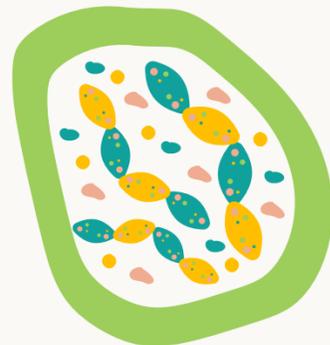
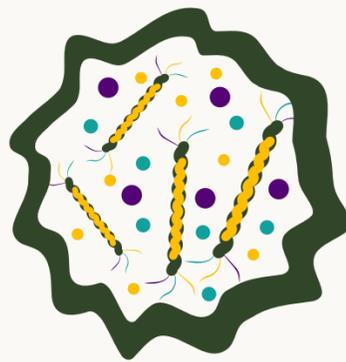


PATHOLOGY LAB

for doctor sura

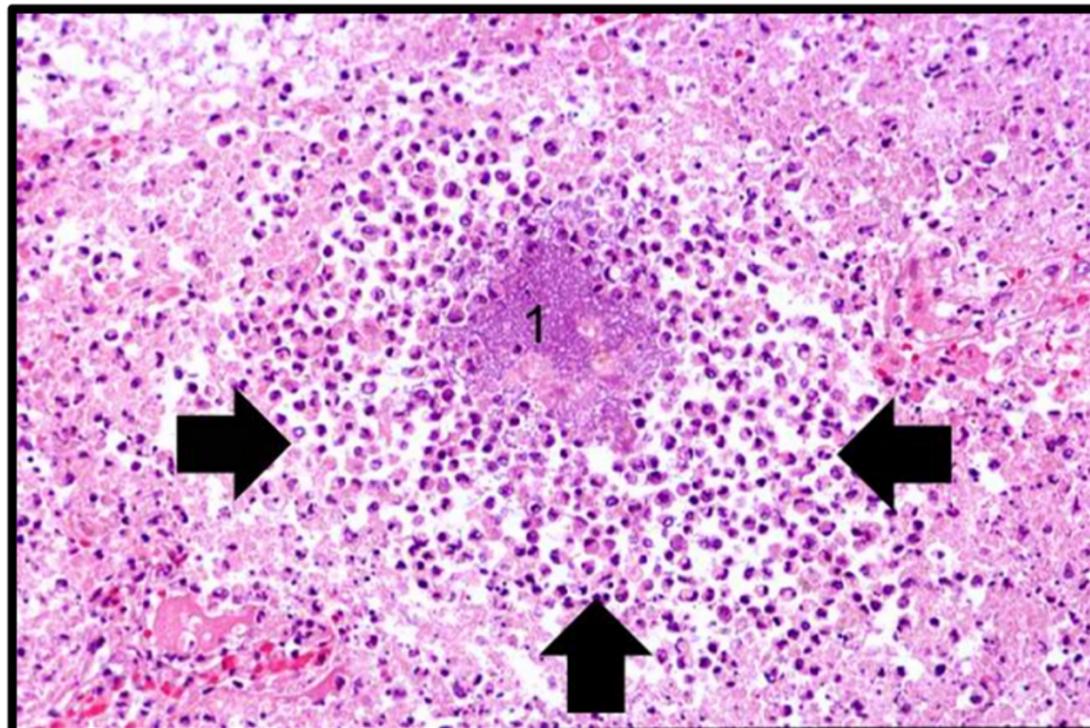
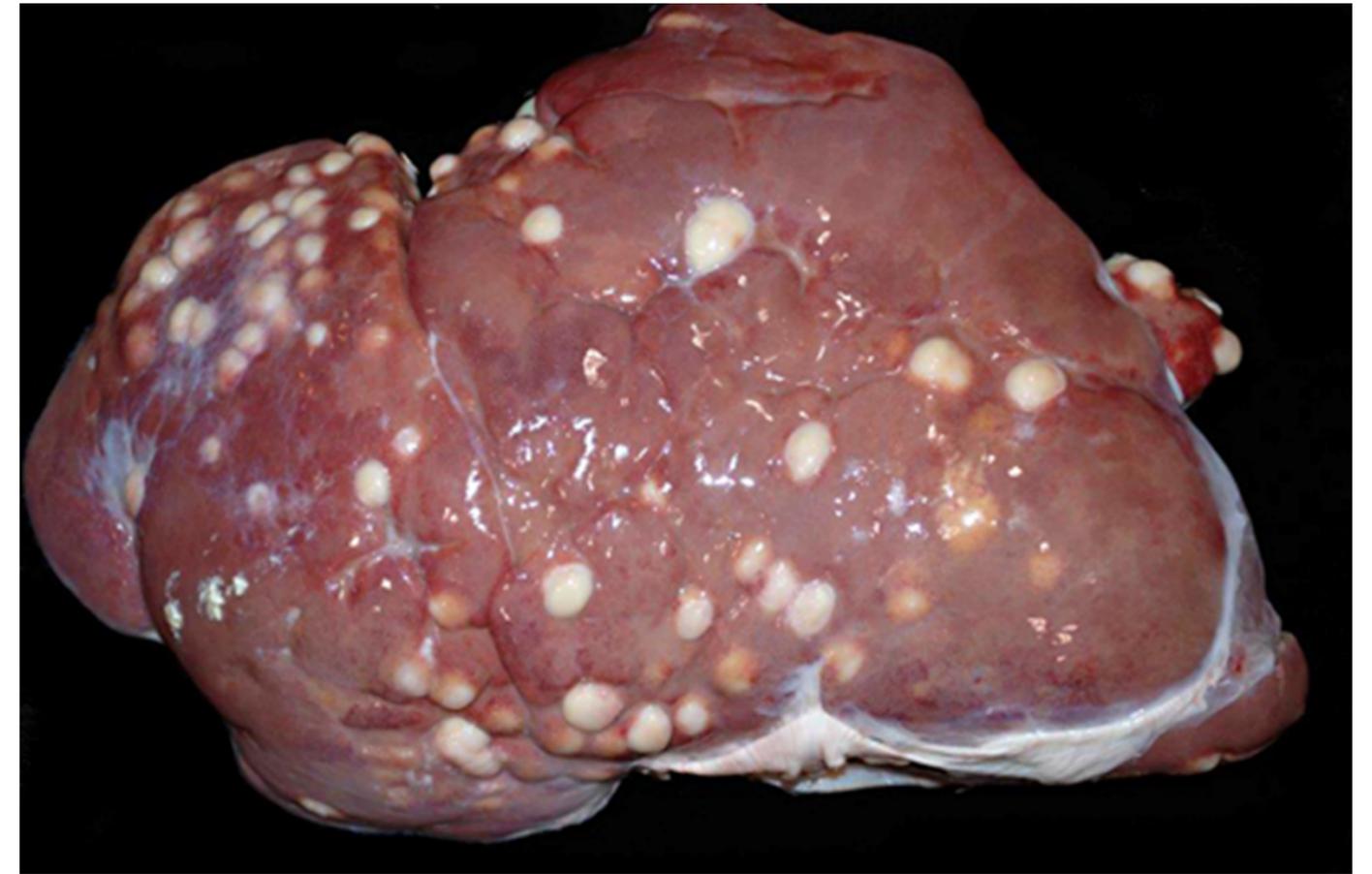
done by reem ghabayen and hiba

makkawi



Gross

Variably sized abscesses are distributed randomly throughout all lobes of the liver.
Abscess is a collection of neutrophils



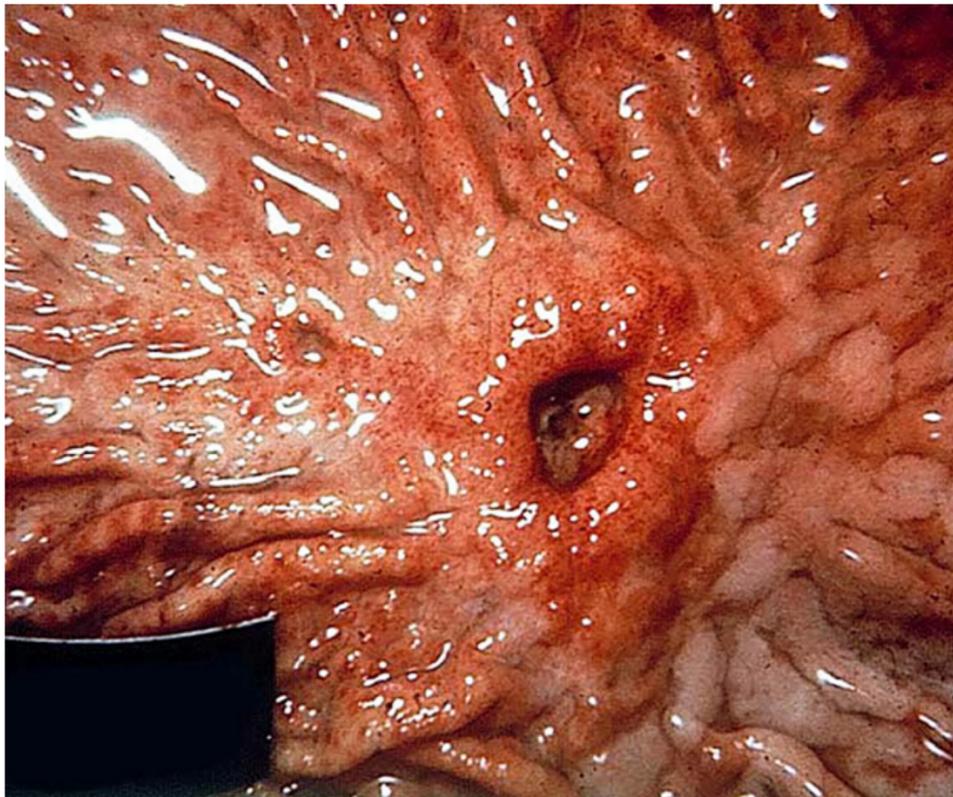
Abscess zones:

1. central region with necrotic leukocytes and tissue cells.
2. zone of preserved neutrophils .
3. outer most zone composed of vascular dilation, parenchymal and fibroblastic proliferation

ULCERS

Gross

ulcer: An ulcer is a local defect, or excavation, of the surface of an organ or tissue that is produced by the sloughing (shedding) of inflamed necrotic tissue



gastric ulcer : loss of teh gastric epithellium mucosa 'shedding'



skin ulcer : loss of epidermis by sloughing

Histology;

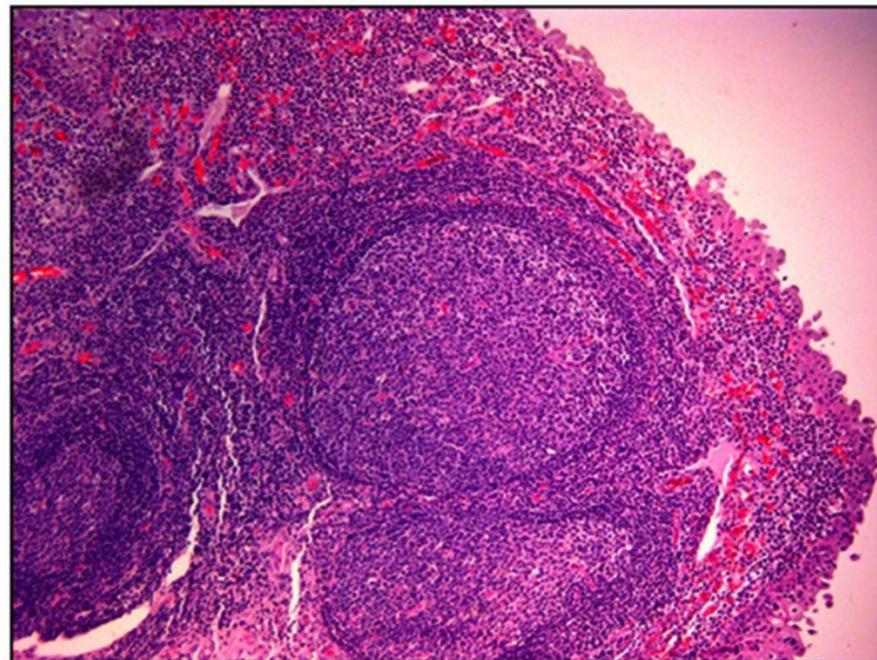
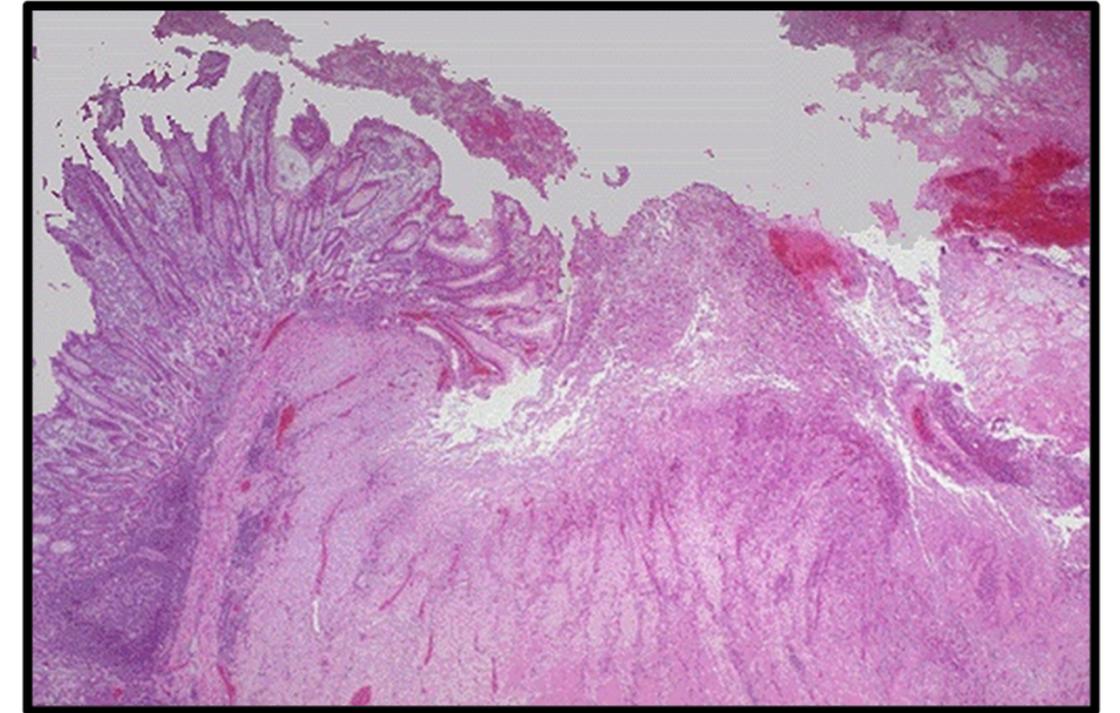
acute ulcer:

intense polymorphonuclear infiltration and vascular dilation in the margins of the defect.

