

General pathology lap



Cell injury

CELLULER ADAPTATION

1. Hypertrophy : increase size of the cells.
2. Hyperplasia : increase number of the cells
3. Atrophy
4. Metaplasia

1. Hypertrophy

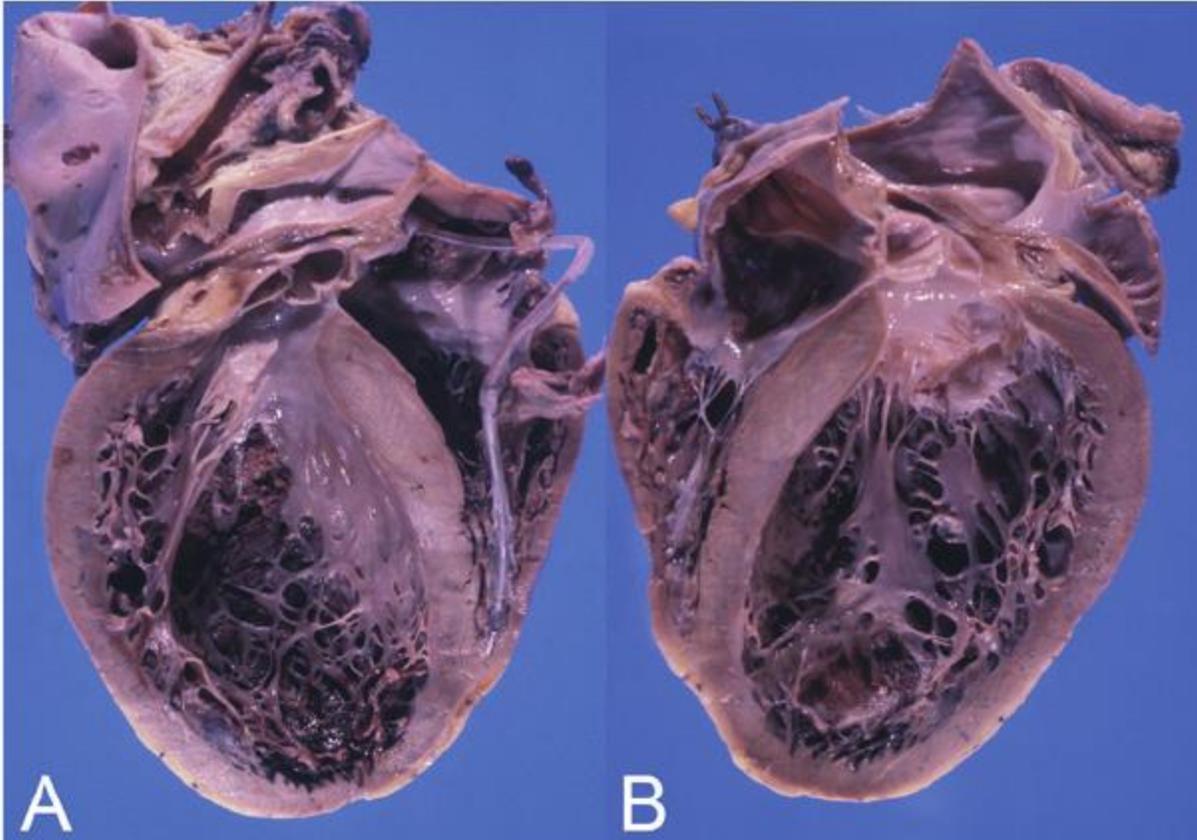


Normal spleen

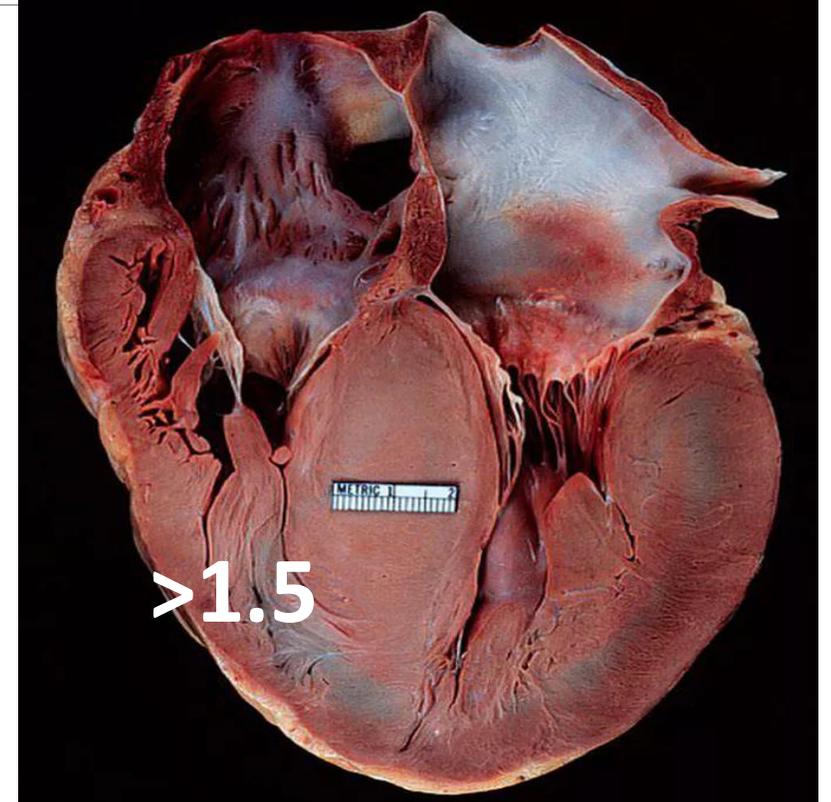


Hypertrophy spleen

