# THE CELL INJURY



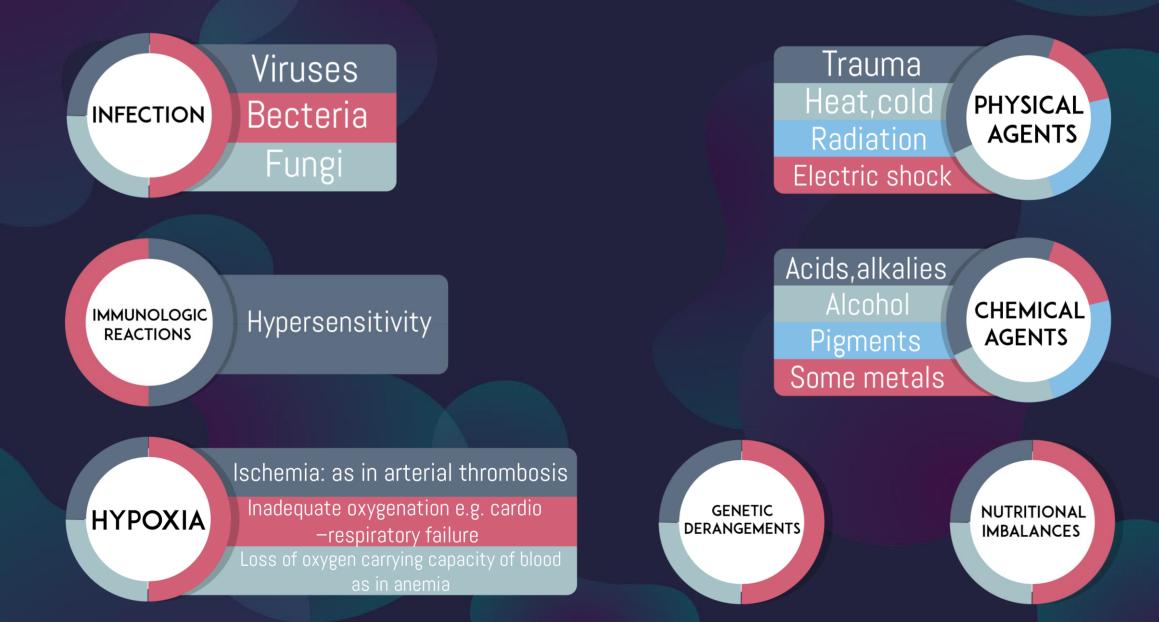
The second year-pharmD

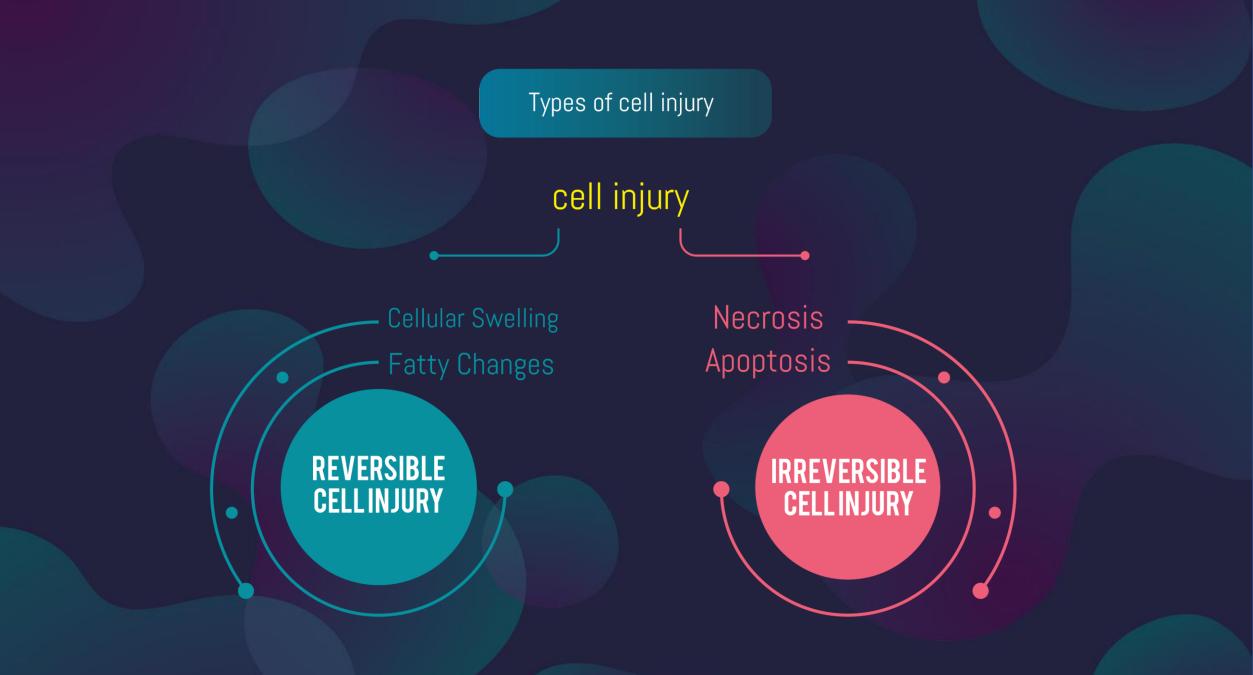


# THE CELL INJURY

if the cells fail to adapt under stress, they undergo certain changes called cell injury

# THE CAUSES OF THE CELL INJURY



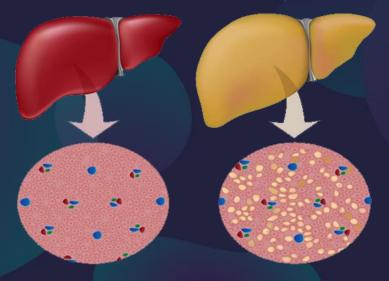


#### EXAPLES OF THE REVERSIBLE INJUR (CELLULAR SWELLING):

Ballooning of liver cells in viral hepatitis
Ballooning of B cells of islets pf Langerhans in cases of type
1 diabetes mellitus

## (FATTY CHANGES)

Healthy liver Fatty liver



#### EXAMPLES OF THE IRREVERSIBLE CELL INJURY

### **(NECROSIS)**: 1 - Liquefactive necrosis

### (APOPTOSIS)

1 - in physiological (normal) state such as : Cells after achieving their purport .

- 2 in pathological states such as :
  - Apoptosis of malignant tumor cells
  - In some cases of atrophy

Liquefactive necrosis



# THANK YOU

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