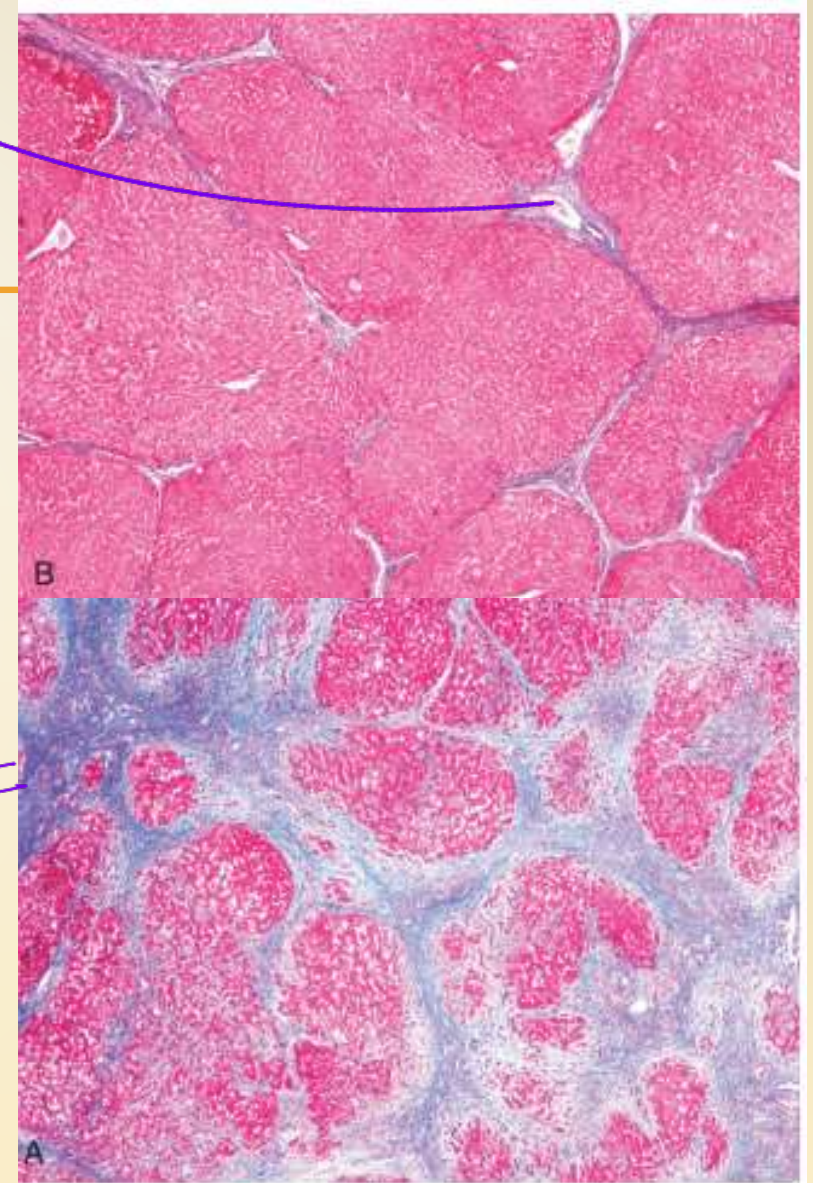
- * ductular reactions.

- * (Masson trichrome stain) highlights these fibrous septa.