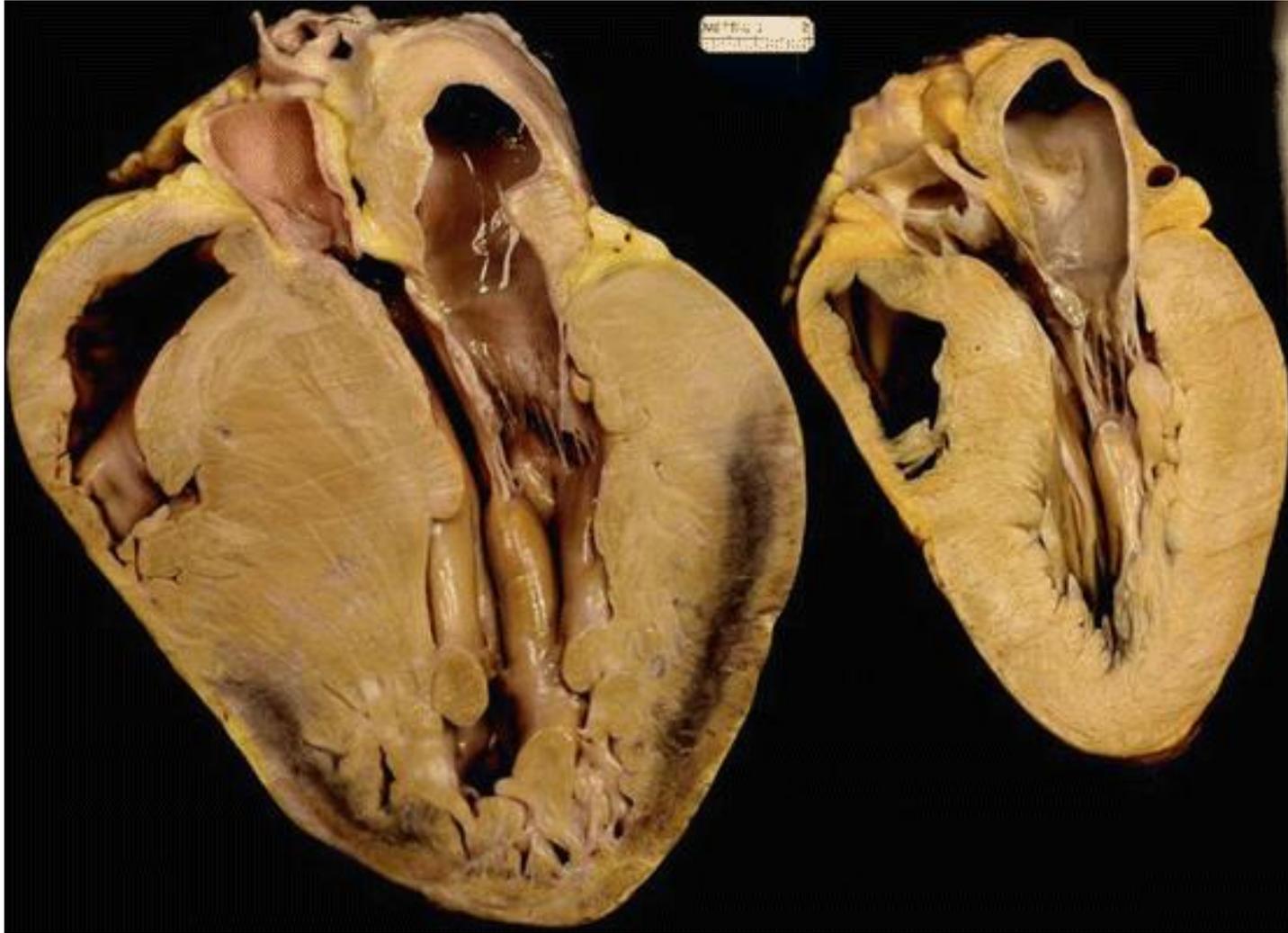
Hypertrophic heart



Normal



Hypertrophy



Normal heart compare to Hypertrophic heart

Example :Hypertensive heart

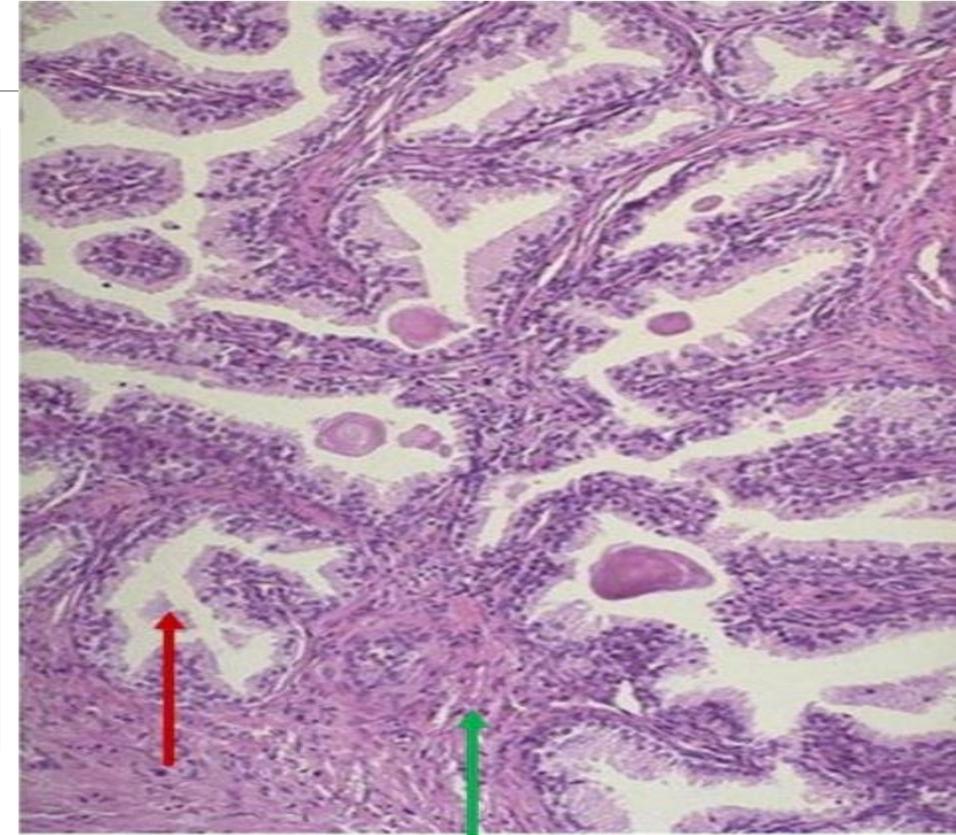
2. Hyperplasia



Normal prostate

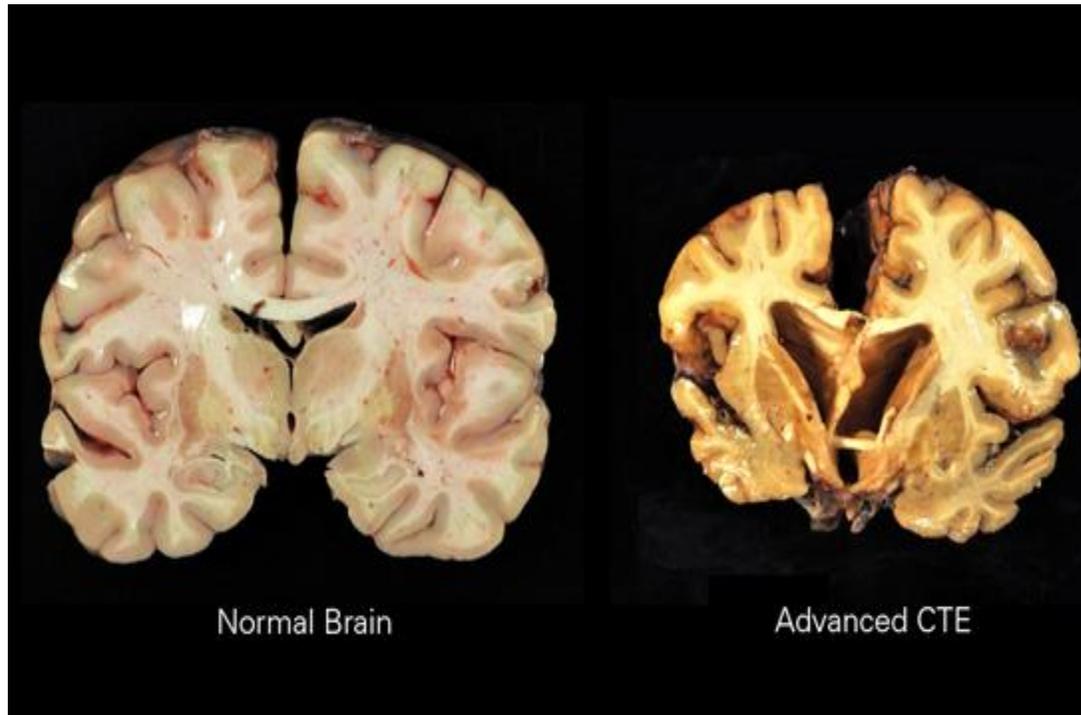


Benign prostatic hyperplasia
- Urethra narrower