Chronic ulcer:

the margins and base of the ulcer develop fibroblast proliferation, scarring, and the accumulation of lymphocytes, macrophages, and plasma cells.

when chronic ulcer there is a defect without many neutrophils but have mononuclear cells , lymphocytes macrophages plasma cells



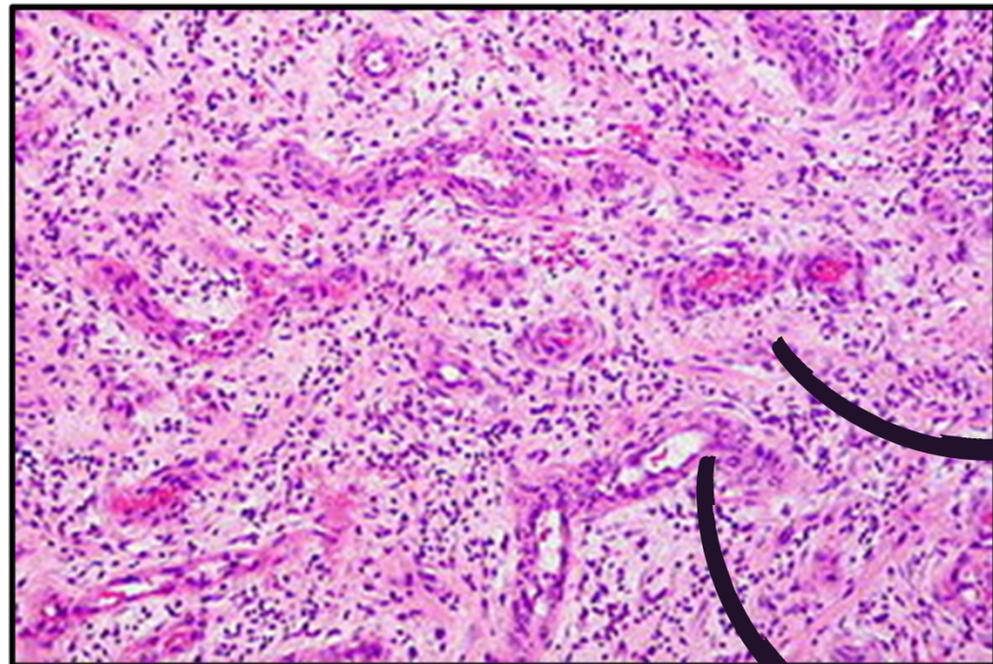
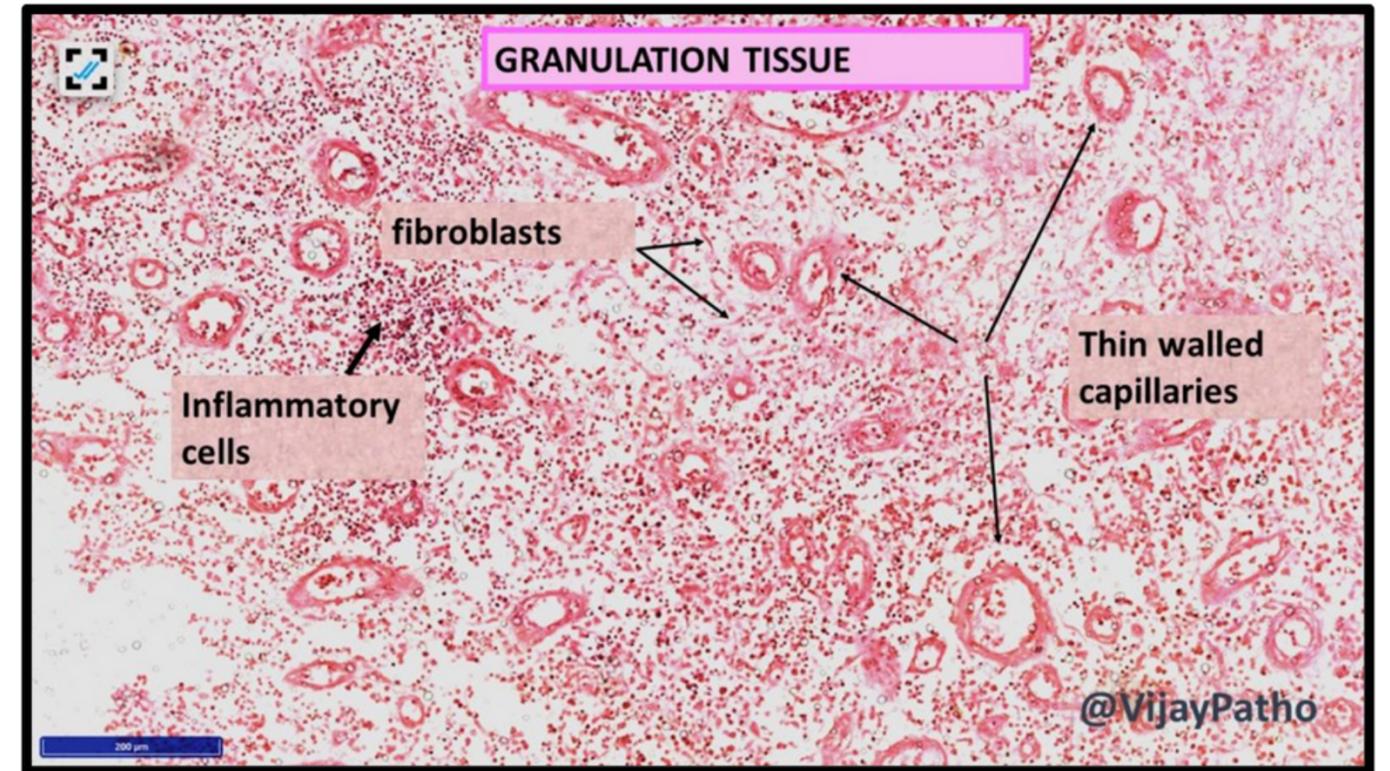
Tertiary lymphoid organs:

definition, examples:

Hashimoto thyroiditis, Helicobacter pylori gastritis

H pylori leads to acute and chronic gastritis when prolonged chronic gastritis it leads to tertiary lymphoid organ "accumulation of lymphocytes in lamina propria (reactive germinal center)" they may secrete lymphomas

granulation tissue associate with prolong chronic inflammation

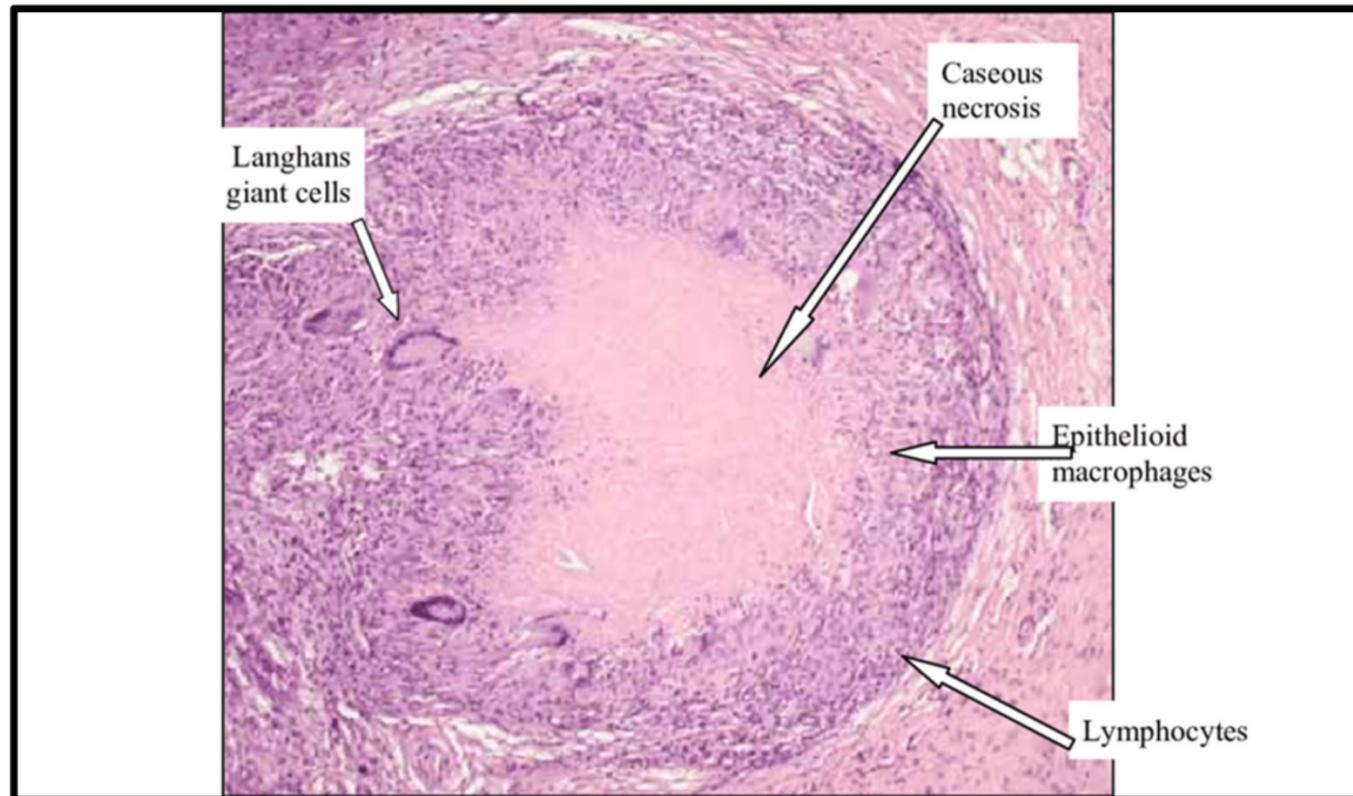
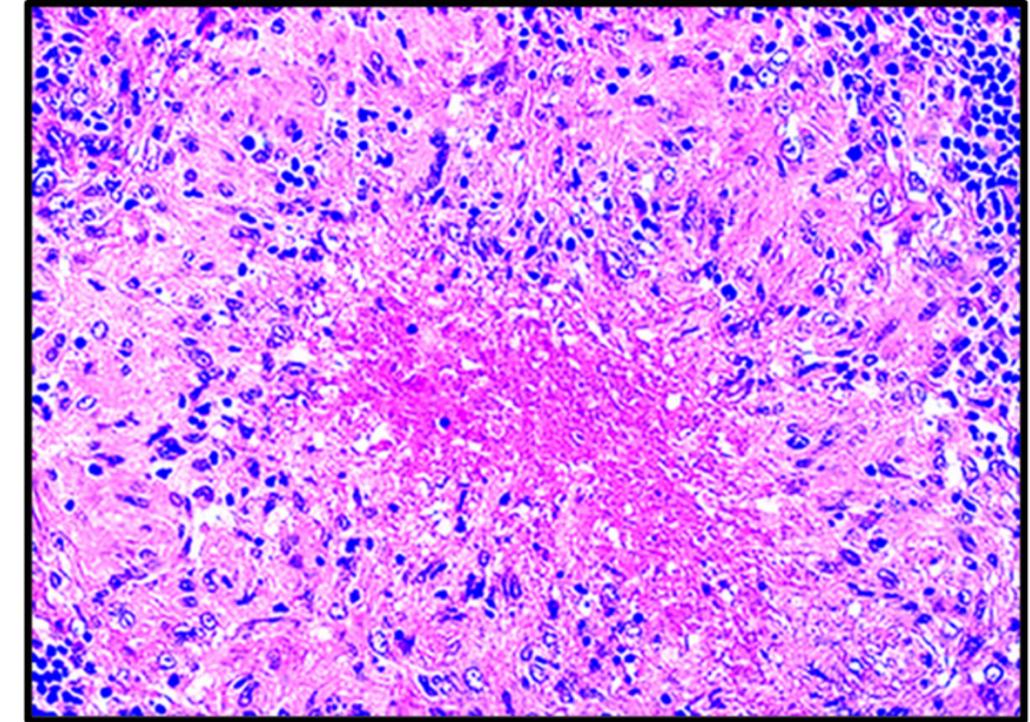
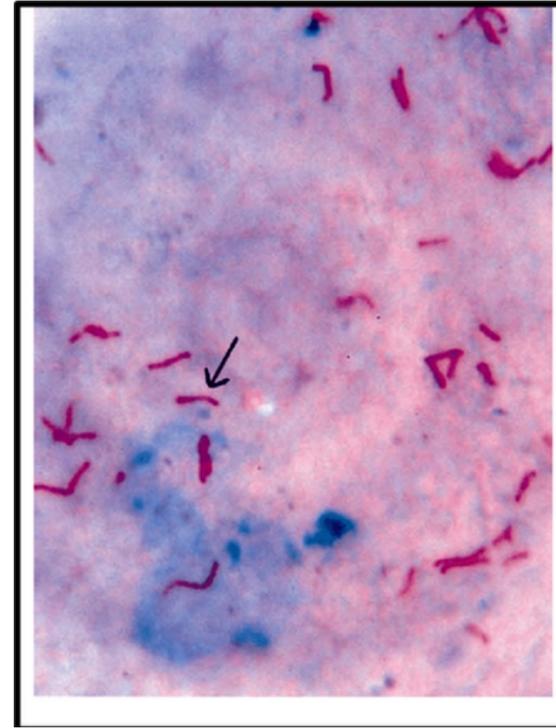


inflammatory cells and fibroblasts in between BV

increase BV in granulation tissue

Granuloma formation is a cellular attempt to contain an offending agent that is difficult to eradicate

- by chronic inflammation only
- when causes necrosis inside granuloma u should think of TB type of bacteria is acid fast bacillus



Langhans giant cells are multinucleated giant cells in TB



Arterial ulcers:
develop in individuals with
atherosclerosis of
peripheral arteries, especially
associated with
diabetes.



Venous leg ulcers:
seen in chronic venous hypertension
which may be caused
by severe varicose veins or
congestive heart failure

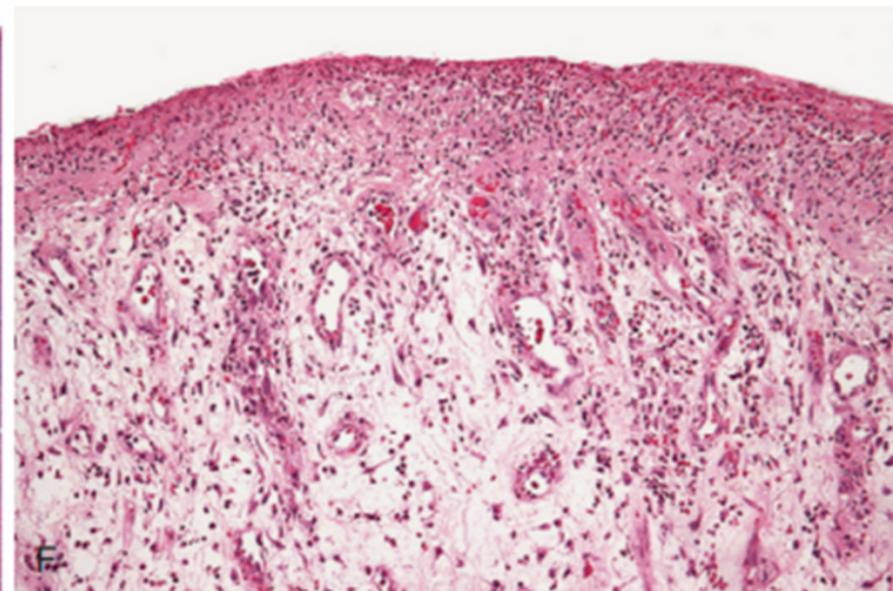


Pressure sores:
caused by prolonged
compression of
tissues against a bone,
for example, in bedridden

DIABETIC ULCERS



caused by:
small vessel disease causing ischemia,
neuropathy, systemic metabolic
abnormalities, and secondary infections



epithelial ulceration and extensive
granulation tissue in the underlying
dermis

WOUND RUPTURE (DEHISCENCE)

when increased intra abdominal pressure patient after surgery may have "dilation of colon or small bowel" so wide distance between margins

