

Necrosis	Apoptosis
* group of cell	* on cell
* unprogrammed cell death	* programmed cell death
* pathological	* physiological
→ Cell enlargement	
→ Inflammation	
→ DNA degeneration	
→ leakage of content	
→ loss of Membrane Integrity	

\* Morphologic patterns of Necrosis:

- ① Coagulative: hypoxic cell death in all tissue except brain, ghosts  
→ (Liver, Kidney, Myocardium)
- ② Liquefactive: in lipid rich tissue as in brain, infiltration of dead cell lead to loss normal tissue architecture.
- ③ Caseous: Common in autoimmune diseases and mycobacterial infection eg (TB)  
cheese like macroscopic, Granuloma
- ④ Fat: degradation of fatty tissue by lipases, Common in ~~acute~~ acute and trauma to fatty tissue, chalky deposits  
Pneumonia
- ⑤ Fibrinoid: in immune reaction, deposited in wall of blood vessels  
seen as severe hypertension, bright pink amorphous appearance

\* Fate of Necrosis:

- ① removed necrotic tissue by leukocyte (phagocytosis)
- ② if not eliminated → attracts Ca<sup>2+</sup> salt → dystrophic calcification
  - \* AST → liver
  - \* ALP → Bile duct
  - \* creatine kinase → heart