porta
Epithelium

Collagen
1, 3

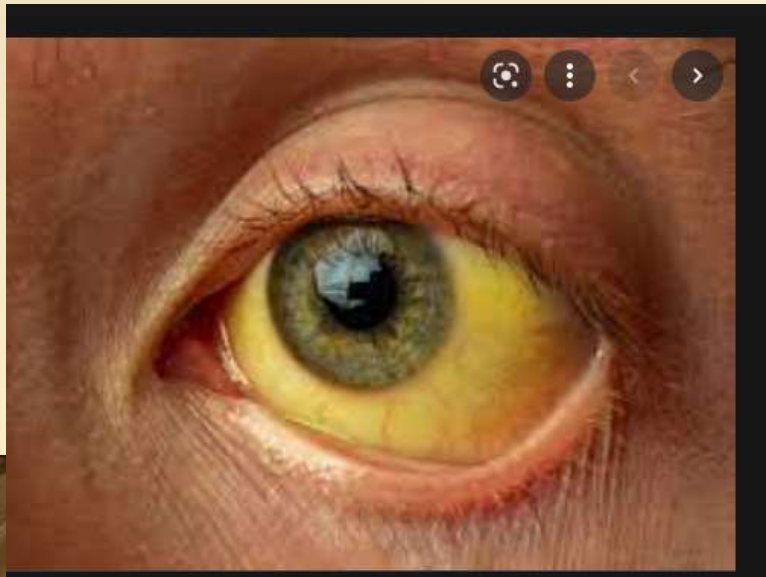
patho



"Generation + septa"

CLINICAL FEATURES

- 1. 40% of individuals with cirrhosis are asymptomatic until the most advanced stages of the disease.
- 2. Non specific symptoms such as anorexia, weight loss, weakness.
- 3. signs and symptoms of liver failure e.g Jaundice, encephalopathy, and coagulopathy.
Change in mode, personality
- 4. Pruritus, portal hypertention (intrahepatic vascular resistance).



Erythema

Hemorrhage
under the
skin

Accumulation of Bile salts
under the skin

5. Hyperestrogenemia:

- due to impaired estrogen metabolism in male patients with chronic liver failure can give rise to palmar erythema (a reflection of local vasodilatation) and spider angiomas of the skin. Such male hyperestrogenemia also leads to hypogonadism and gynecomastia.
- 6. hepatocellular carcinoma (HCC).

*Recurrent Inflammation
and fibrosis
leads to change
in the Genome*



- Patients may have :

- Jaundice.

- Pruritus.

- skin xanthomas (focal accumulation of cholesterol). *Since the Bile is the only method to excrete cholesterol*

- symptoms related to intestinal malabsorption, including nutritional deficiencies of the fat-soluble vitamins A, D, or K.

Lab:

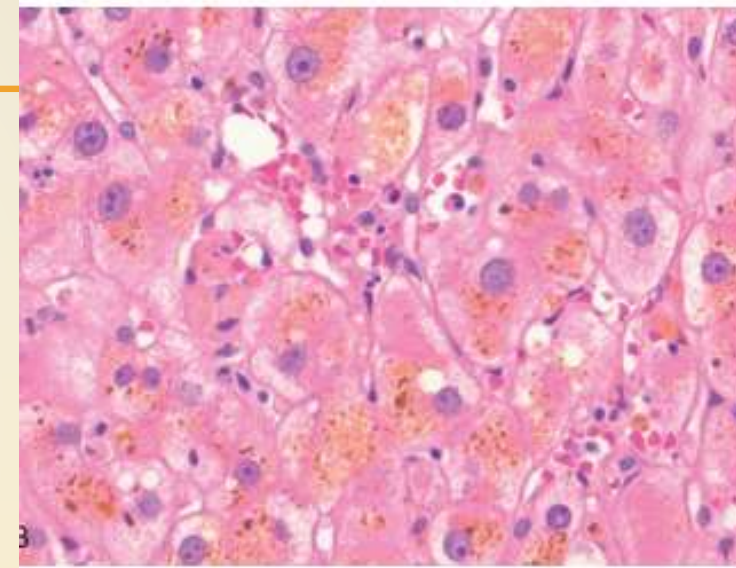
elevated serum alkaline phosphatase and
 γ -glutamyl transpeptidase (GGT),