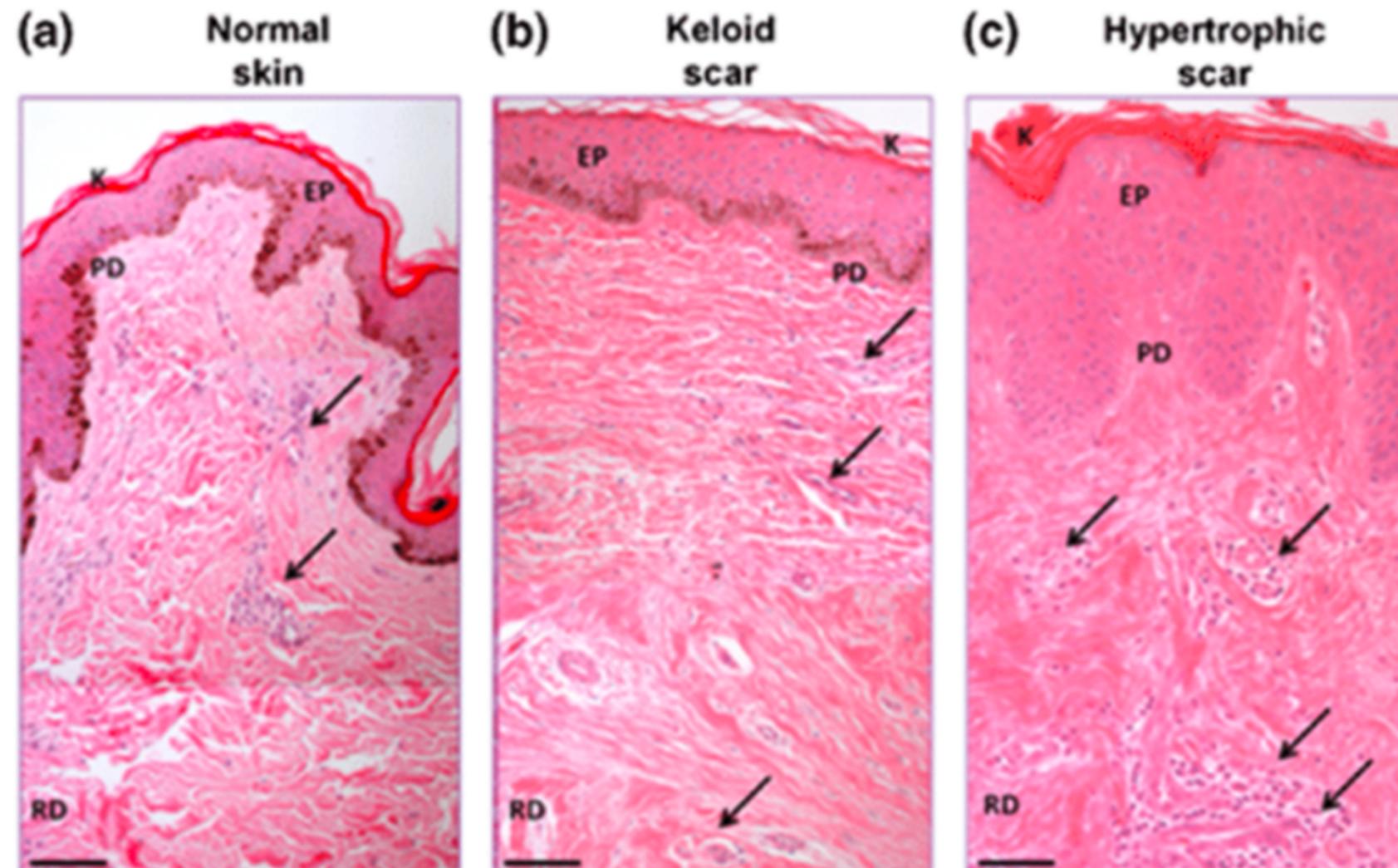
when chronic cough like whooping cough or ileus (painful obstruction of the ileum or other part of intestine)



**HYPERTROPHIC
SCAR**

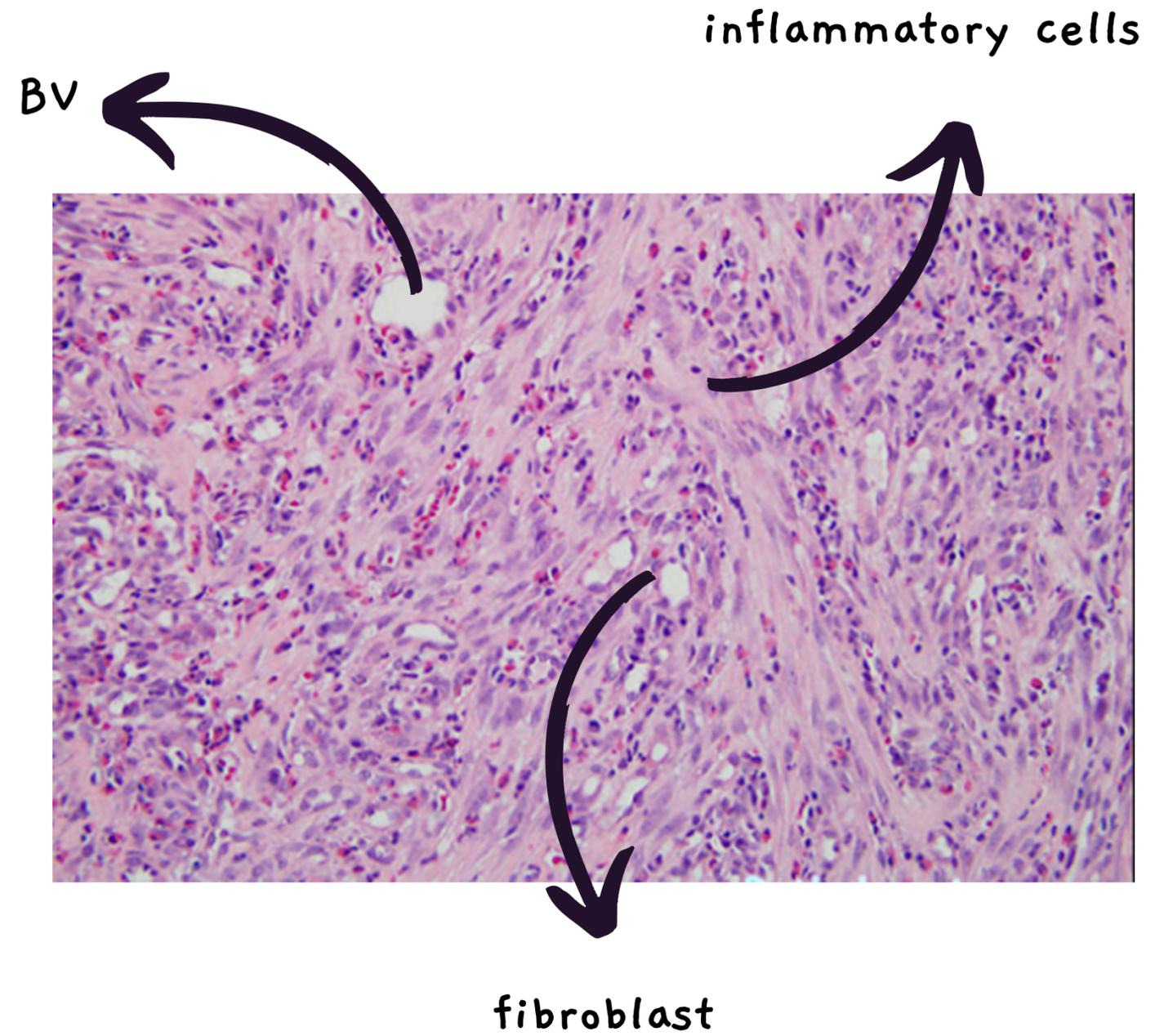
KELOID

growth outside the boundaries



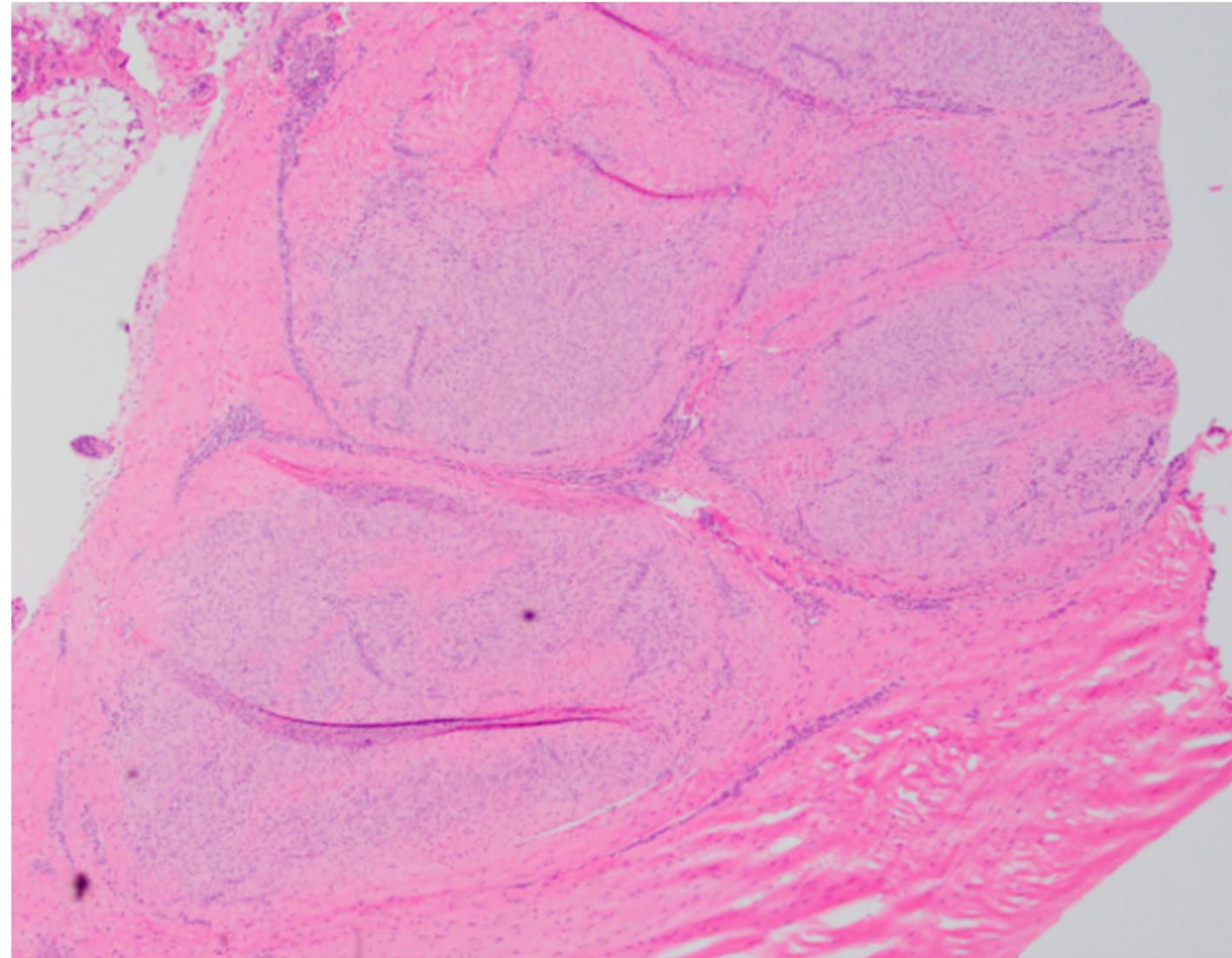
- A. In normal skin, the characteristic random orientation and bundle formation of collagen fibres
- B. increased number of thick collagen fibres arranged in bundles
- C. The collagen fibres were arranged randomly and showed highly cellular zones

EXUBERANT GRANULATION



CONTRACTION

high fibrous tissue for when sever burns



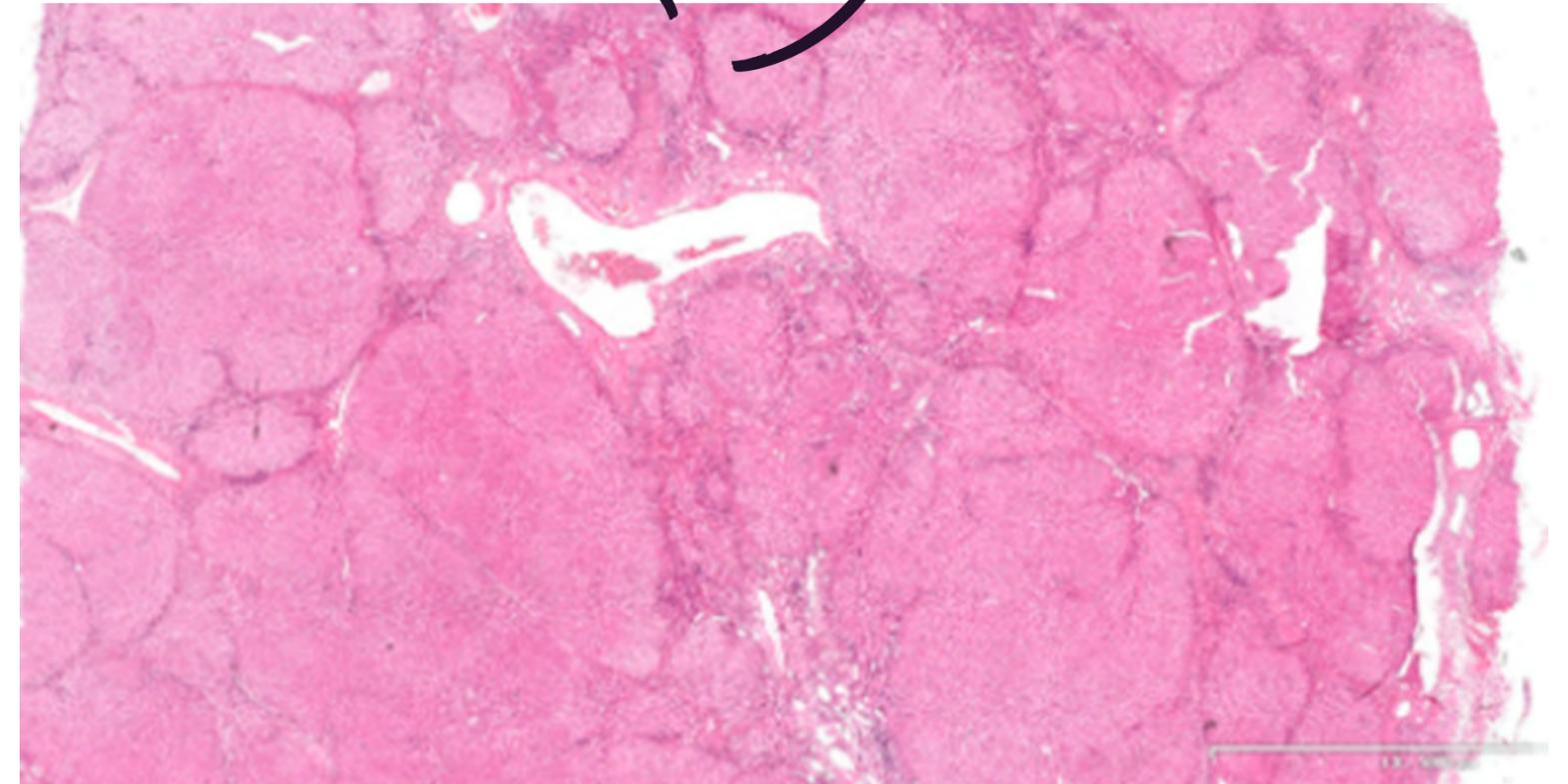
LIVER CIRRHOSIS

fibrous tissue

nodule



Diffuse nodulation of liver
due to fibrous bands
subdividing liver into
regenerative nodules
rich in fibers