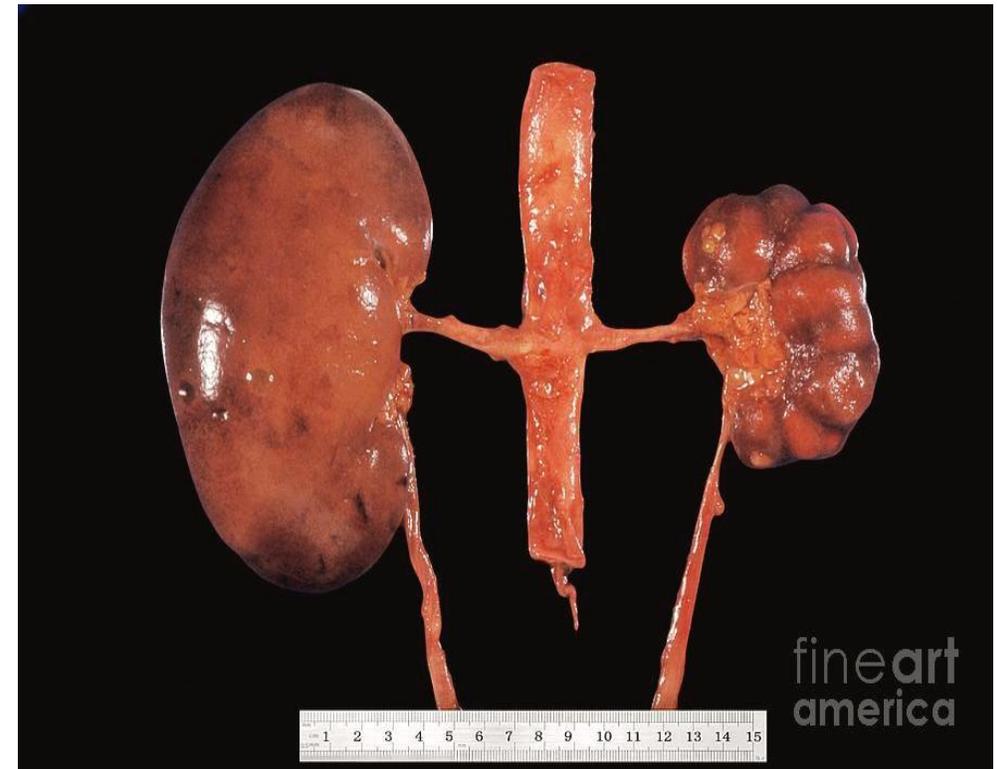


Microscopic picture of Benign prostatic hyperplasia

3. Atrophy



Cerebral atrophy (ischemic)



Atrophic Kidney (ischemic)



Disuse atrophy lower limb



**Neuropathic Muscle atrophy
(cutting nerve supply)**

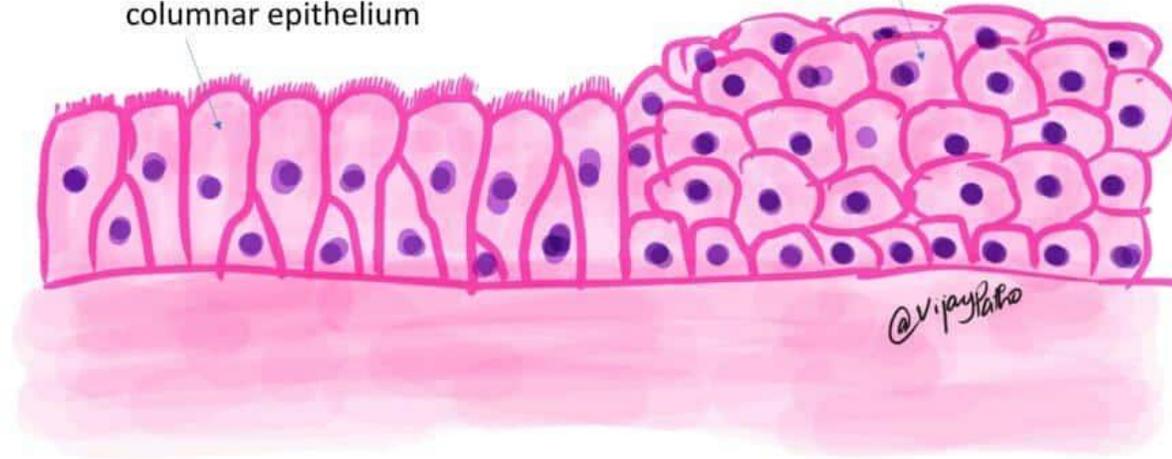
4. Metaplasia (chronic irritation)

