

Medical Intelligent Systems
Include Technical of Diagnosis and Treatment
Or called Artificial Intelligent in Medicine

So How can Intelligent systems ?? By modification and development .

**We have many problems in medicine need medical intelligent systems
Such as health care without doctors , nurses and hospitals
Ageing Tumors Obesity handicaps Transportation of Patients**

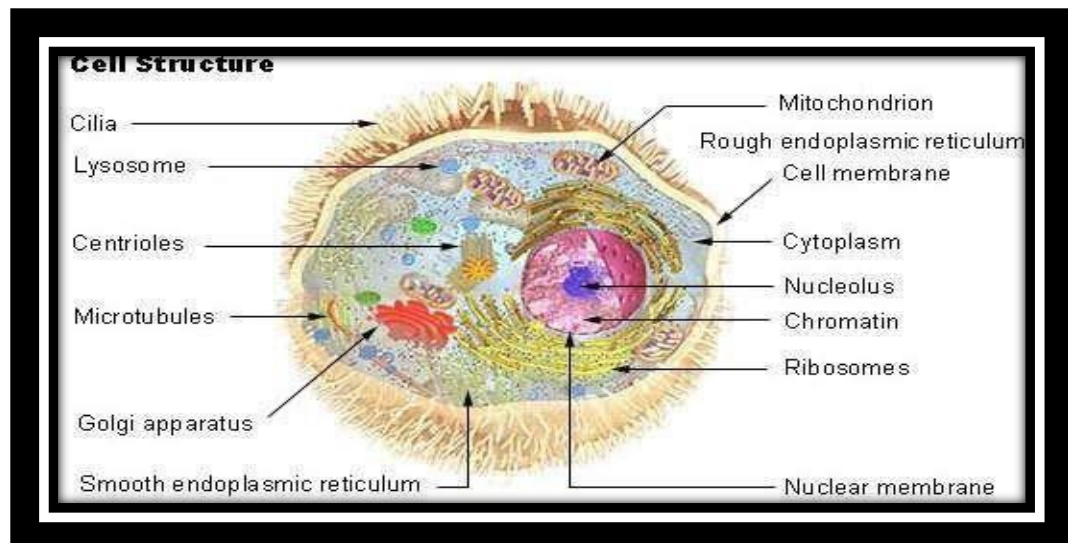
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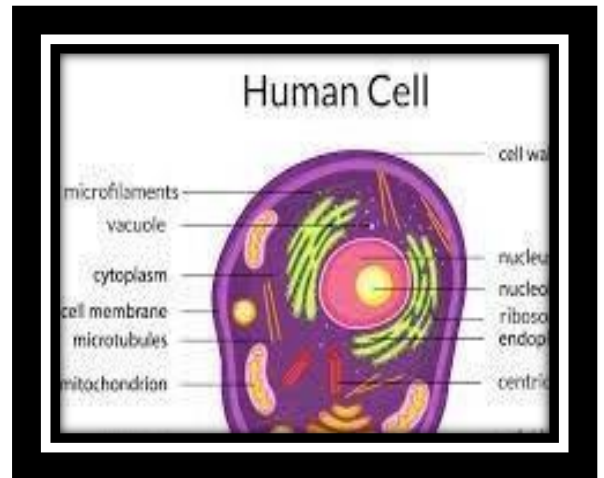
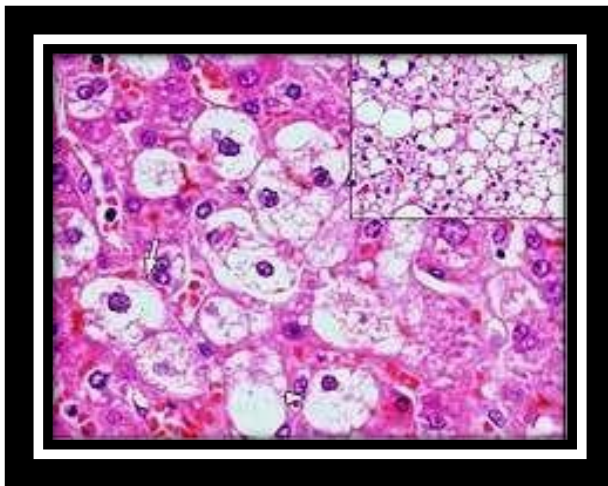
**Lecture one / Human diseases / Second year / Medical Intelligent
Systems Department**