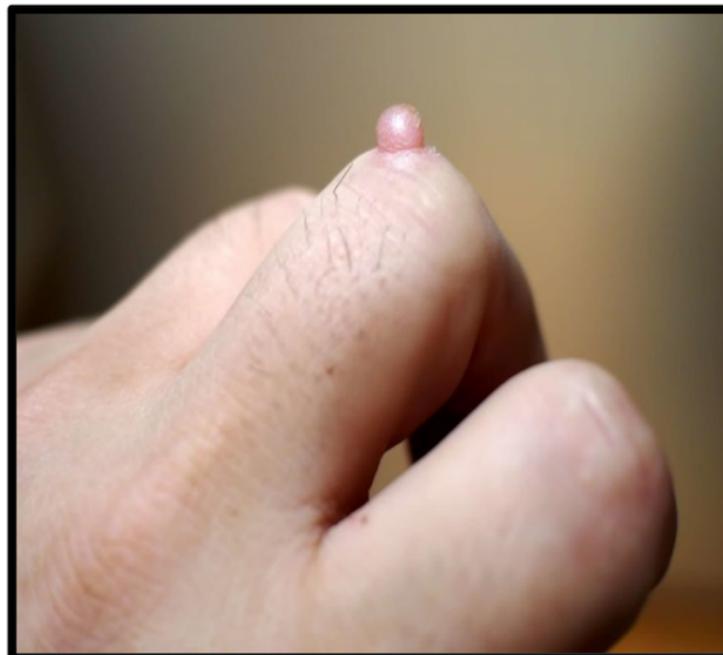
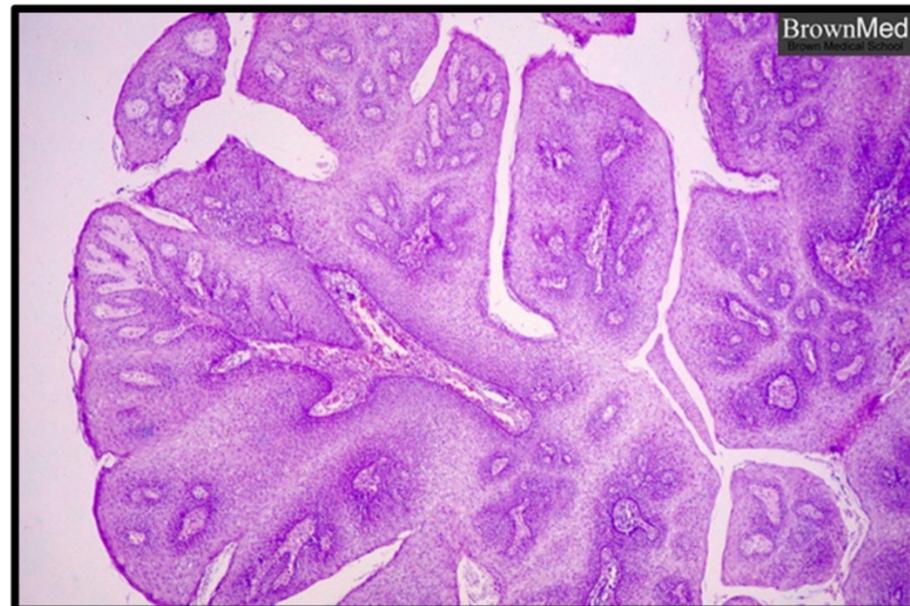
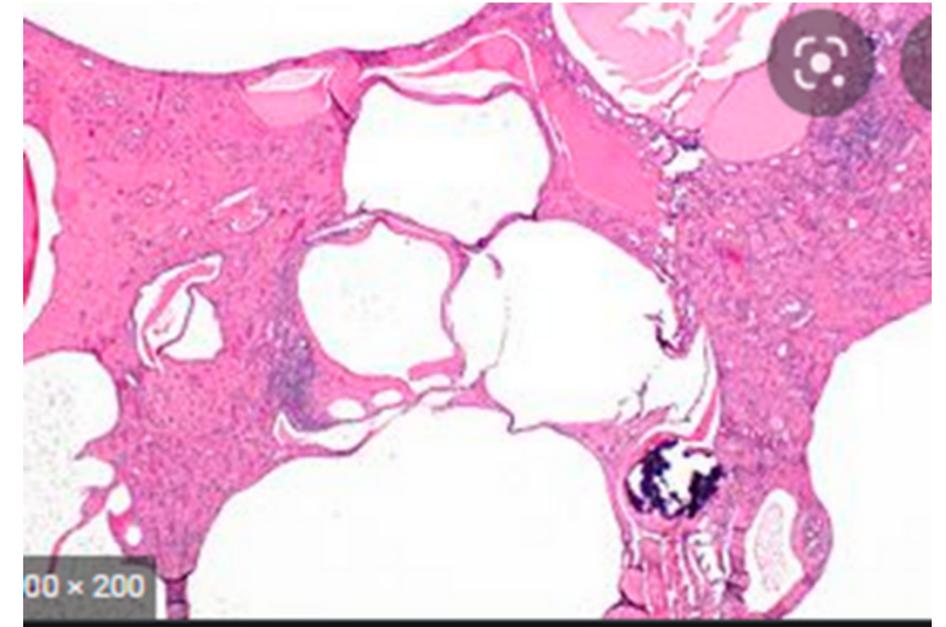


diffuse disruption in architecture of
the liver with
bridging fibrous septa and
parenchymal nodules
formation.

END-STAGE KIDNEY DISEASE HISTOLOGY

Cystic expansions of all portions of renal tubule and glomerular capsule, lined by atrophic epithelium.

prolong pr the end stage kidney disease
also high fibrous tissue

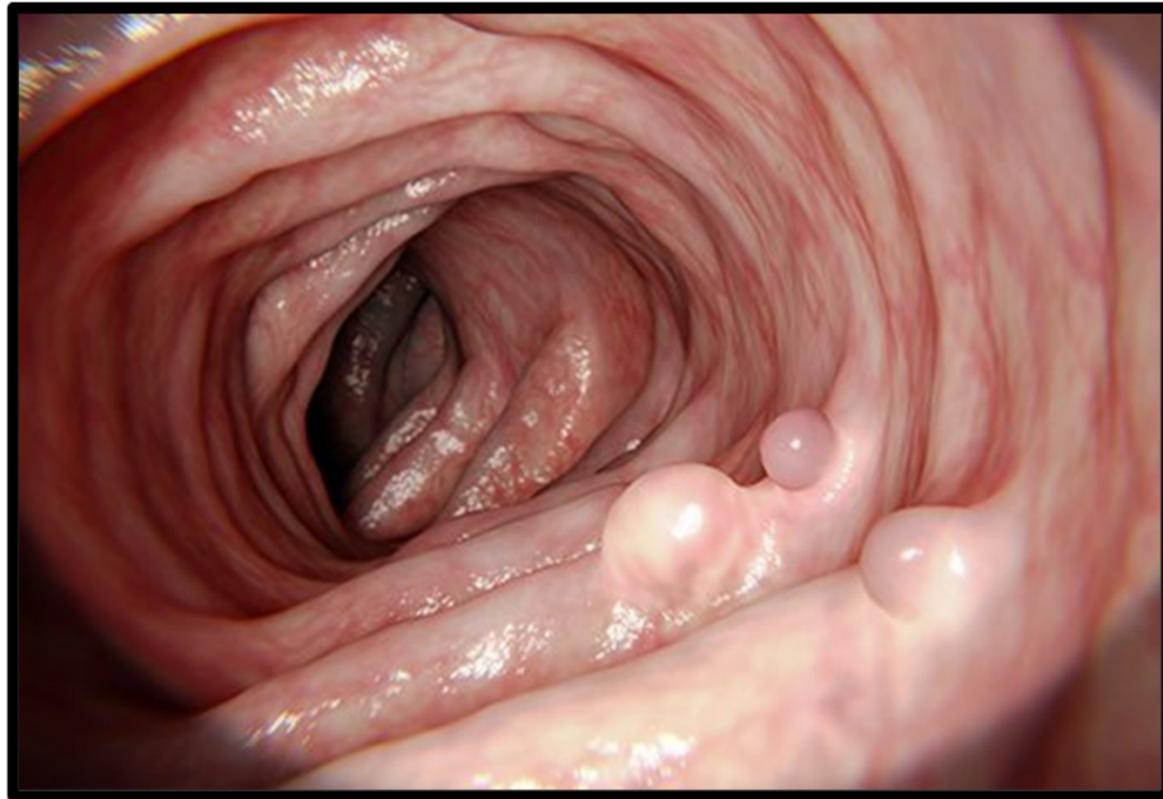


PAPILLOMAS

papillary proliferation of squamous epithelium its benign
the most important in neoplasm is
different benign from malignant tumor

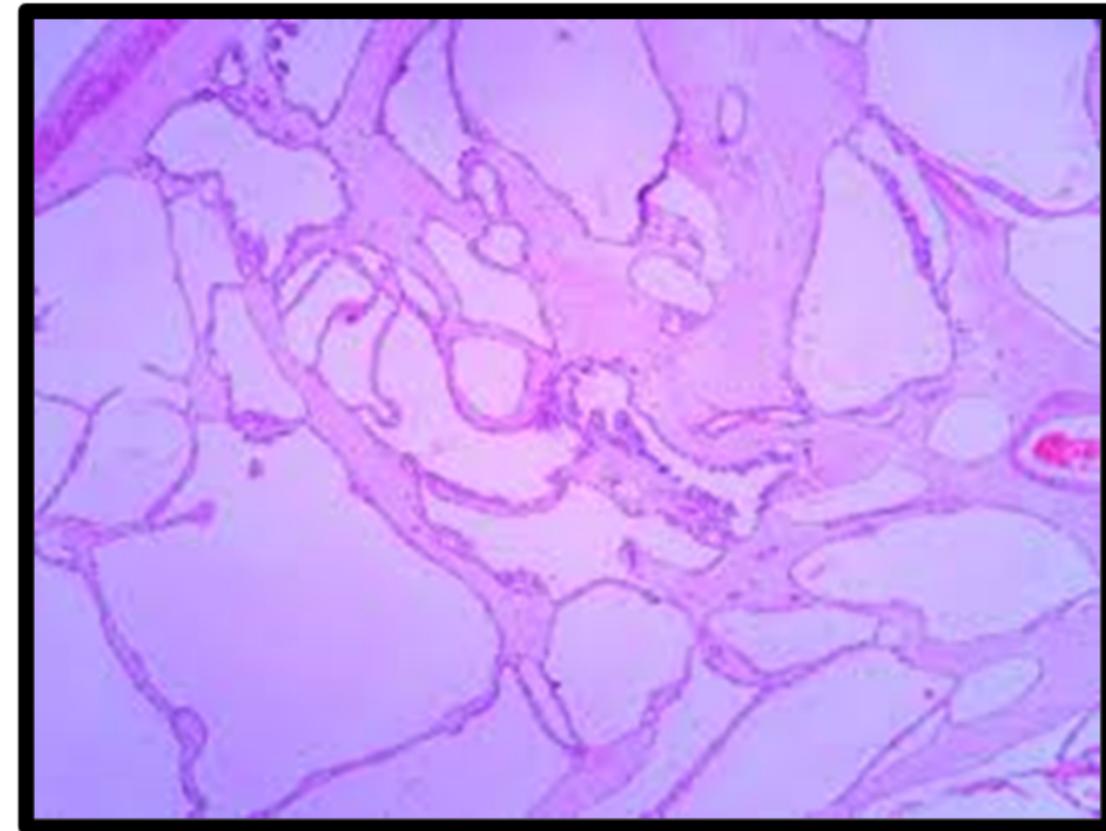
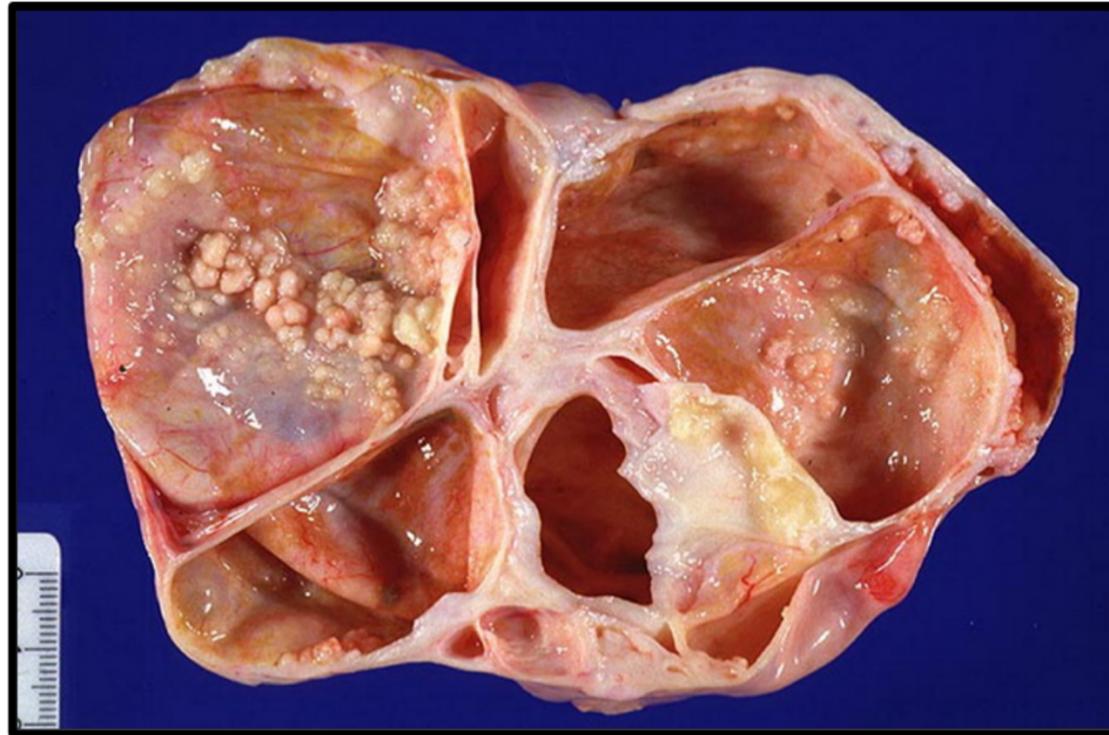
GASTROINTESTINAL POLYP

composed of hyperplastic or dysplastic epithelium papillary OR tubular proliferation



OVARIAN CYSTADENOMA

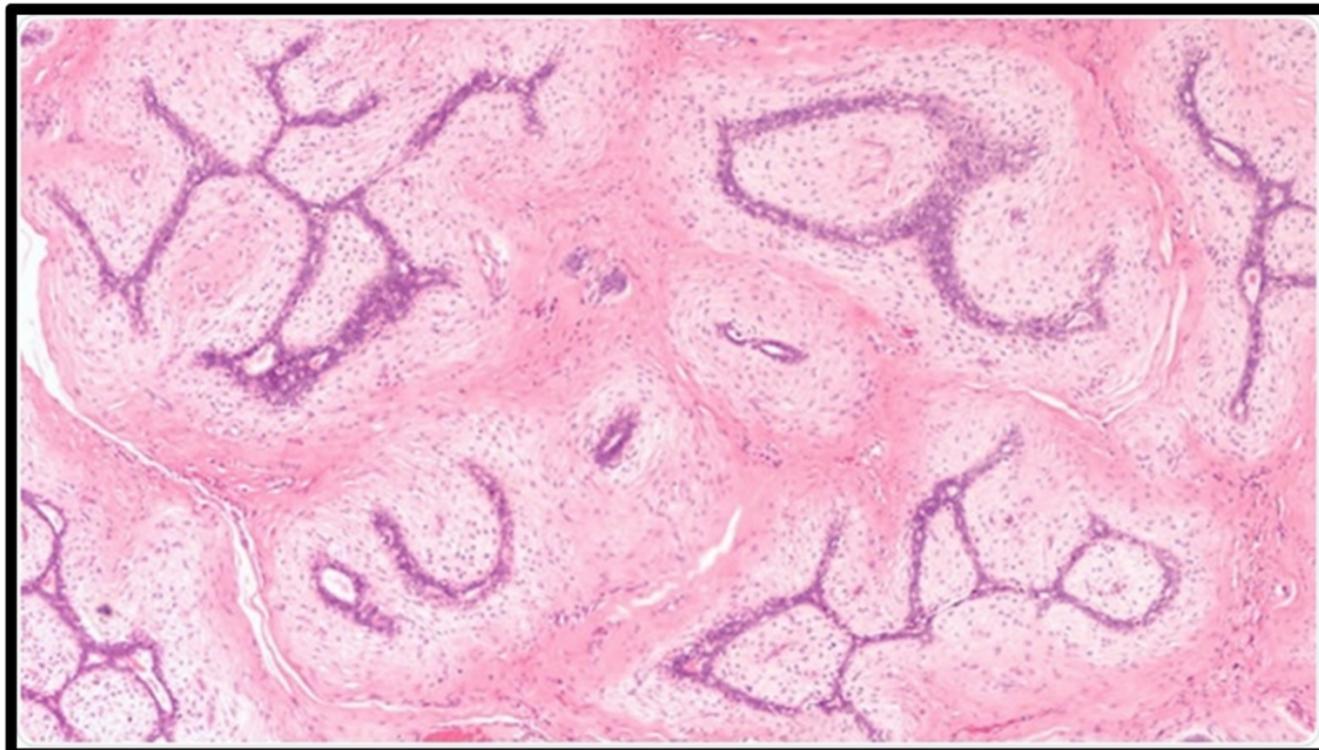
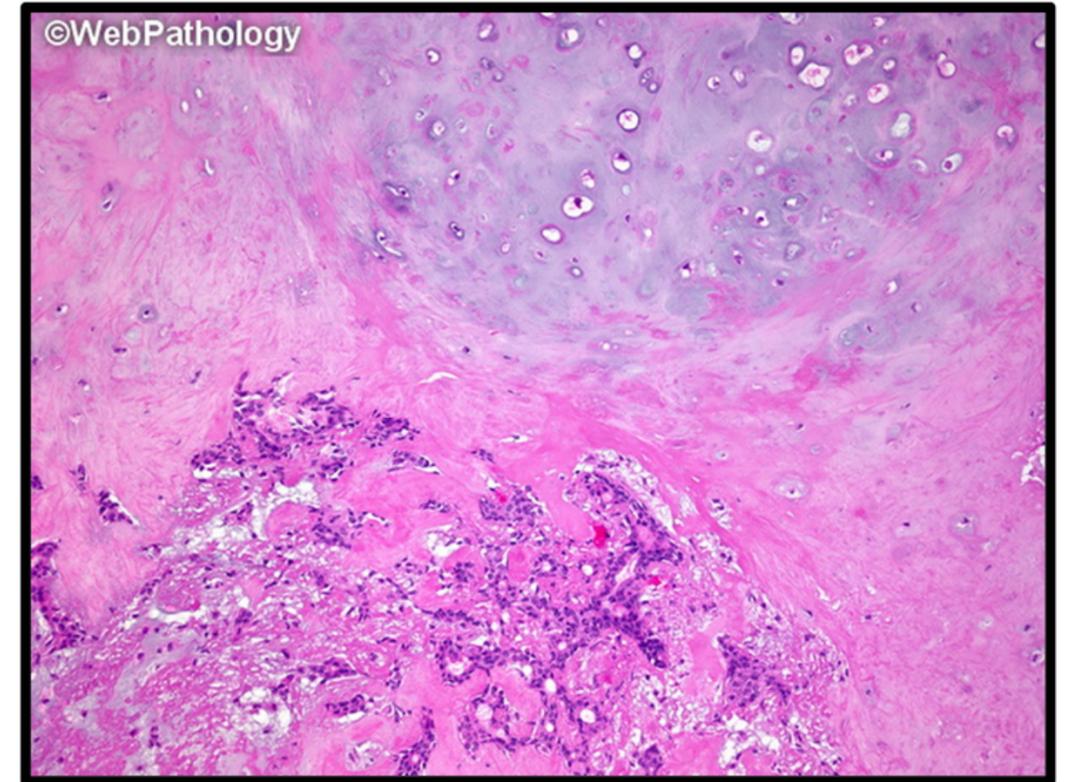
ovarian full of cystic sepsis lined by either serous or mucinous epithelium multilocular many locale inside cyst