SQUAMOUS METAPLASIA

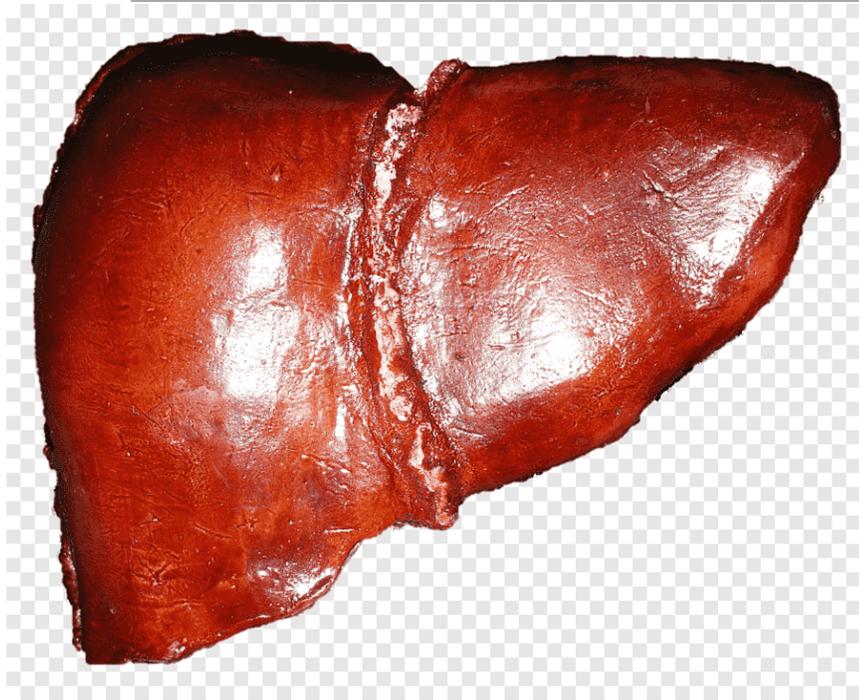
Bronchus

Pseudostratified ciliated columnar epithelium

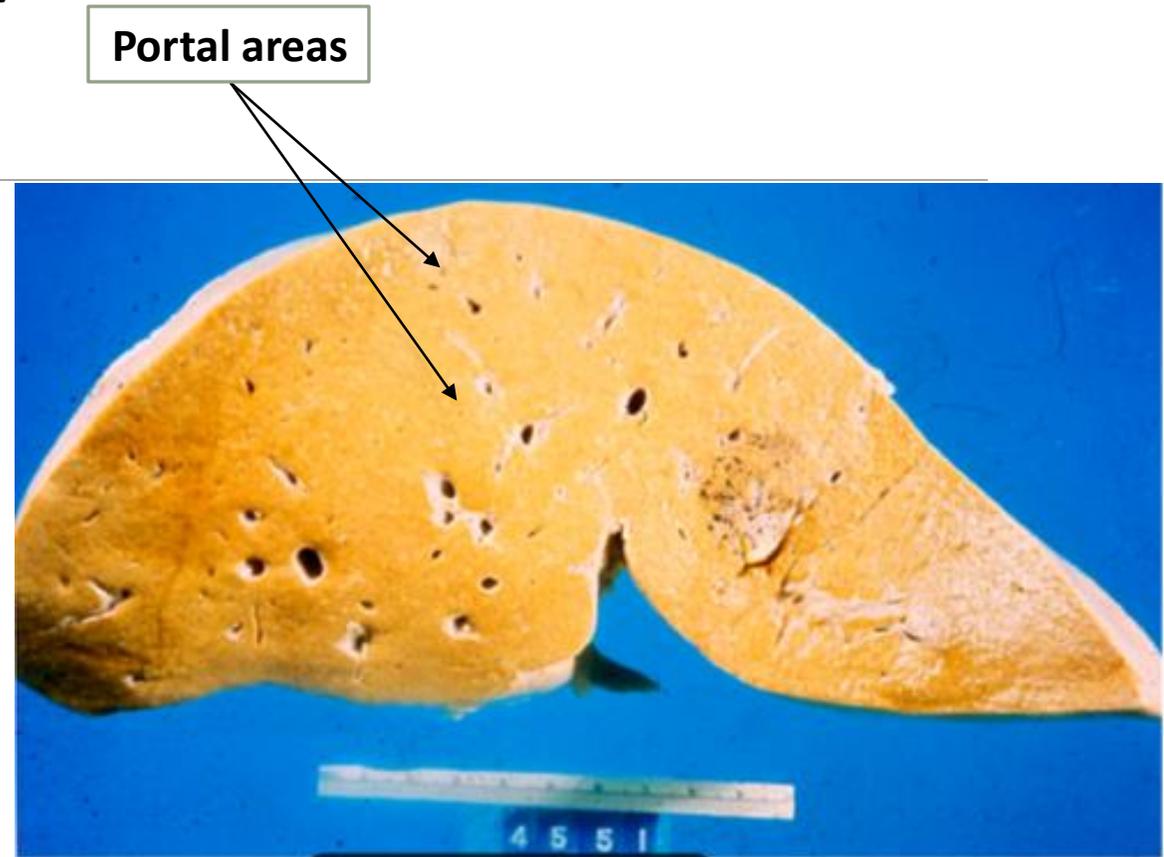
Squamous epithelium



Disturbance of lipid metabolism (reversible)



