

⇒ patho lecture = 1

pathology ⇒ ancient Greek root

- suffering  
- diseases

↳ study of .

↳ study of structural & functional changes that underlies the diseases

### Rudolf Virchow

↳ Father of modern pathology

↳ cellular pathology → All diseases generated at the cellular level.

↳ Foundation of modern pathology.  
↳ understanding the cellular & molecular abnormalities that give rise to diseases.

### Giovanni Morgagni

↳ physician - Anatomist

↳ Father of anatomical pathology.

↳ introduced clinical pathology methodology in study of diseases

↳ HOW? Correlation clinical finding (sign + symptom) with finding at postmortem examination.

### PATHOLOGY

↳ General pathology

various diseases, multiple organ / systems

cell injury, inflammation, neoplasia.

↳ Molecular pathology.

↳ Systematic pathology  
diseases of specific organ / system

↳ Anatomical pathology

↳ Clinical pathology

- Hematopathology.

- Immune pathology

- Radiation pathology.

### The study of diseases include

Etiology



pathogenesis



Morphology



clinical manifestation

- causes that lead to diseases

- modifying factor

- genetic & environmental

factor that are responsible for disease

- WHY!

- mechanism

- the cellular & <sup>molecular</sup> functional changes that give rise to the specific functional & structural abnormalities

- HOW

- structural alteration of cell & tissue

① Gross → naked eye.

② microscopic

### PATHOLOGISTS

(Take biopsy & resection)

↳ Grossing

→ processing into paraffin block

→ microtome

→ H&E stain

→ diagnoses.