PLEOMORPHIC ADENOMA

It contain epithelial components with islands of cartilage
or bone

this is a mixed benign tumor composed of epithelium and
mesenchyme and the ducts that show are epithelium



Fibroadenoma of the female breast contain:
proliferating ductal elements (adenoma)
embedded in loose fibrous tissue

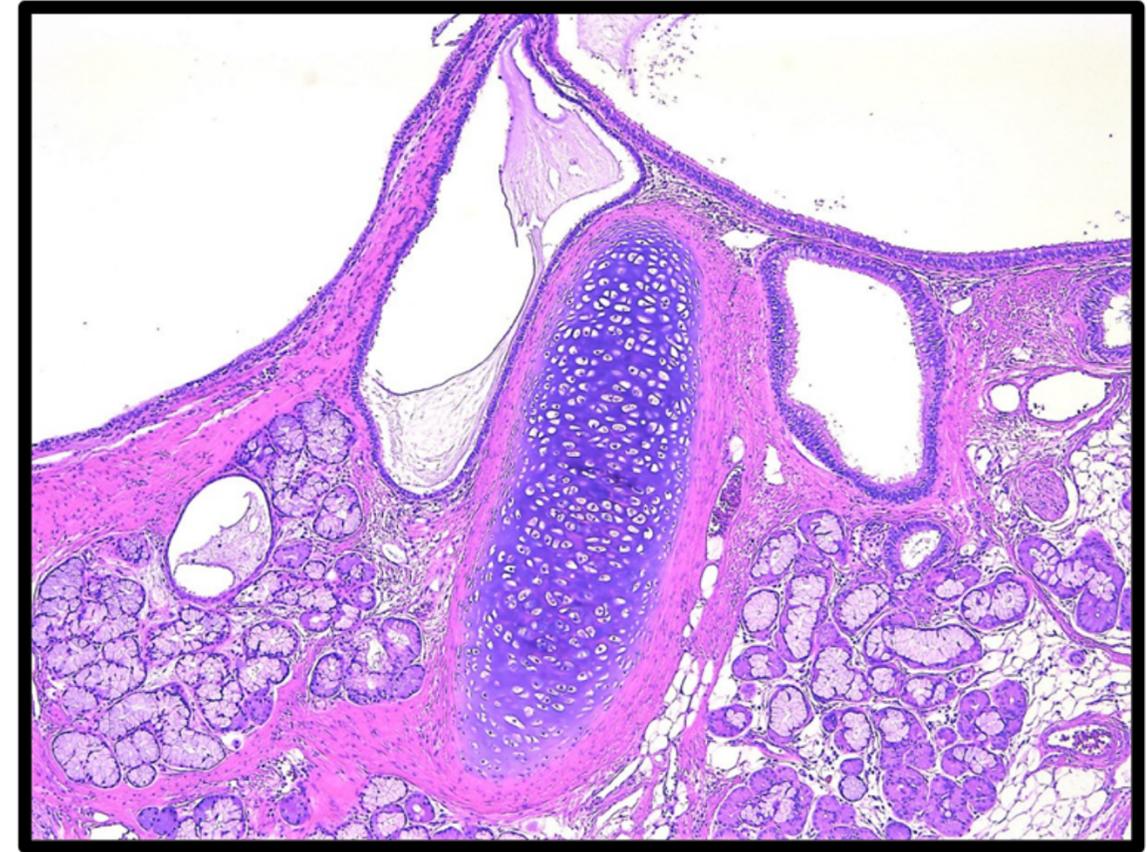
when take suction would find epitheliums + fibrous tissue

TERATOMA

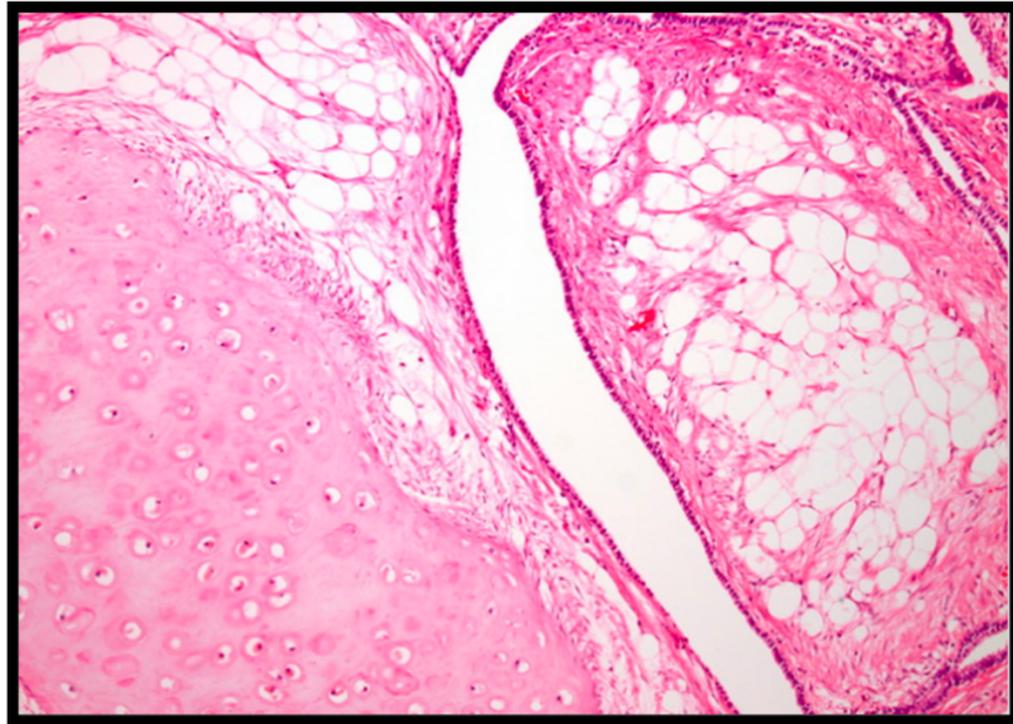
more than one cell type mesoderm
ectoderm endoderm



you can find any type of
mesenchyme or epithelium

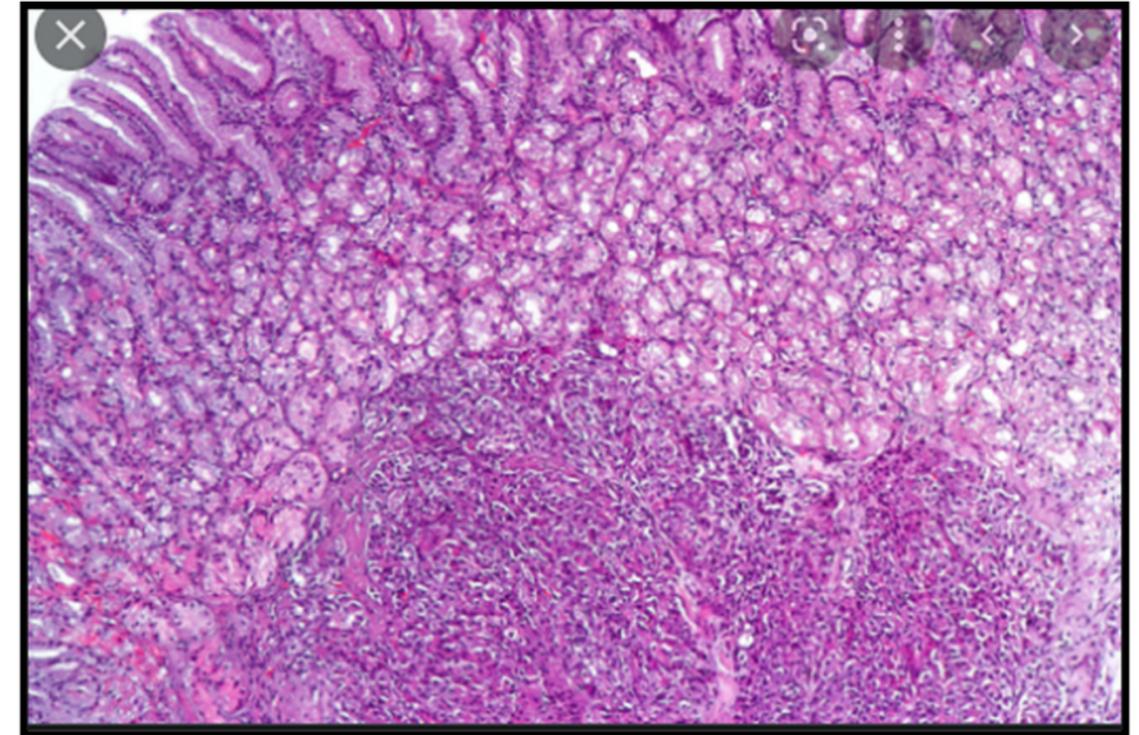


HAMARTOMA



➤ is a mass of disorganized tissue indigenous to the particular site, such as the lung or the liver.
like seeing a bile duct BV and liver parenchyma
same component of the organ but disorganized

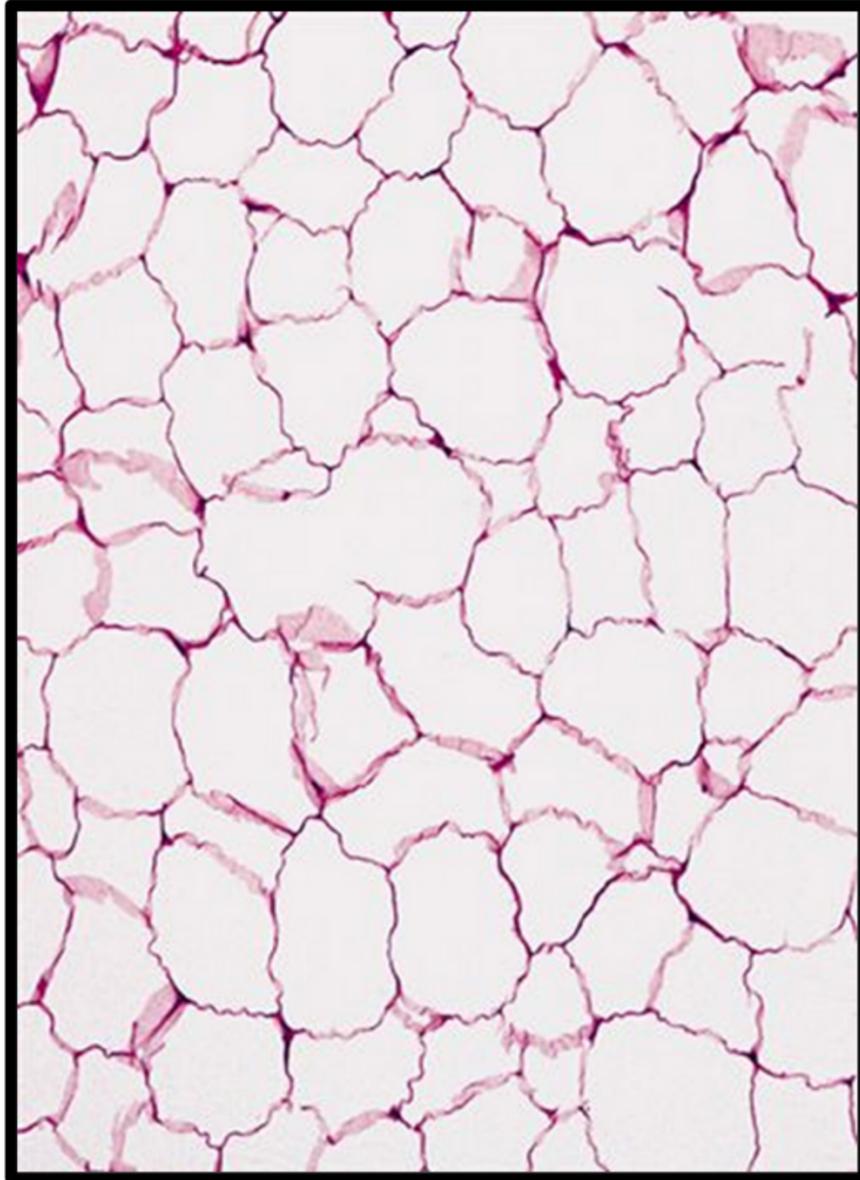
CHORISTOMA



is a congenital anomaly consisting of a heterotopic nest of cells.
foreign to the organ
pancreatic heterotopia
presence of pancreatic tissue in gastric epithelia