Normal liver



**Cross section
- Diffuse lesion
e.g. fatty change of liver**

Irreversible cell injury

1. Apoptosis

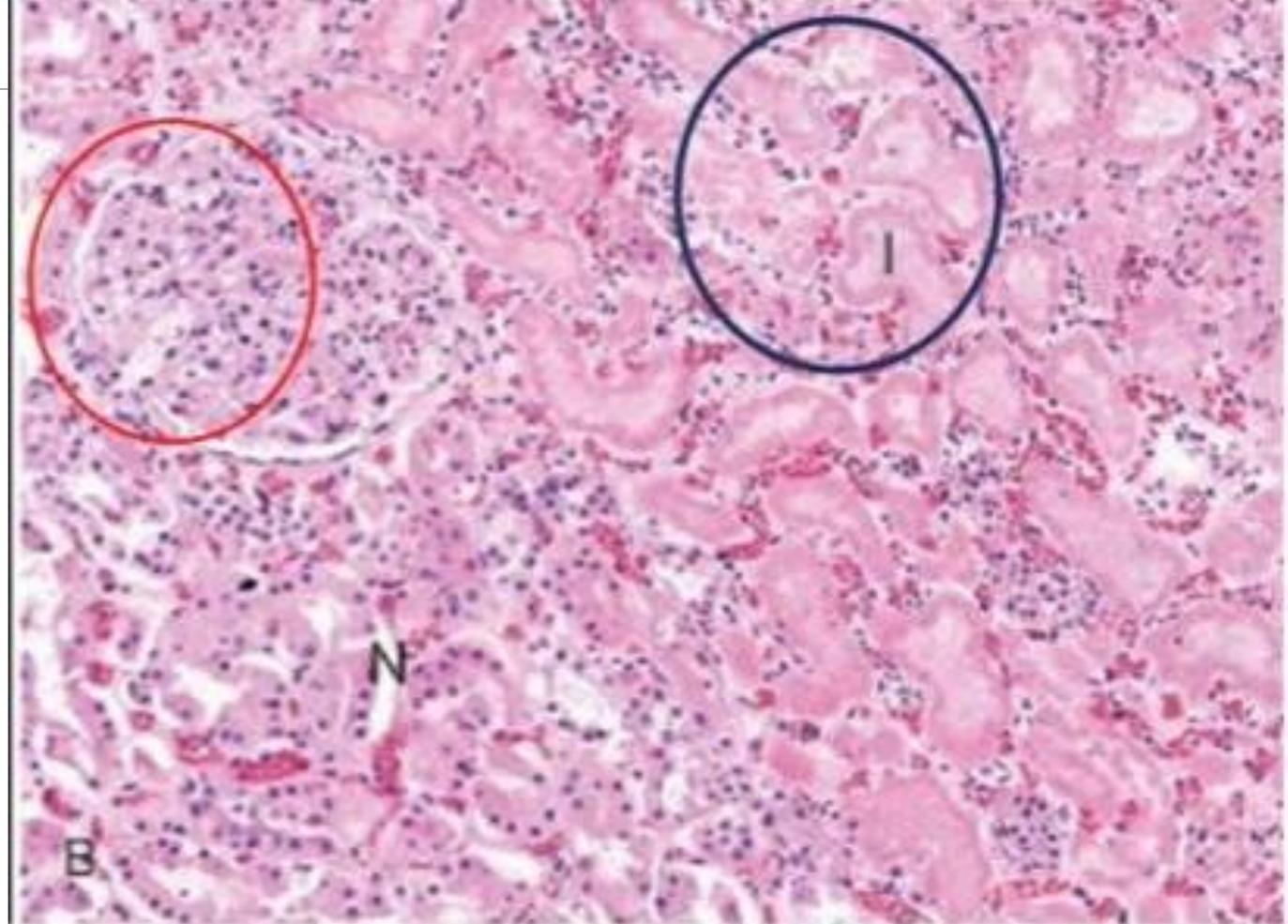
2. Necrosis

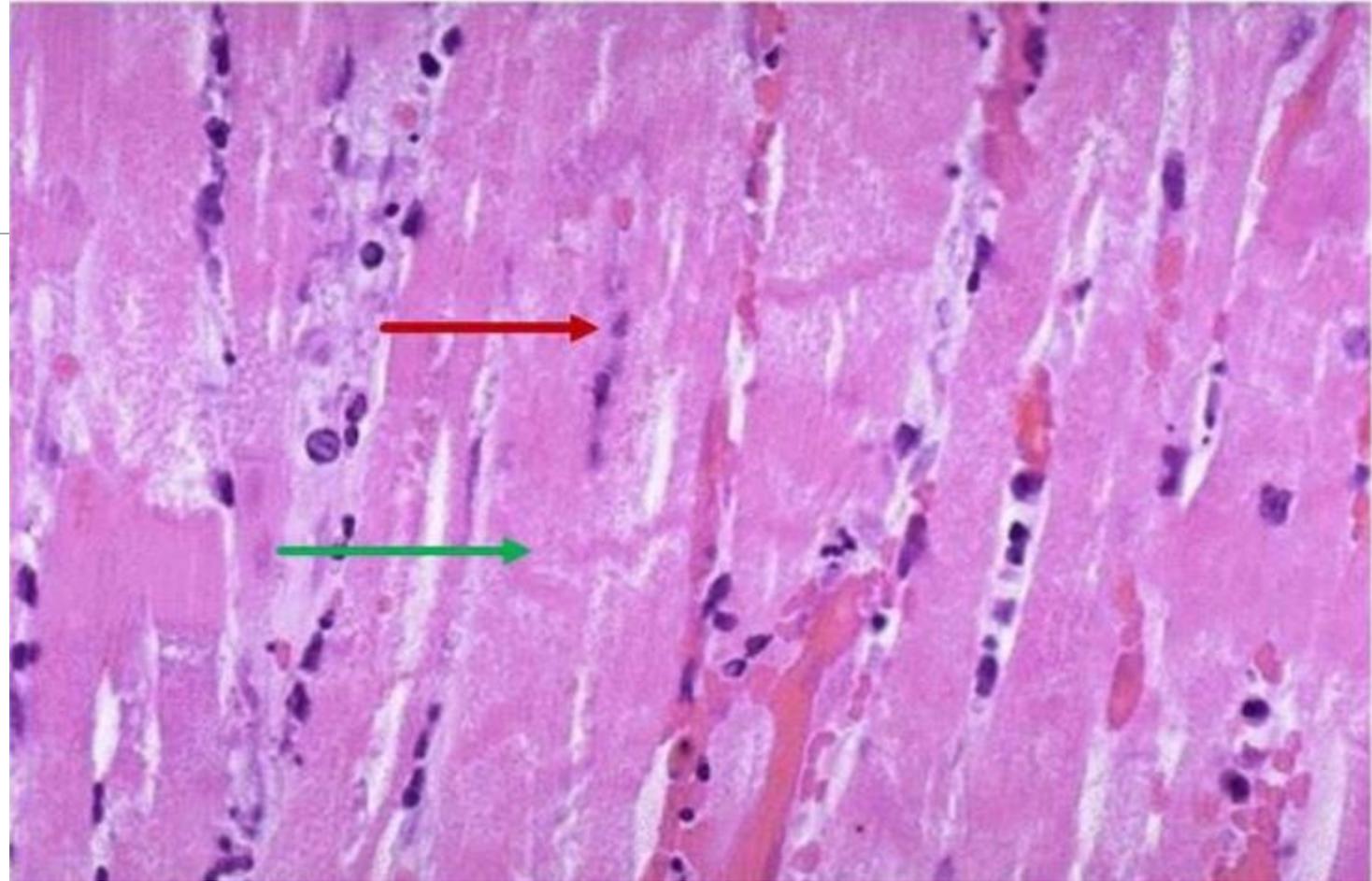