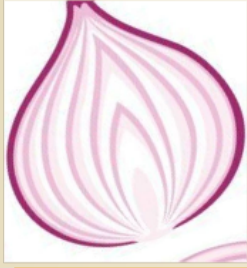
✖ Tado
↑ Indas

HISTOPATHOLOGY

- accumulation of bile pigment within the hepatic parenchyma. Gold
- Rupture of canaliculi leads to extravasation of bile, which is quickly phagocytosed by Kupffer cells.
- feathery degeneration:
- Droplets of bile pigment accumulate within hepatocytes, give them foamy appearance



AnKa



D. PRIMARY SCLEROSING CHOLANGITIS

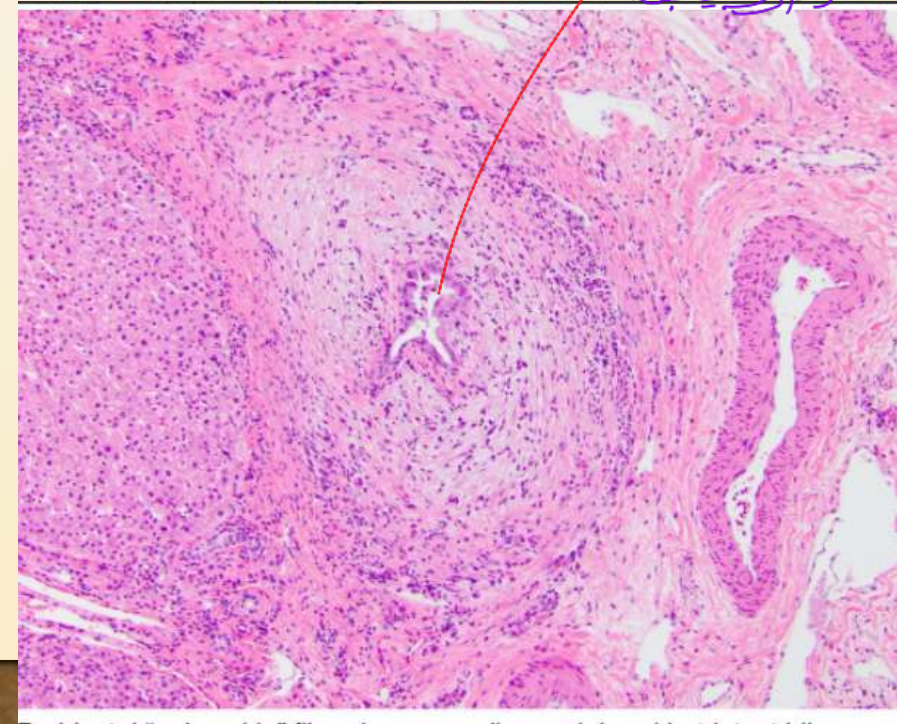
Anti body
1) Mitochondria
2) Neutrophil cytoplasmic Antibodies

- Primary sclerosing cholangitis (PSC) is characterized by inflammation and obliterative fibrosis of intrahepatic and extrahepatic bile ducts, leading to dilation of preserved segments.