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**Normal cell / pathology / Cloudy swelling / Hydropic degeneration /
Fatty Change or steatosis / Hyaline degeneration (Connective
Hyaline an Epithelial Hyaline) / Glycogen Infiltration (Diabetes
mellitus)**





Pathology : Pathos = disease / Logos = Science General Pathology + Systemic Pathology

Lesions : Pathological changes / macroscopical and microscopical tissue changes .

Biopsy : Tissue sample was taken from living human .

Autopsy : Tissue sample was taken from dead human.

Stain used for staining tissue (normal and diseased) is Hematoxylin and Eosin ,

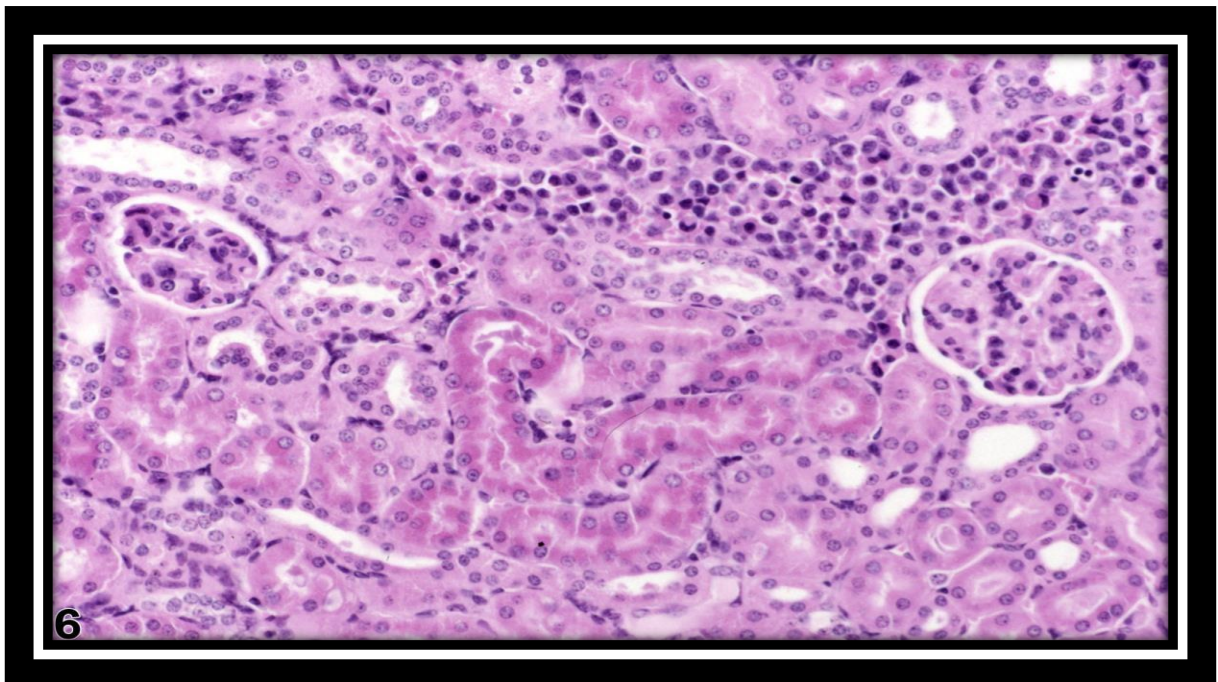
There are special stains to diagnose many pathological changes .