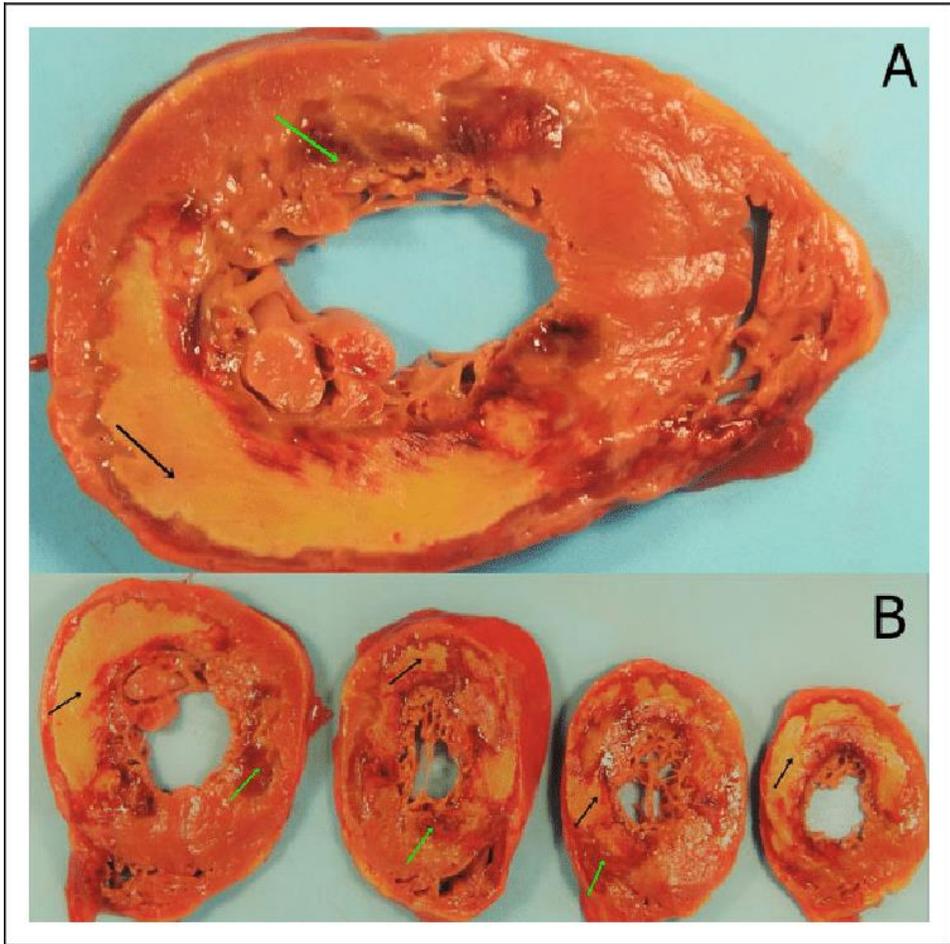
- A. Coagulative necrosis
- B. Liquifactive necrosis
- C. Caseating necrosis
- D. Fat necrosis
- E. Fibrinoid necrosis
- F. Gangrenous necrosis