- Classic finding is "onion skin" fibrosis around affected bile ducts

Diagnosed By : Radiology

توسع من البلياري



Duct
واحدة على عكس
الآخر


ANKA ⊕

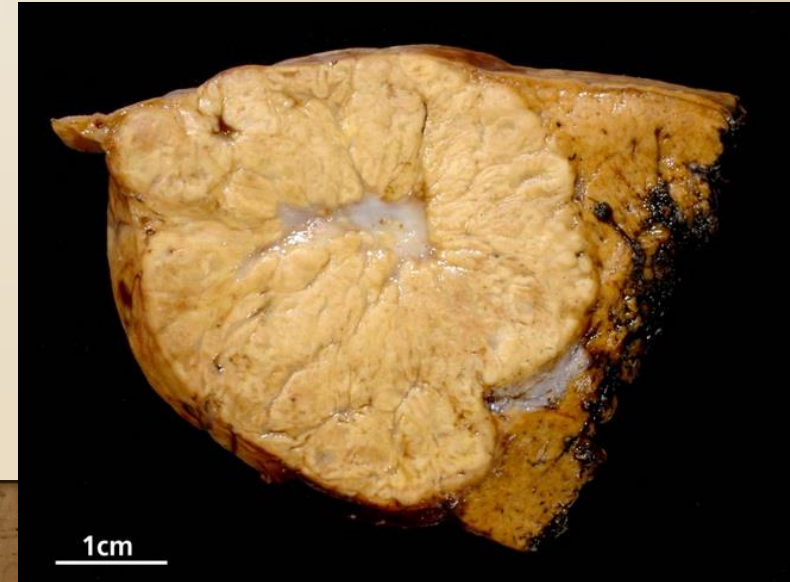
stricture
and
Dilatation

مضيق
المضيق

FOCAL NODULAR HYPERPLASIA: GROSS.

- well-demarcated, poorly encapsulated nodule in an otherwise normal liver.
- there is a central gray-white, depressed stellate scar from which fibrous septa radiate to the periphery.

 stellate scar
fibrosis without Borders



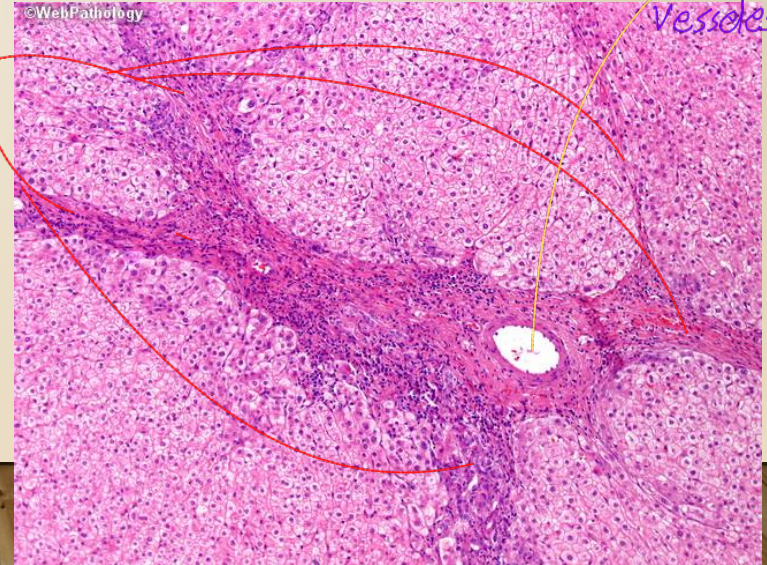
FOCAL NODULAR HYPERPLASIA: MICROSCOPICALLY.

- The central scar contains large abnormal vessels and ductular reactions along the spokes of scar.
- The hyperplastic regions are composed of normal hepatocytes separated by thickened sinusoidal plates

بقية ومنها بنطاق
الغواصين



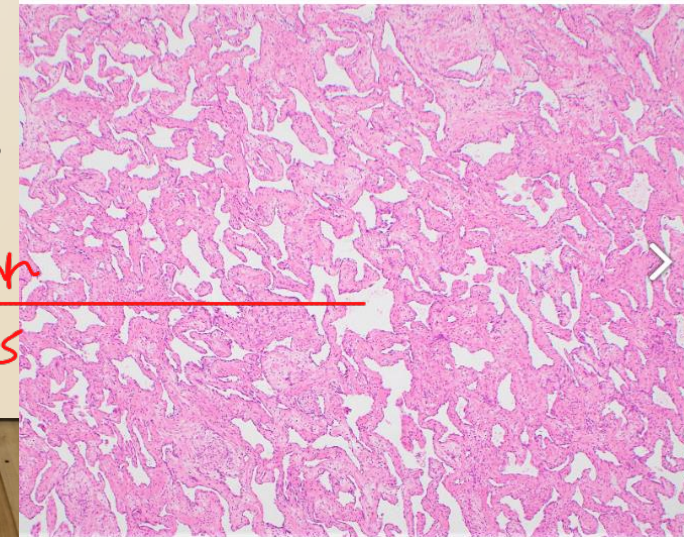
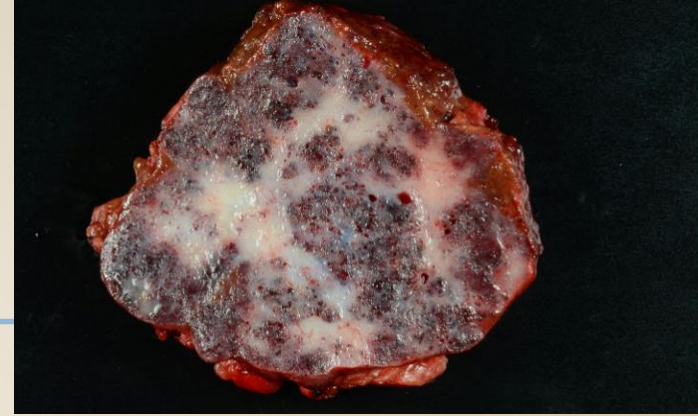
nodule