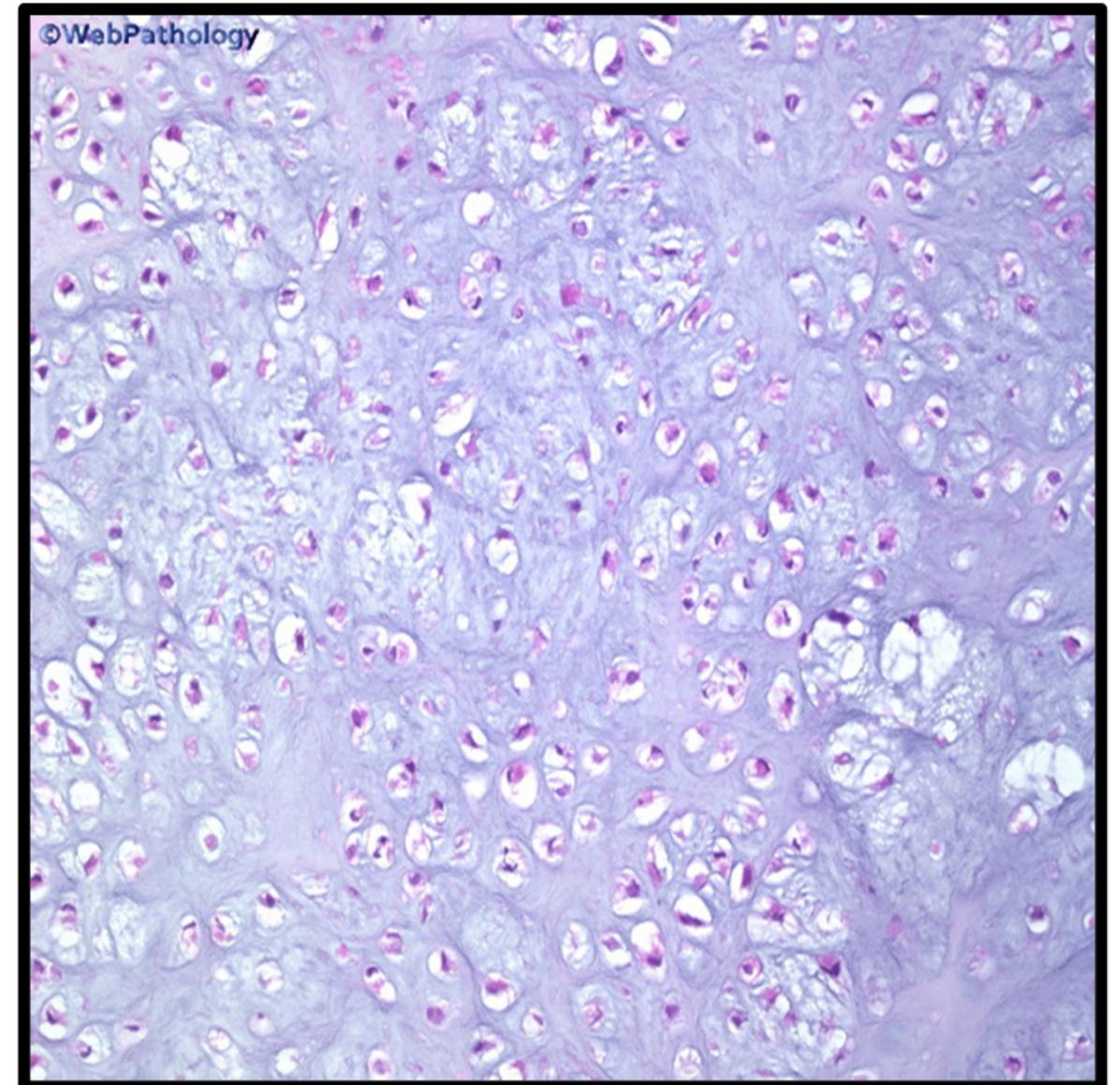
LIPOMA

benign adipocyte

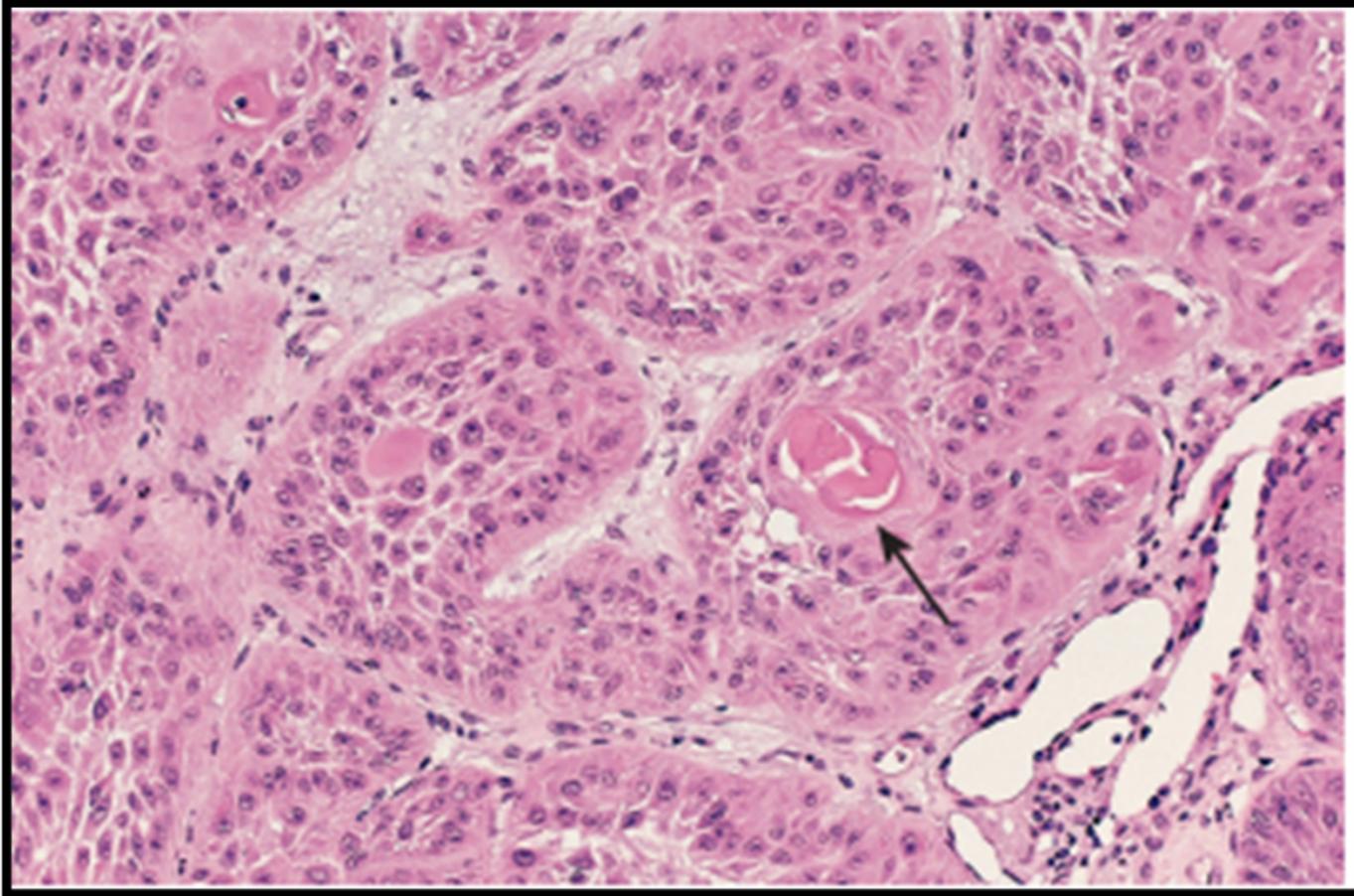


CHONDROMA

benign lobule of cartilage

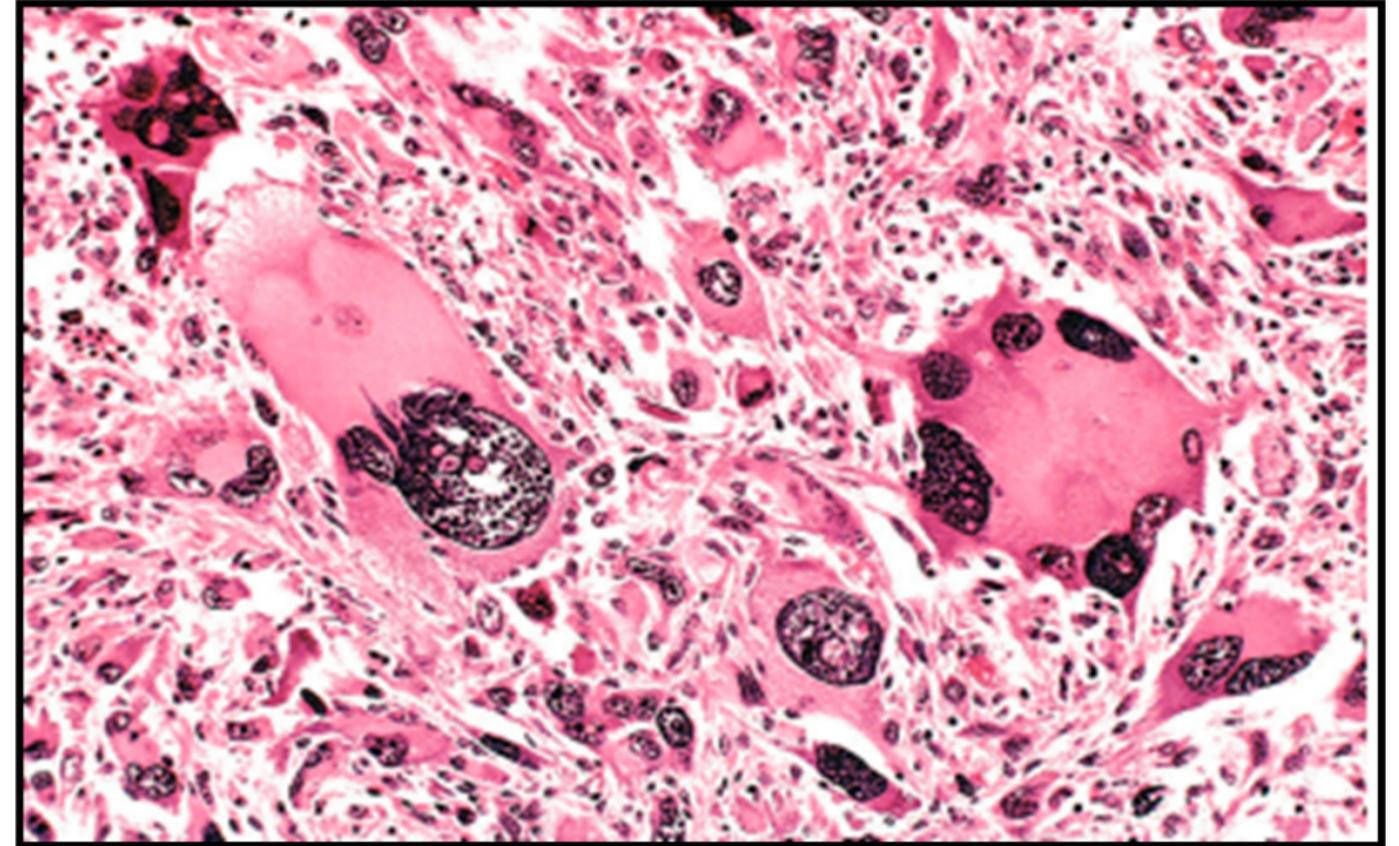


In malignant we depend on differentiation when we name the tumor



Well-differentiated squamous cell carcinoma

Respect its Origin

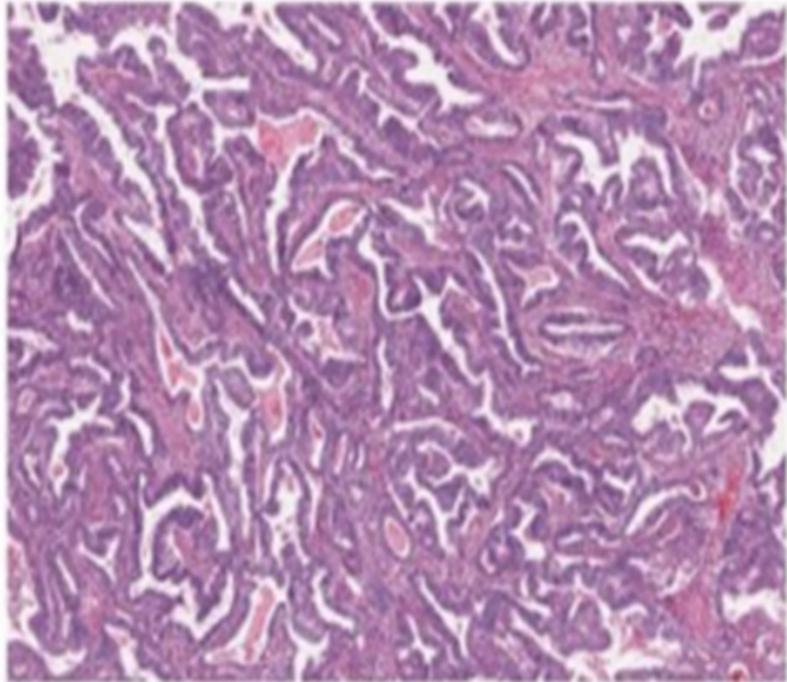


Pleomorphic malignant tumor

poorly differentiated depend on immunostaining
to know its type

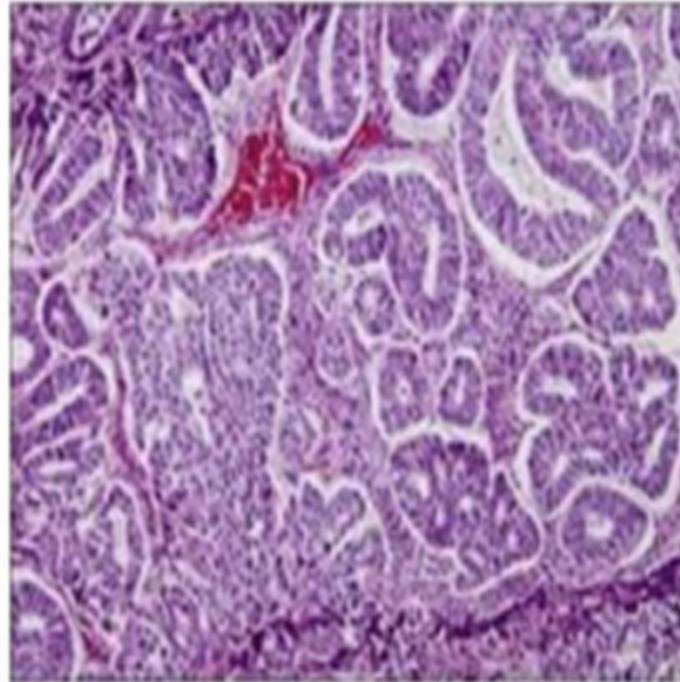
the grading differs according to the type of organ

Well differentiated / grade 1



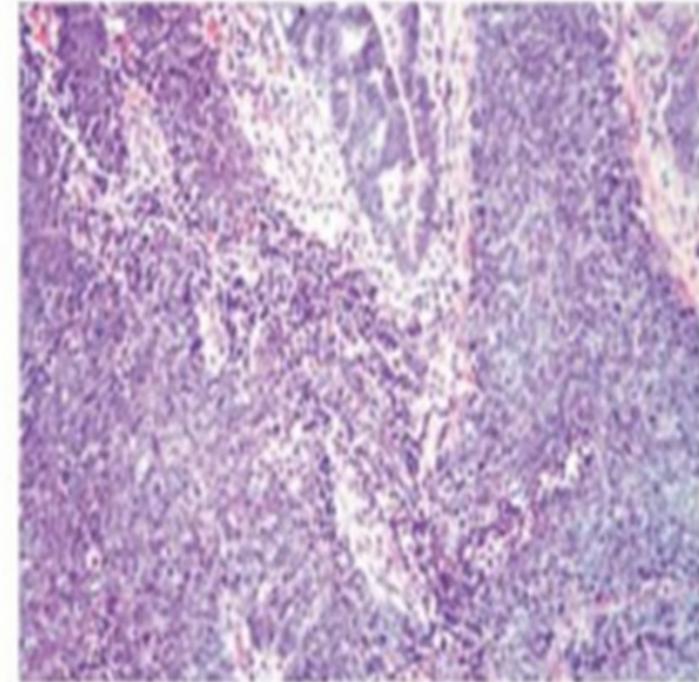
Well formed glands

Moderately differentiated / grade 2



Well formed glands with solid sheets (<50%)

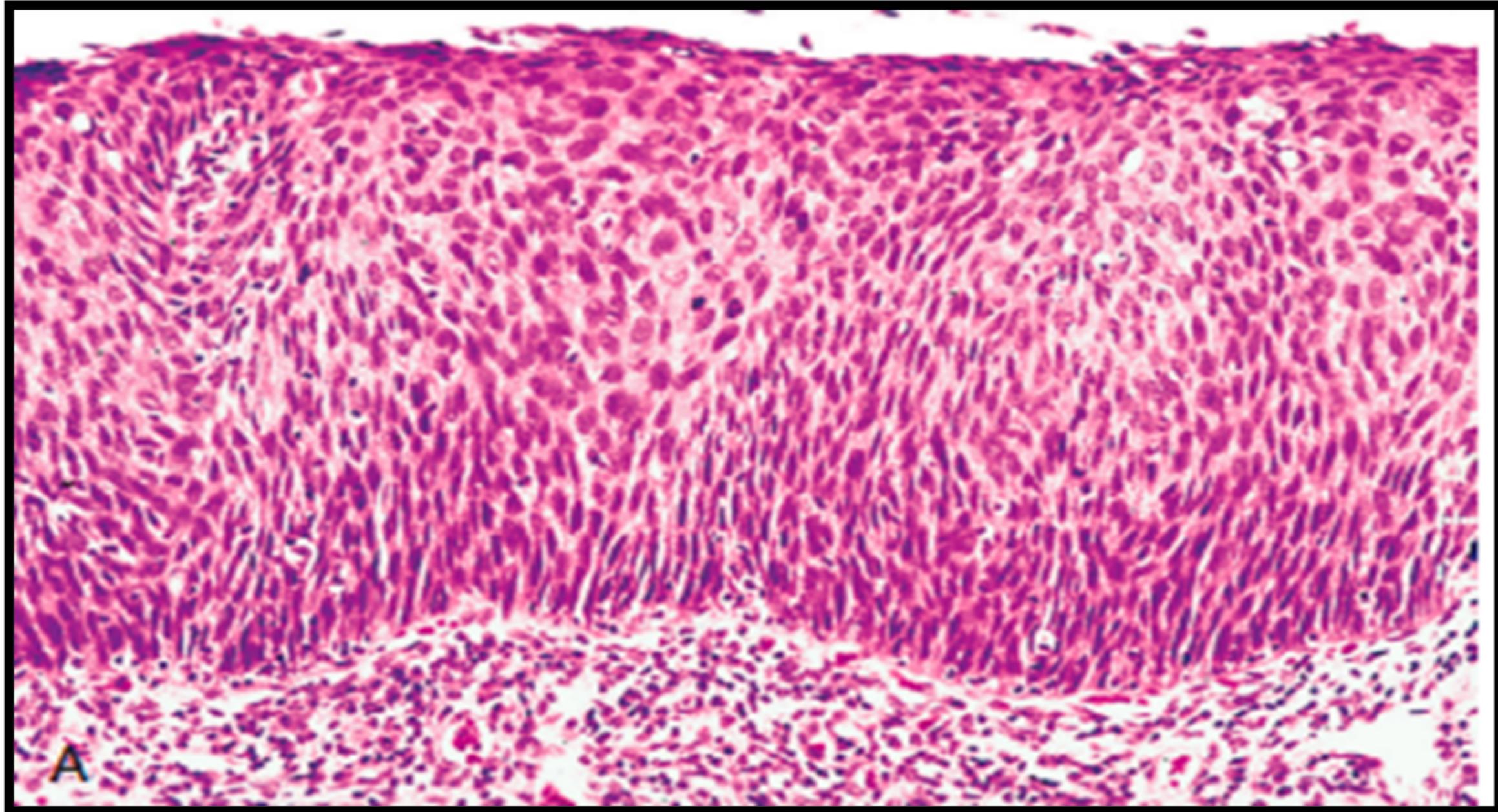
Poorly differentiated / grade 3



glands with solid sheets (>50%)