A. Coagulative necrosis



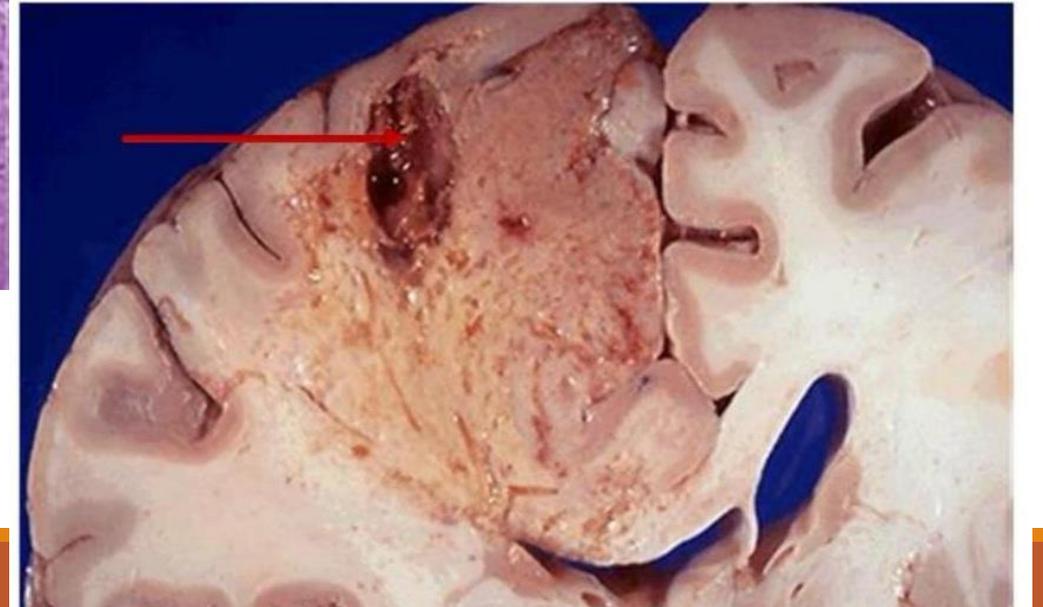
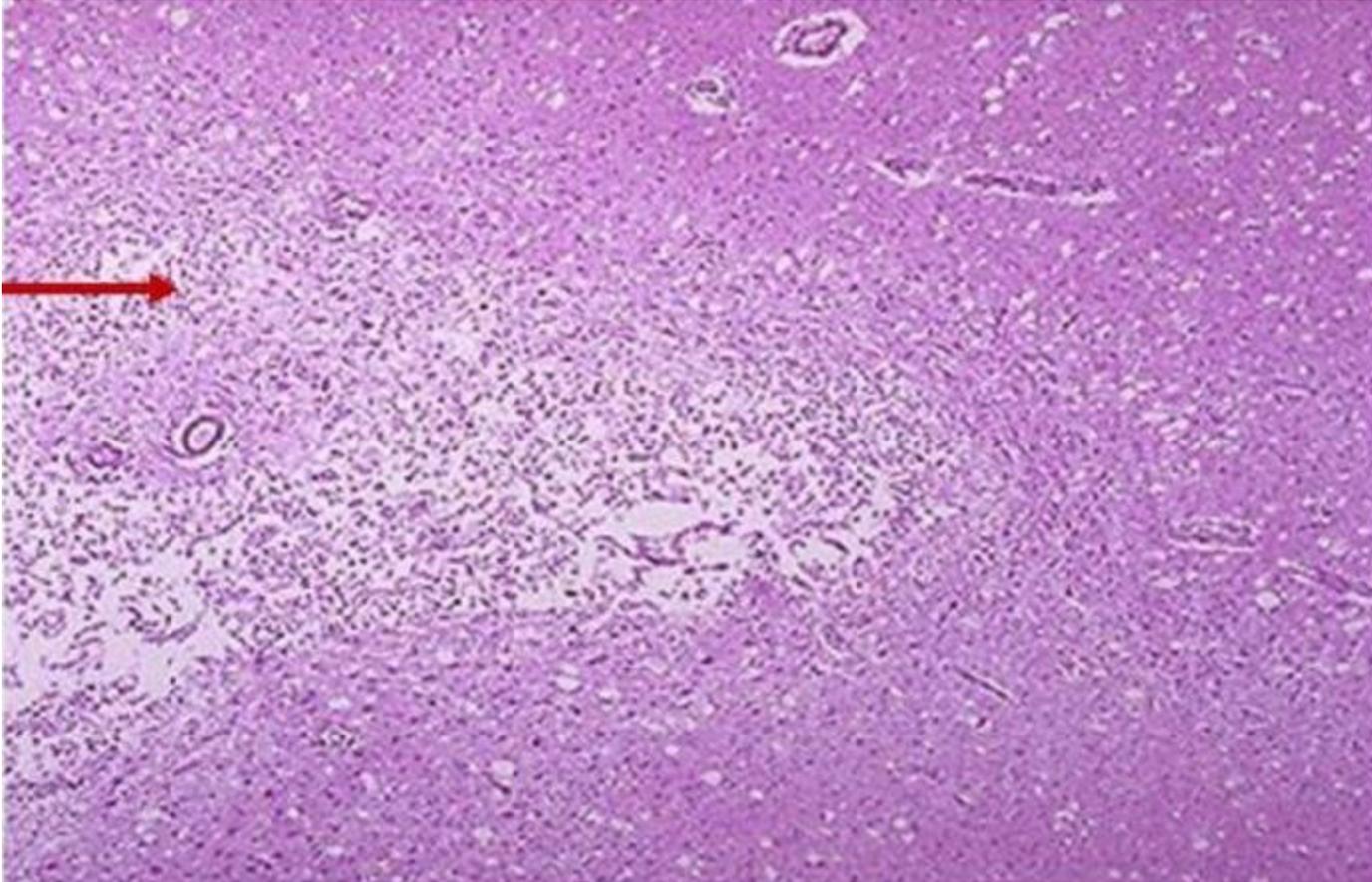
Kidney focal necrotic tissue