BENIGN NEOPLASMS

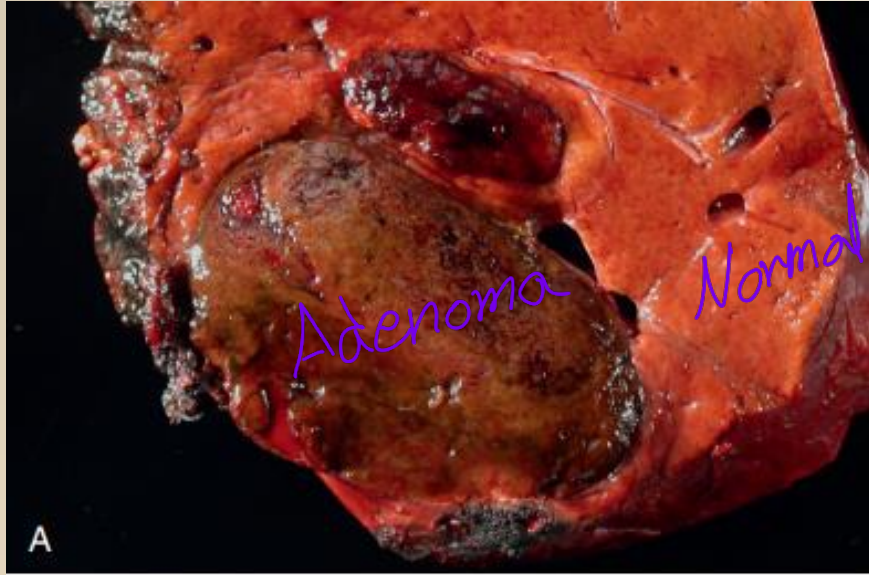
❖ I. Cavernous hemangiomas: ~ Red "vascular"

- the most common benign tumor of the liver. ~~XX~~
- Vast majority of hemangiomas are asymptomatic and require no intervention.
- **Gross description:**
- Well circumscribed with red-brown, spongy / honeycombed cut surface
- **Microscopic:** *unifocal*
- Circumscribed proliferation of variably sized, dilated and thin walled vessels

