

Death

Presented

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Definition

Arrest of circulation and respiration :-

- Complete**
- Irreversible**
- Persistent**

Modes of dying

- 1- Syncope (failure of circulation)
- 2- Asphyxia (failure of respiration)
- 3- Coma (arrest of C.N.S)

Stages of death

1- Brain death

(No oxygen for 5-10 m)

2- Somatic death

(No function of systems)

3- Clinical death

(No apparent vital signs)

4- Cellular (Molecular) death

(No function of cell)

Diagnosis of death

1- No signs of circulation

**No heart sounds, No pulsations , No B.P,
flat E.C.G.**

2- No signs of respiration

No respiratory sounds, No chest movements

3- Primary Flaccidity

4- Absent pupil and corneal reflexes

5- Contact Flattening

Brain death

Harvard criteria :-

- 1- No spontaneous movement
- 2- No response to any stimulus
- 3- Apnea for 3 m without support
- 4- Fixed dilated pupil
- 5- Absent reflexes
- 6- Flat E.E.G

Persistent Vegetative State

- 1- Destruction of cortex (irreversible)**
- 2- Intact brain stem**
- 3- Permanent loss of consciousness**
- 4- Good cardio-respiratory functions
without assistance**

Suspended animation

- 1- Severe intoxication**
- 2- Drowning**
- 3- Hypothermia**
- 4- Electrocution**
- 5- Cases of deep coma**

Manner , Cause and Mechanism of Death

1- Manner = Natural or Unnatural

2- Cause = Underlying Lesion

**3-Mechanism = Mode = Patho-Physiology
(syncope or asphyxia)**

Post- Mortem Changes

1- **Immediate** = Clinical Signs

2- **Early** » A- Primary flaccidity

B- Contact flattening

C- Cooling

D- Hypostasis

E- Rigidity

F- Secondary flaccidity

3- **Late** » Putrefaction , Adipocere, Mummification

1- Post Mortem Cooling

Factors affecting :-

- ▣ Fat (obese)
- ▣ Age
- ▣ The surroundings
- ▣ The cause of death

2- Hypostasis

Definition

Medico-legal Importance :-

- ▣ Sure sign of death
- ▣ Time passed since death
- ▣ Position of the body
- ▣ Cause of death
- Bruises & Hypostasis







3- Rigor Mortis

Definition

Medico-legal Importance:-

- ▣ Sure sign of death
- ▣ Time passed since death
- ▣ Position of the body
- ▣ Cause of death

Factors affecting :-

Temperature

Age - Muscular activity



4- Putrefaction

Mechanism

Medico-legal Importance:-

- ▣ **Sure sign of death**
- ▣ **Time passed since death**
- ▣ **Cause of death**

Factors affecting :-

Temperature - Age - Air

Cause of death - Blood - Moisture





5- Adipocere Formation

Definition

Medico-legal Importance:-

- ▣ Long Submersion
- ▣ Time passed since death
- ▣ Cause of death
- ▣ Personal Identification

6- Mummification

Mechanism due to :-

- High temperature
- Absence of moisture

Medico-legal Importance :-

- ▣ Time passed since death
- ▣ Cause of death
- ▣ Personal Identification

Thank you