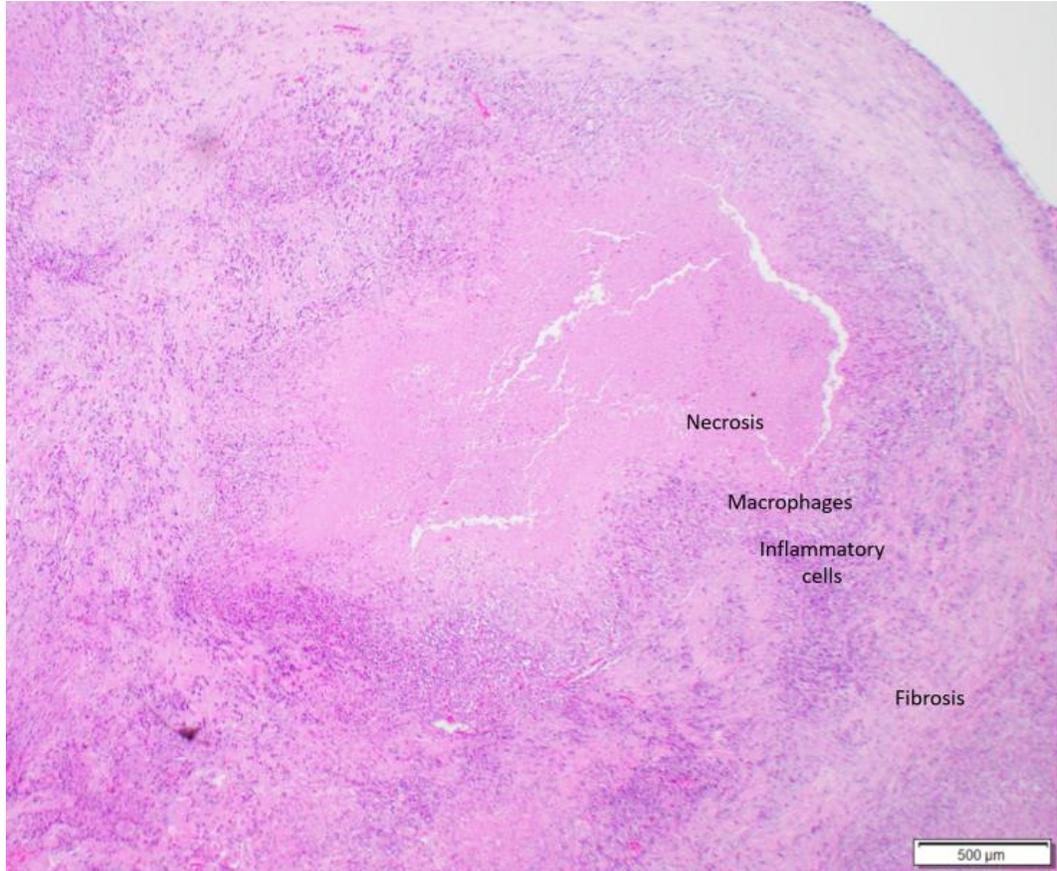
Cardiac necrosis

B. Liquefactive necrosis



Cerebral infarction

C. Caseation necrosis



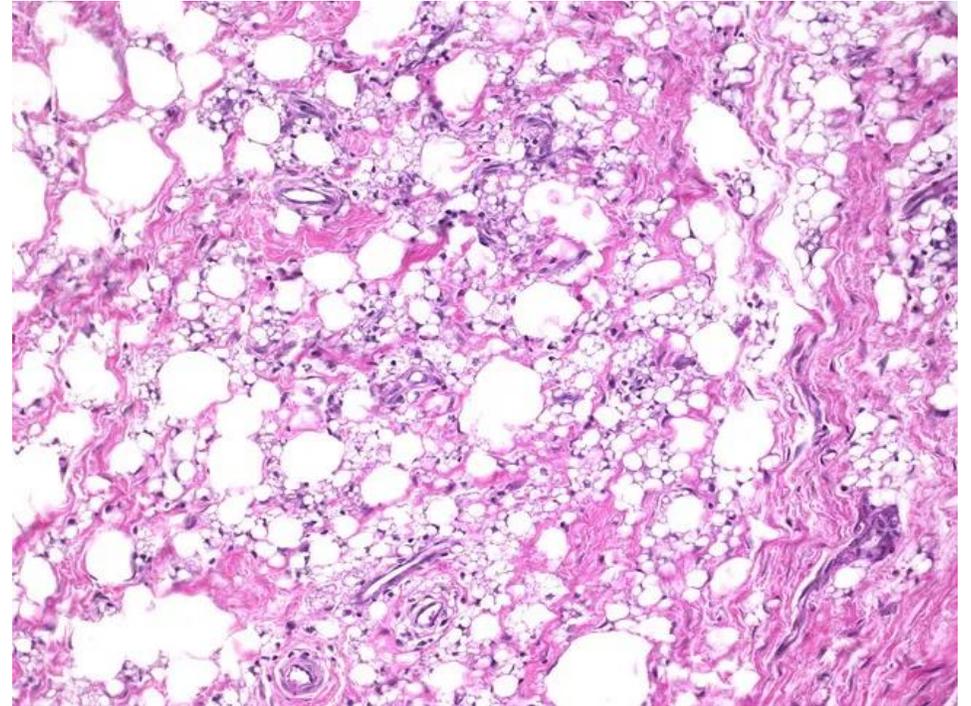
T.B LUNG :

Large area of caseous necrosis (yellow , white and cheesy)

D. Fat necrosis

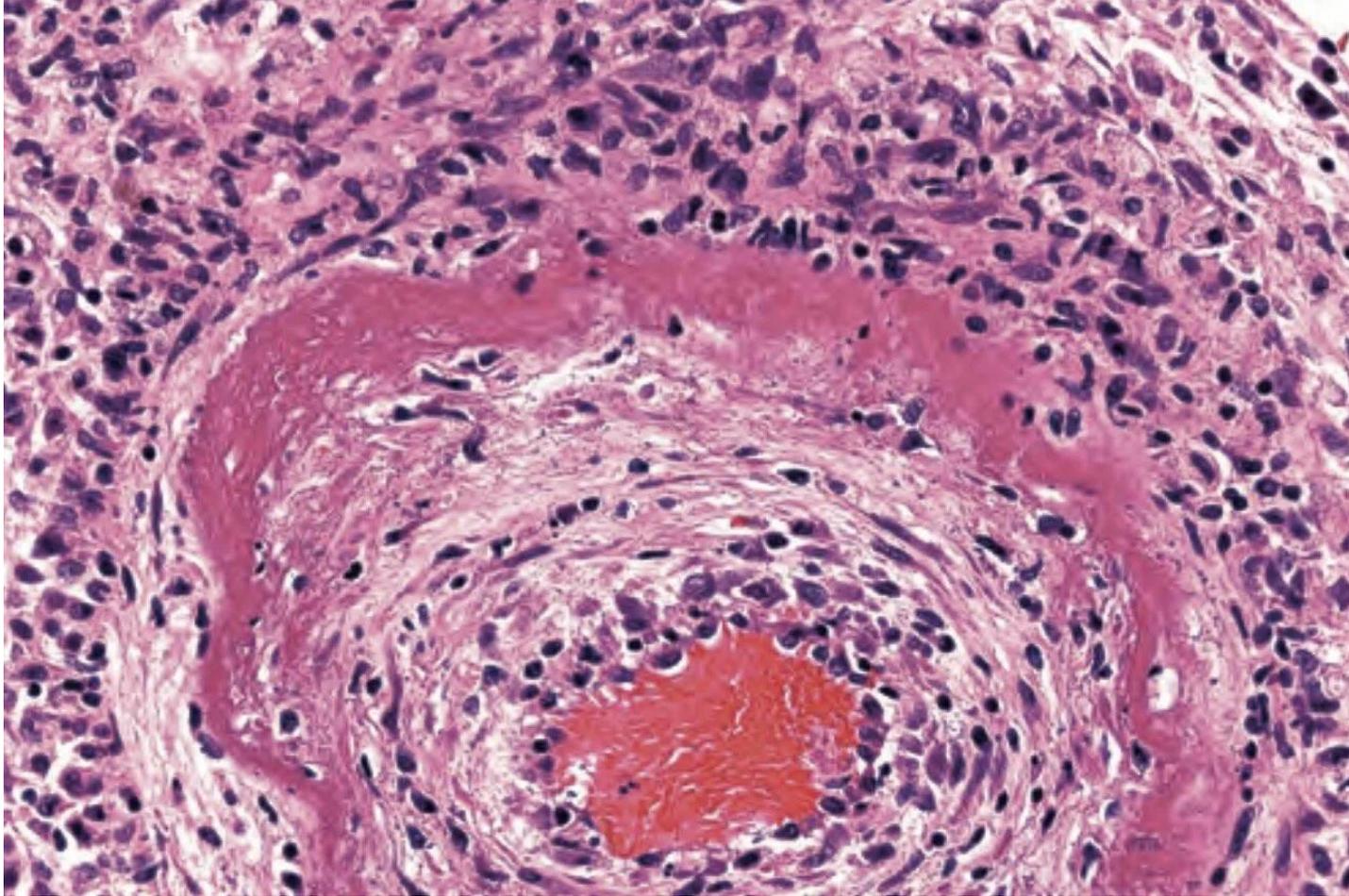


**fat necrosis : pancreas
(enzymatic)**



**Fat Necrosis : Breast
(traumatic)**

E. Fibrinoid necrosis



- **Affect small arteries and arterioles**
- **Autoimmune disease**

F. Gangrenous necrosis (Gangrene)



Dry gangrene of the lower limb
← **Line of demarcation-**



Dry gangrene of the lower limb

Line of demarcation



**wet gangrene of the lower
limb**
No line of demarcation