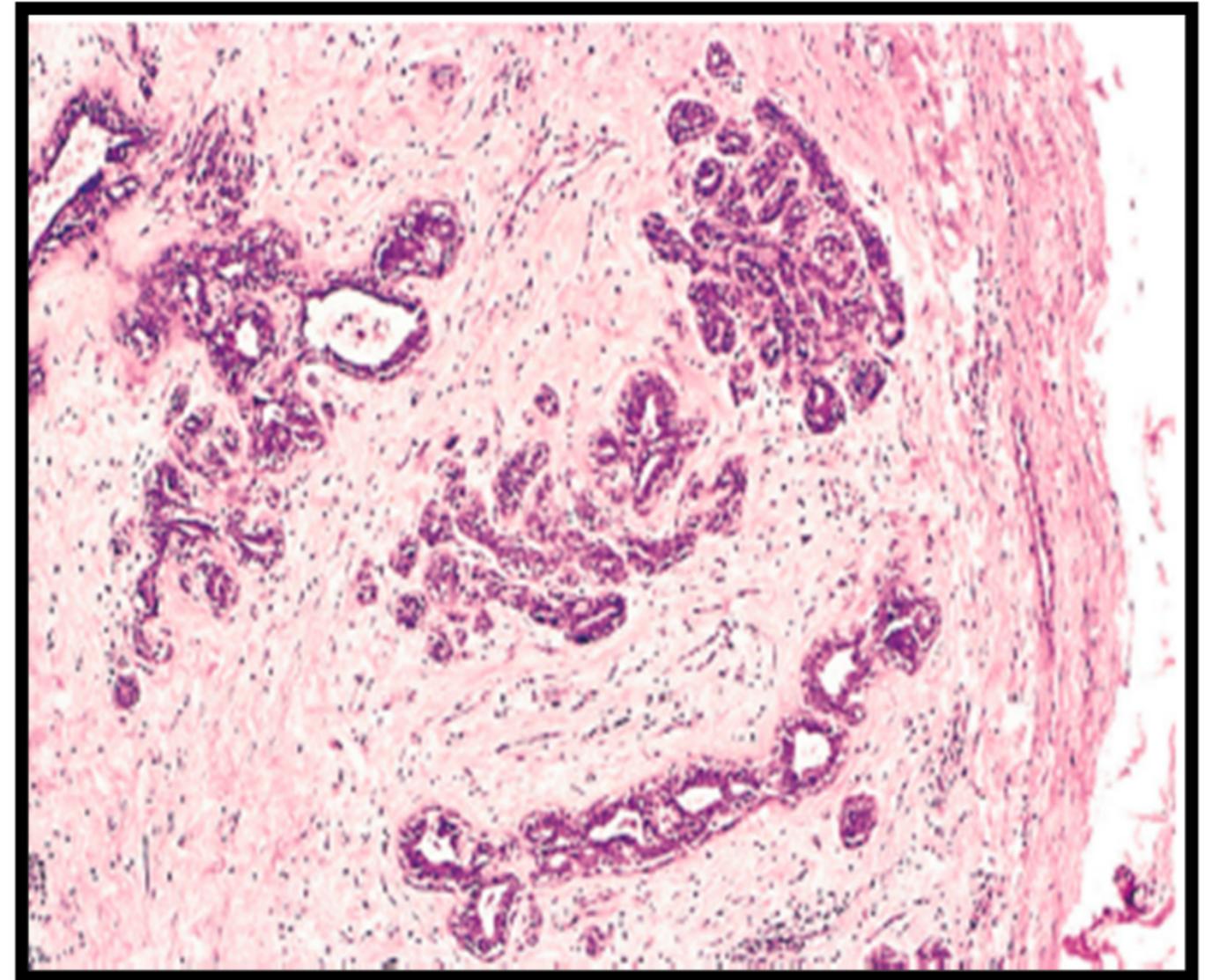
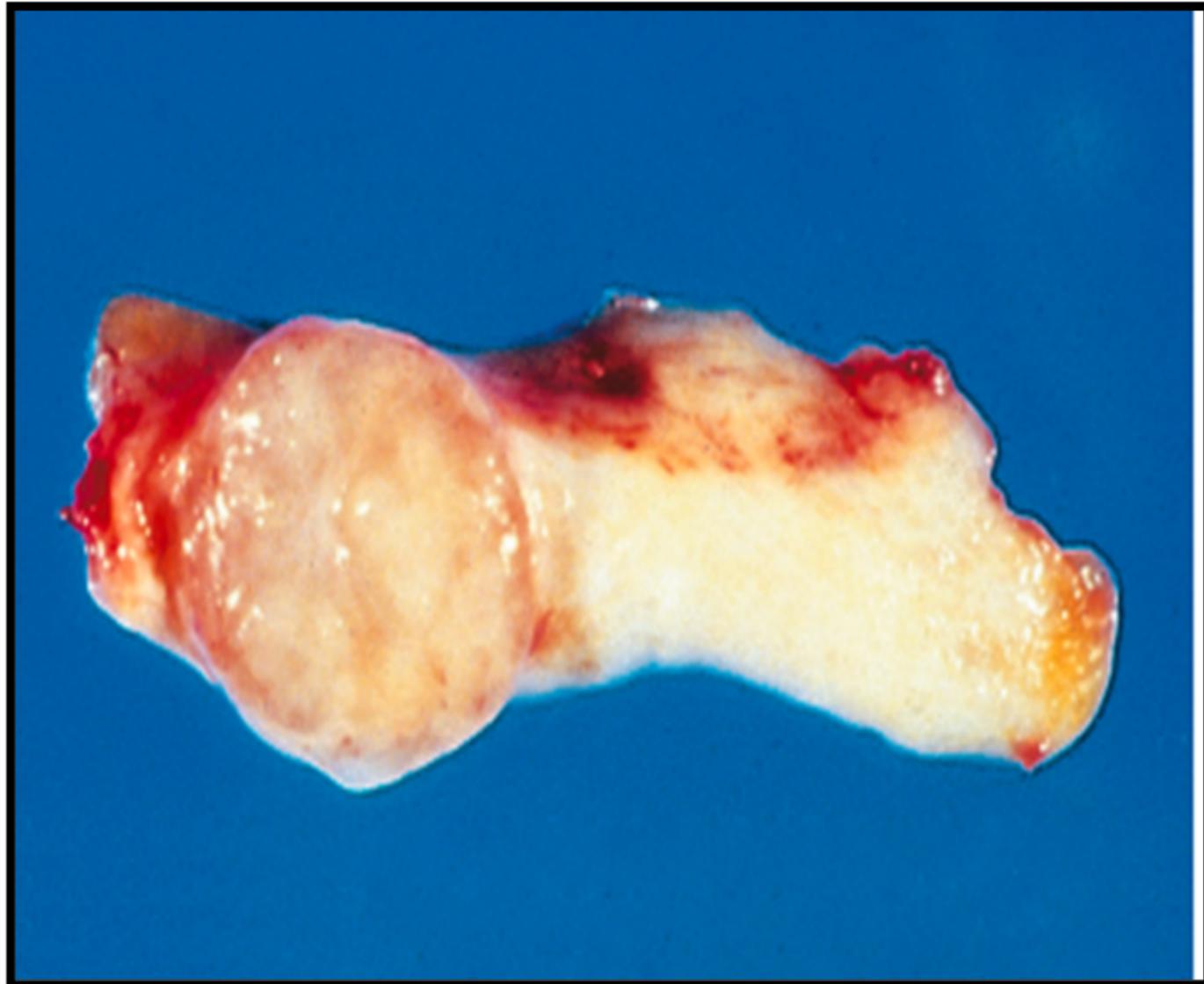
@VijayPatho

CARCINOMA in-SITU



Limited to epidermis No invasion to the dermis

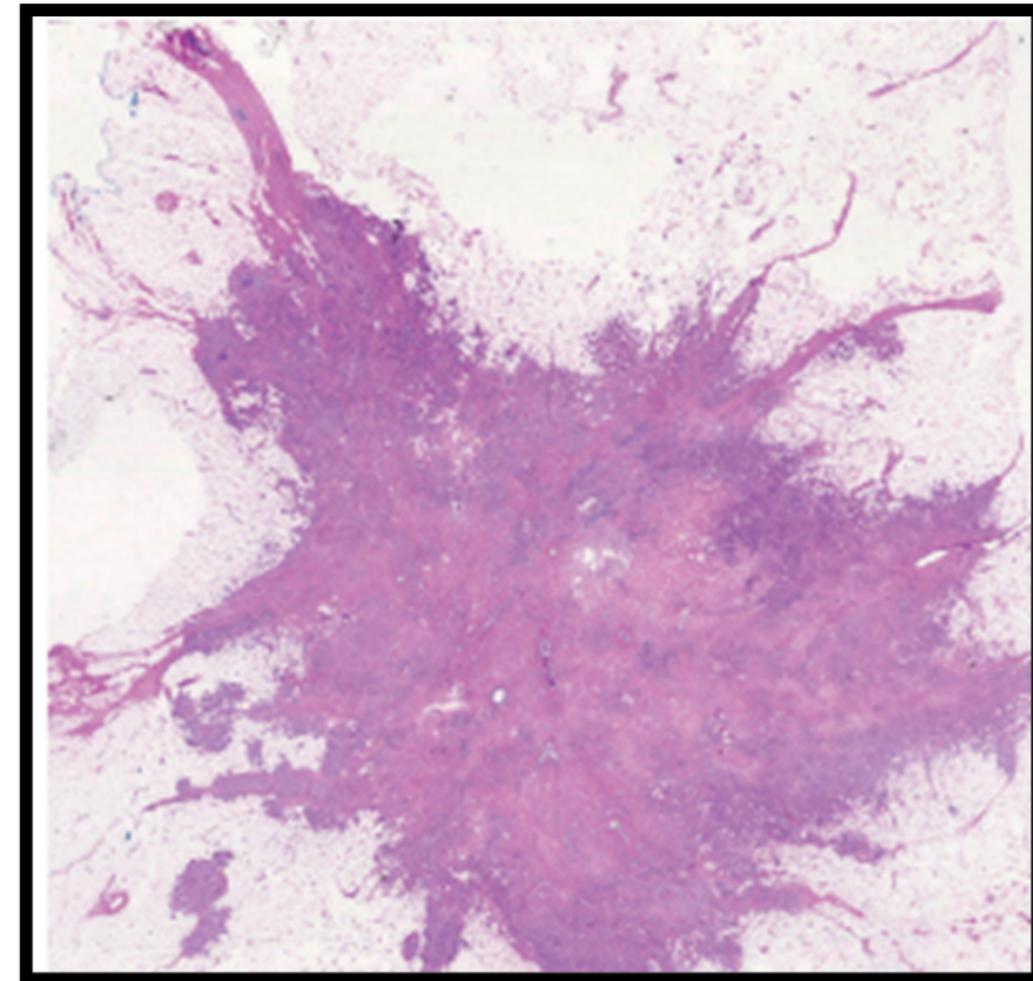
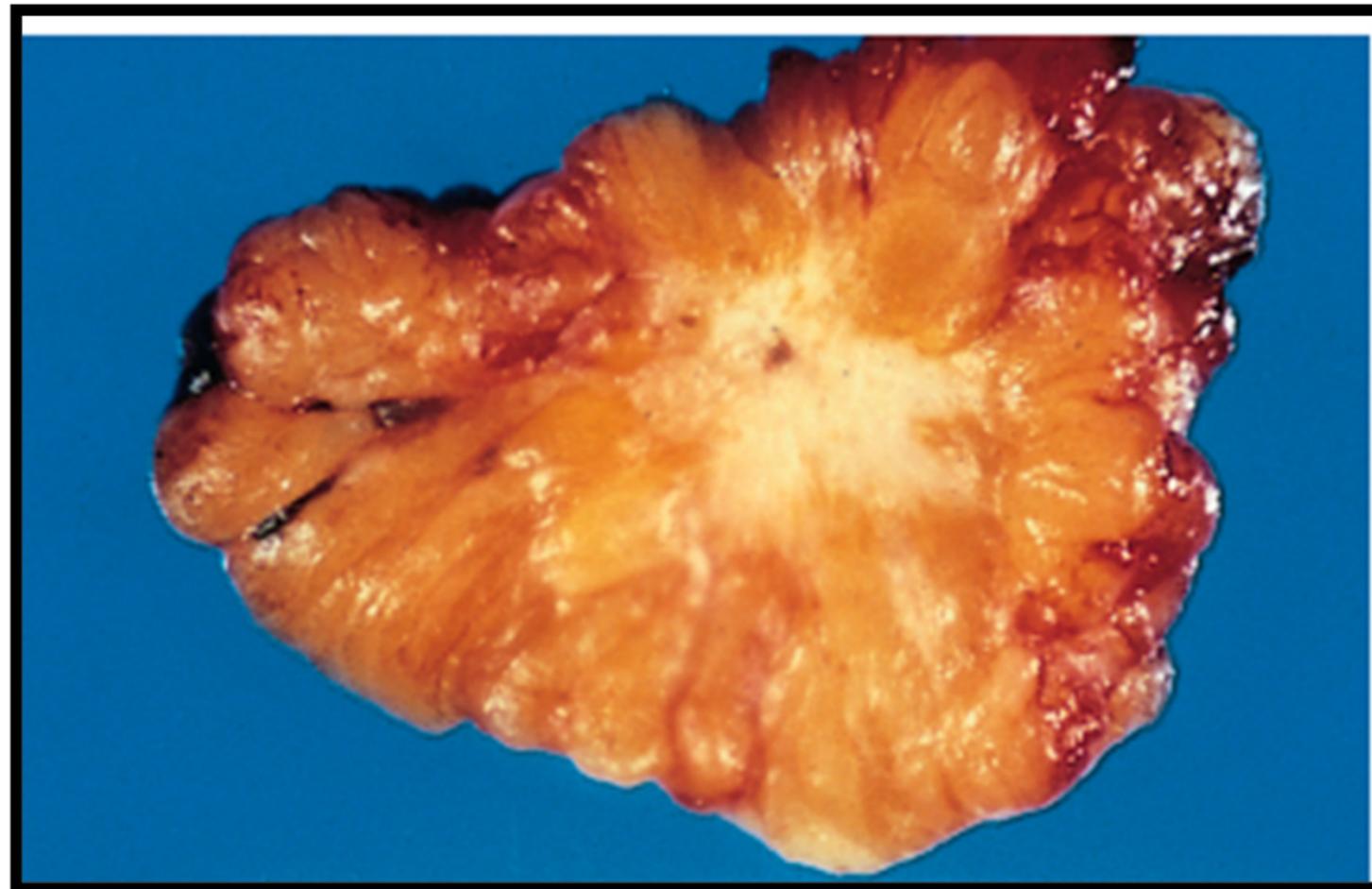
FIBROADENOMA



composed of well defined encapsulated "sign of benign tumor"
under microscope benign gland in a loose fibrous stroma

