

NECROSIS

Microscopic appearance.

Cytoplasmic

- increased eosinophilia
- ↳ ↓ binding of eosin to cytoplasmic phn.
- ↳ loss of basophilic RNA in cytoplasm.
- Glassy, Homogeneous
- ↳ loss of lighter staining glycogen.
- Cytoplasm vacuolated
- mito - eaten

Nuclear (break down of DNA)

- pyknosis
- shrinkage + increase basophilic.
- karyorrhexis
- fragmentation of pyknosis
- karyolysis
- ↓ basophilia of chromatic DNAse

1-2 days the nucleus in dead cell may disappear

Cardiac muscle → Kinase & troponin
 Hepatic duct → alkaline phosphatase
 Hepato cyte → trans aminases
 شغل إذا شفاف في الدم يدل على
 خل ببقولة صوية

specific Morphologic pattern

Necrosis

Coagulative

- preservation the outline structure of the dead cell
- For DMS
- the most common
- liver, kidney, Myocardium
- All solid organ except BRAIN

Liquefactive

- bacteria + Fungal + Hypoxic infection
- CNS BRAIN
- Acute infection
- PUS → (creamy yellow)

Caseous

- most common TB infection
- caseous → cheese like
- grossly
- ↳ yellow-white appearance of the area of necrosis.
- microscopy
- ↳ pink appearance (collection of fragmented & lysed cell)
- ↳ Architecture obliterated - cannot be discerned.
- ↳ surrounded by collection of inflam cell (Macrophages)

Mechanism

- denaturation of ph + enzyme
- ↓
- blocking cellular proteolysis
- ↓
- preserve cell outline

Fat (xanthoma)

- fat destruction
- release of activated pancreatic lipases into the substances of the pancreas & peritoneal cavity (acute pancreatitis)

Fibrinoid

- immune reaction complex Ag & Ab
- deposited in the wall of B.V
- severe Hypertension
- bright pink & amorphous appearance

Gangrene

- commonly used in clinical practice
- the condition of the limb (low
- ① Coagulative
 - ↳ lost blood supply
 - ↳ multiple tissue layers.
- ② Liquefactive
 - ↳ bacterial infection
 - ↳ wet gangrenous.
 - ↳ content of bacteria + attracted leukocyte.

Free fatty acid (Atherosclerotic lipases)

- bind & precipitate Ca^{2+} forming insoluble salt.
- gross → Chalky white