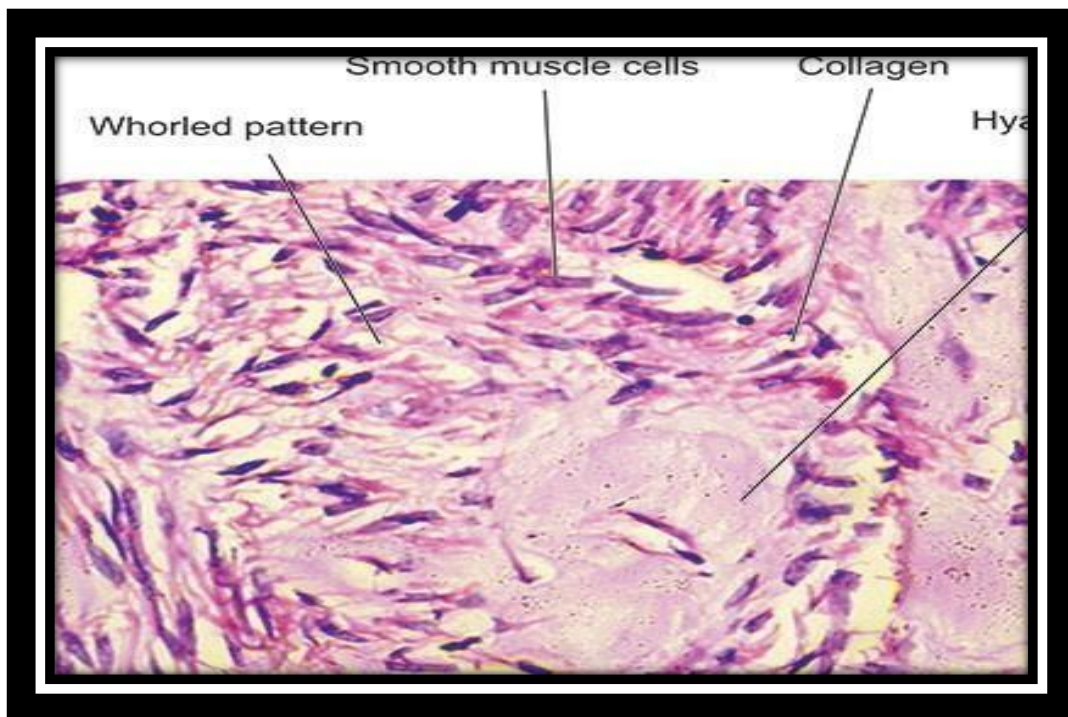
Cloudy swelling :

Degeneration in tissues of various organs (as liver , kidneys , or heart) , marked by swelling and cloudy appearance of the tissue due to deposition of protein granules .

Hydropic degeneration :

Degeneration that lead to an increase of intracellular water or fluid.





Fatty Change :

Abnormal accumulation of fatty (Lipids) with in cells or organs (Steatosis) most often effect the liver of heavy alcoholic drinker.

Hyaline degeneration :

Occur when smooth muscle replaced by fibrous connective tissues .

Hyaline formation homogenous glassy eosinophilic zone (without celllar structures) .

Epithelial hyaline , most common in urinary system (Urine casts) .

Glycogen Infiltration :

Excessive intracellular deposition of glycogen which is associated with abnormalities of either glucose or glycogen due to Diabetes mellitus .

There are two types of Diabetes mellitus : Type 1 genetic disorder (Insulin deficiency) . Type 2 An inherited deficiency of any enzymes involved in glycogen synthesis result in excessive accumulation of glycogen in various tissues .

Glycogen stored in intracellular location .

There are two types of Glycogen deposition :

- Hepatic type : Occur due to deficiency one of several enzymes that lead to synthesis glycogen , This case lead to enlargement of liver .
 - Myopathic type : This type occur in striated muscle .
- , lead to weakness of muscles .