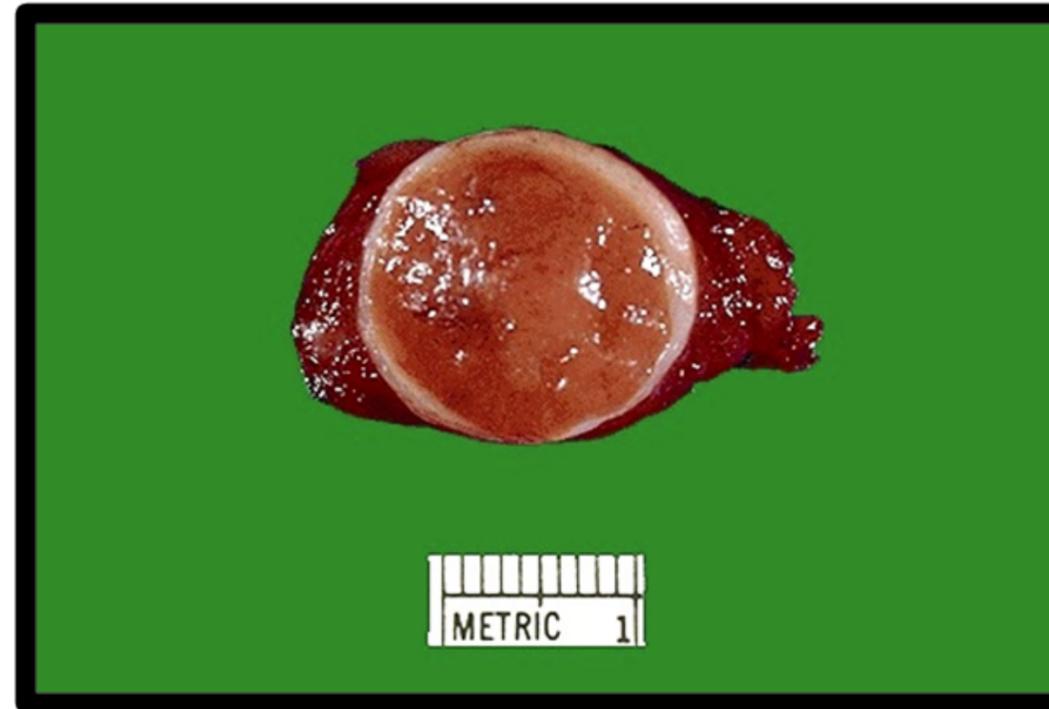
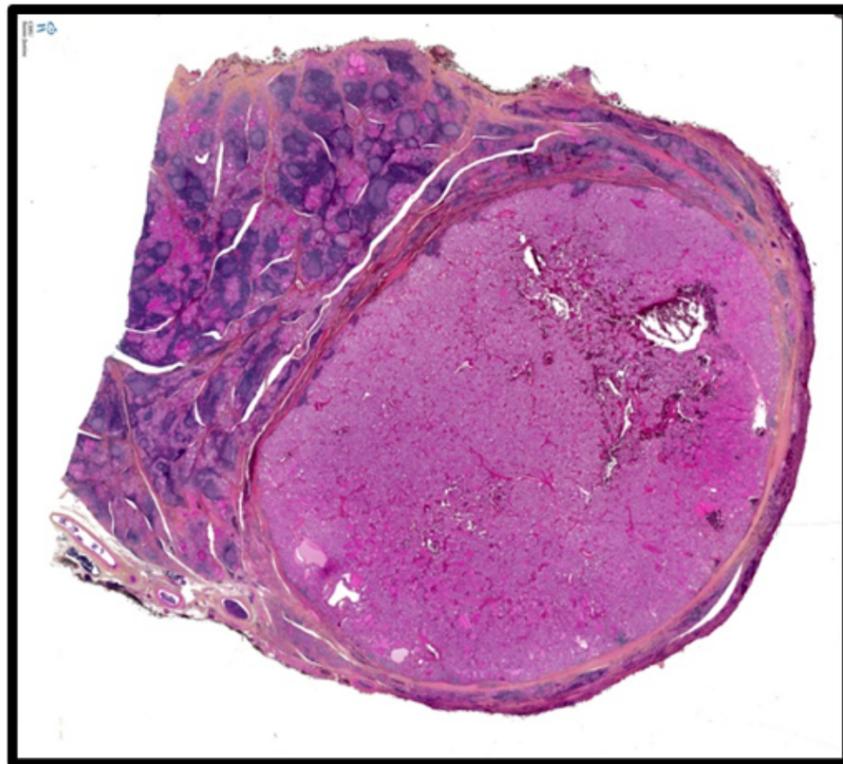
BREAST CANCER

Sign of malignancy ill defined "no capsule" or invasion of the tissue around

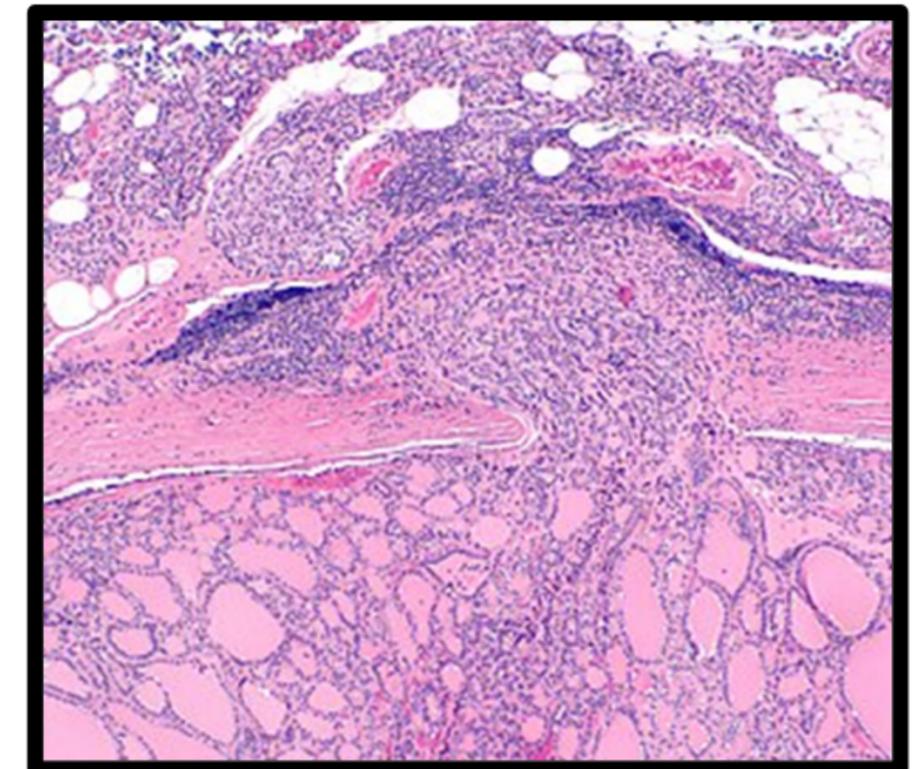


THYROID NODULE

FOLLICULAR ADENOMA



FOLLICULAR CARCINOMA

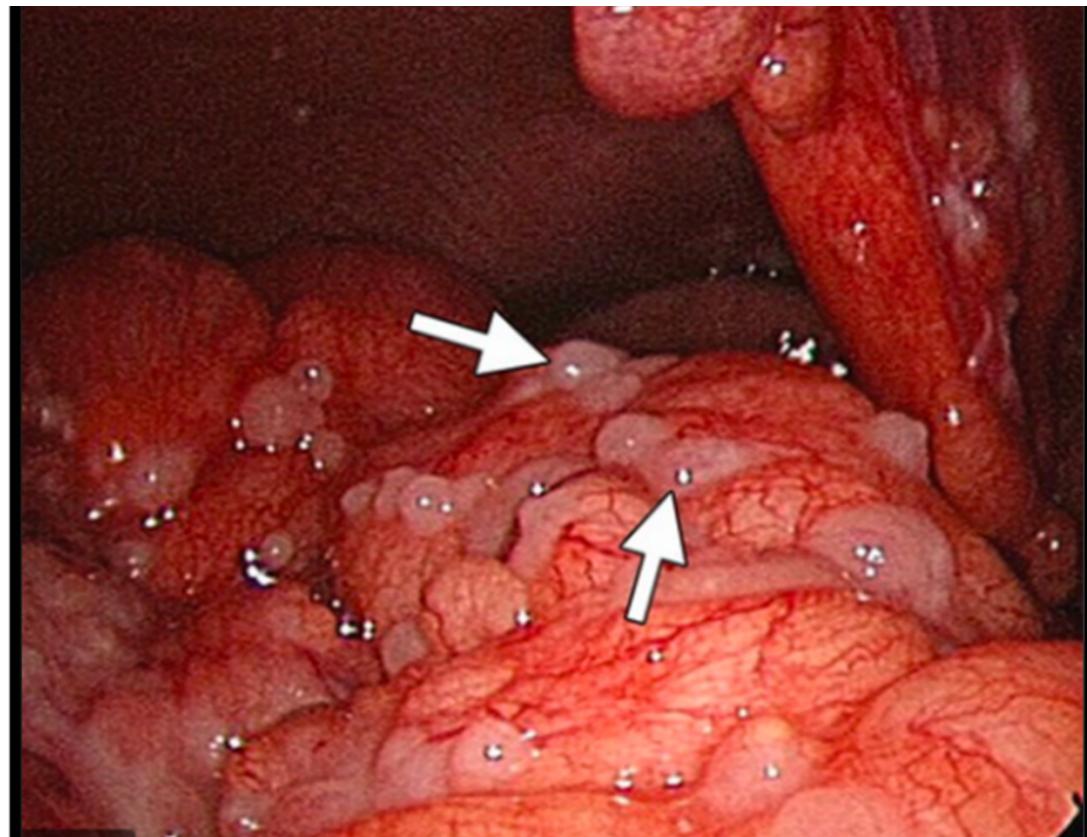
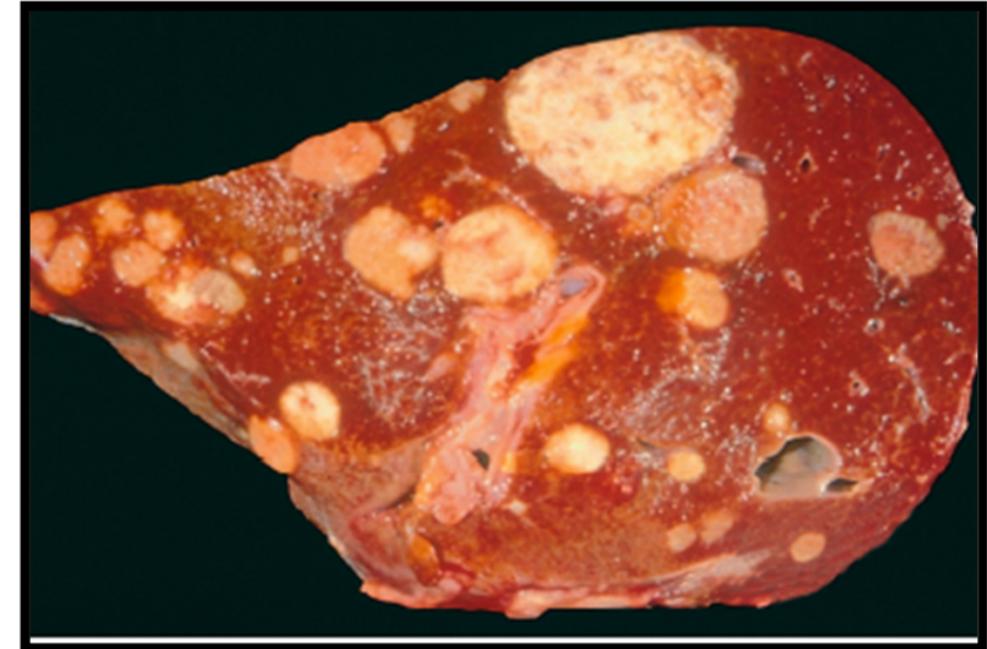


you must Sample the Capsule
thoroughly "multiple suction to see
area of invasion"

The difference by invasion
capsular or vascular

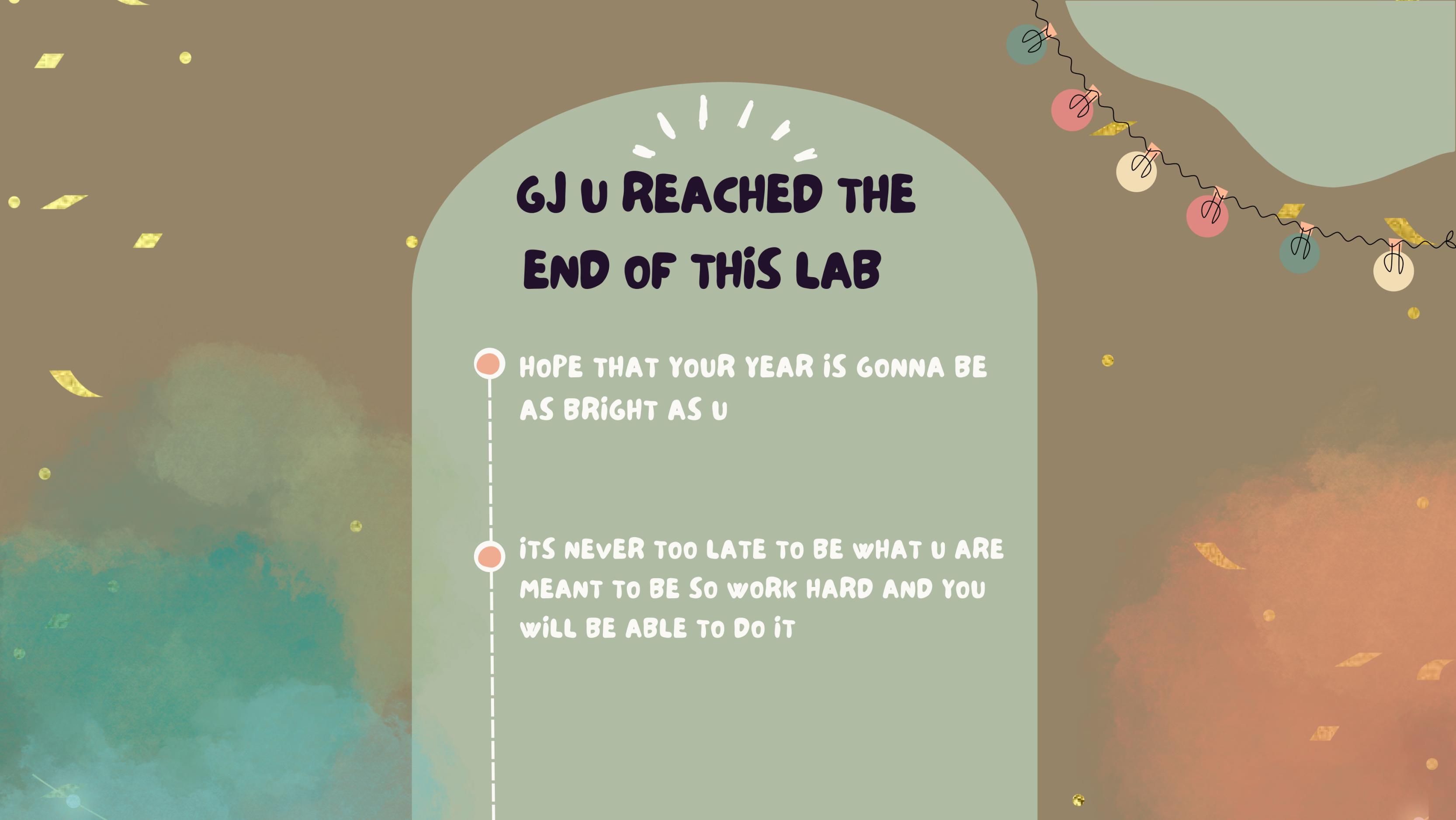
defect of the capsule
get outside of the capsule

MULTIFOCAL HEPATIC METASTASIS



SEEDING OF OVARIAN CANCER IN PERITONEAL SURFACE





GJ U REACHED THE END OF THIS LAB

HOPE THAT YOUR YEAR IS GONNA BE
AS BRIGHT AS U

ITS NEVER TOO LATE TO BE WHAT U ARE
MEANT TO BE SO WORK HARD AND YOU
WILL BE ABLE TO DO IT