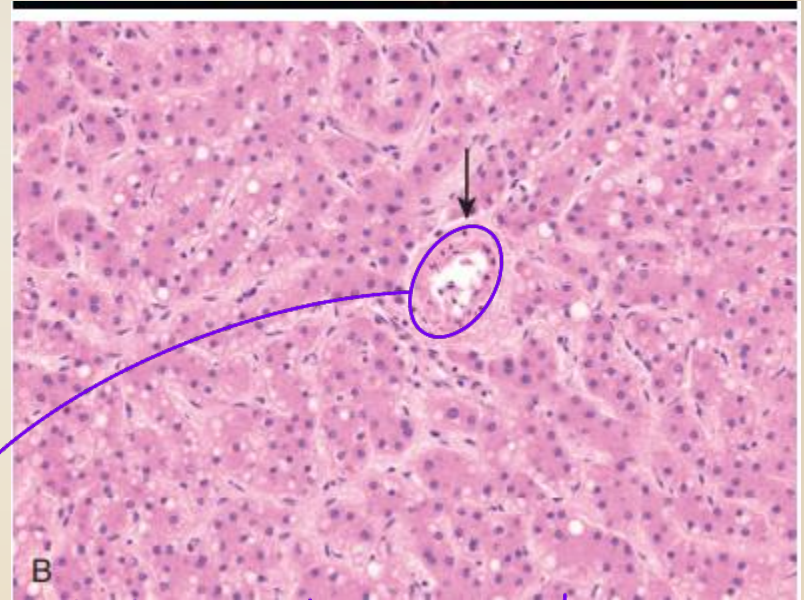


Vascular
spaces

Adenoma



- solitary well circumscribed unencapsulated lesion.



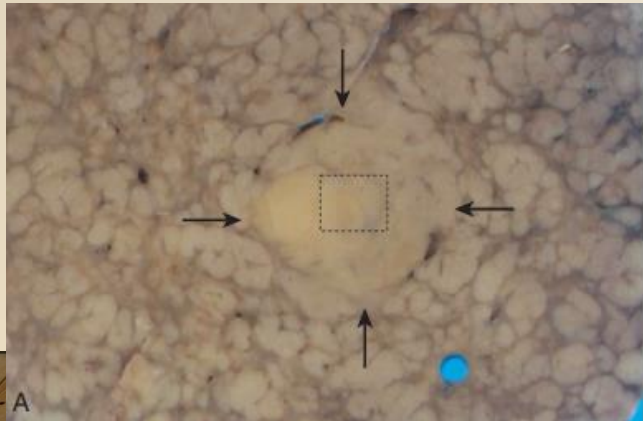
portal tract Doesn't seen

Microscopic view showing cords of hepatocytes, with an arterial vascular supply (arrow) and no portal tracts.

MORPHOLOGY

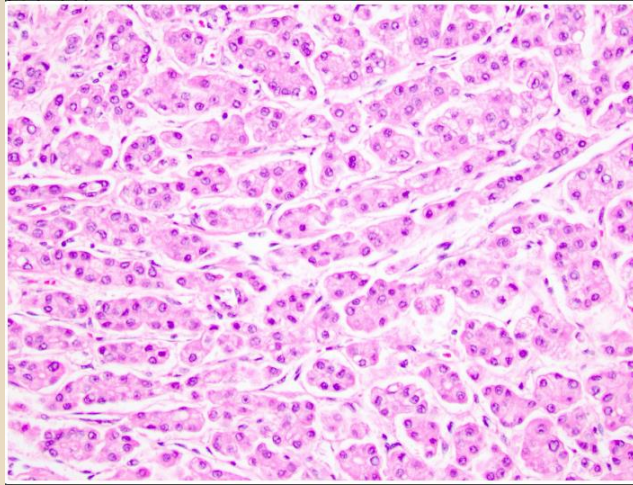
Hepatocellular Carcinoma

- HCC may appear grossly as:
- (1) a unifocal (usually large) mass.
- (2) multifocal, widely distributed nodules of variable size.
- (3) a diffusely infiltrative cancer,



Hepatocellular Carcinoma

- HCCs range from :
- well differentiated to highly anaplastic lesions.



ما لازم
نستعمل في
الـ cytoplast



Well-differentiated HCCs are composed of cells that look like normal hepatocytes and grow as thick trabeculae

tumor cells appear malignant on H&E and often cannot be distinguished from other poorly differentiated neoplasms;

Mucous

أنسجة من

HCC

MORPHOLOGY

Cholangiocarcinomas

- Most tumors appear as firm, gray nodules within the bile duct wall.
- Cholangiocarcinomas are typical mucin-producing adenocarcinomas. Most are well to moderately differentiated, growing as glandular/tubular structures lined by malignant epithelial cells.



Desmoplasia
Blue color

