

Sudden death and autopsy

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SUDDEN DEATH

Def.-

“ It is a death from natural causes that occurs suddenly and unexpectedly within 24 hours in an apparently healthy person leading to suspicion of a crime especially if the symptoms that appear are accompanied by signs of external injury.”

SUDDEN DEATH

Causes of Sudden Death:

CNS -

- Cerebral artery aneurysm
- Intracerebral Haemorrhage in internal capsule, Pons and medulla
- Rupture of brain abscess
- Brain tumour
- Meningococcal infection
- Acute Polioencephalitis

SUDDEN DEATH

CVS –

- Congenital absence of one of the coronaries
- Spasm/ Stenosis or occlusion of coronaries → Ischaemia
→ Sudden death
- Thrombosis (DVT)- Pulmonary embolism
- Embolism of coronaries from- acute endocarditis, thrombus in the left ventricle.

SUDDEN DEATH

- Affection of the heart or blood vessels-
- Fatty degeneration of heart
- Rupture of aortic aneurysm
- Diseases of pericardium- Acute Pericarditis, sudden Haemopericardium, Acute Pericardial effusion
- Bacterial endocarditis
- Valvular diseases, Ventricular fibrillation- death

SUDDEN DEATH

Respiratory system causes -

Larynx:

- Foreign body
- Acute edema of glottis- Bite of bee/ wasp in the neck, inhalation of irritant gas

Trachea:

- Inhalation of vomitus
- Pressure over trachea- Sudden haemorrhage in diseased thyroid gland or its tumour

SUDDEN DEATH

Mediastinum:

- Pressure of a tumour

Lung:

- Acute pulmonary edema
- Rupture of TB cavity
- Pneumonia (especially in old debilitated patients)
Bronchitis and bronchopneumonia in children.
- Pulmonary diseases- PTB, Lung abscess
- Massive collapse of lung

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Pleura:

- Pneumothorax
- Acute pleural effusion
- Acute haemothorax

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SUDDEN DEATH

GIT causes -

Haemorrhage into GIT :

- Rupture of oesophageal varices
- Ulcerating CA of tongue
- Erosion of carcinoma oesophagus into thoracic aorta
- Perforation of gastric/ duodenal ulcer

SUDDEN DEATH

Intra abdominal haemorrhage :

- Rupture of enlarged spleen and liver
- Acute haemorrhagic pancreatitis
- Rupture of ectopic pregnancy

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Miscellaneous causes –

- Addison's disease
- Pheochromocytoma of adrenals
- Hyperthyroidism
- Uremia

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Causes in Children:

- Bronchiolitis
- Bronchopneumonia
- Gastroenteritis
- Congenital anomalies
- Convulsion with asphyxia

SUDDEN DEATH

Diagnosis of the cause of Sudden Death –

- H/o DM, HTN
- Signs and symptoms before death
- Circumstances of death- fight
- Complete PM exam- PM exam, clinical records, Lab Inv., HPE

AUTOPSY

Def.-

“ To cut open and see”

- investigative dissection of the dead body.

There are three types of autopsies :

- Academic autopsy
- Clinical (pathological) autopsy
- Forensic autopsy- Unnatural deaths, Suspicious deaths, Sudden deaths; No consent needed

AUTOPSY

Objective of Autopsy :

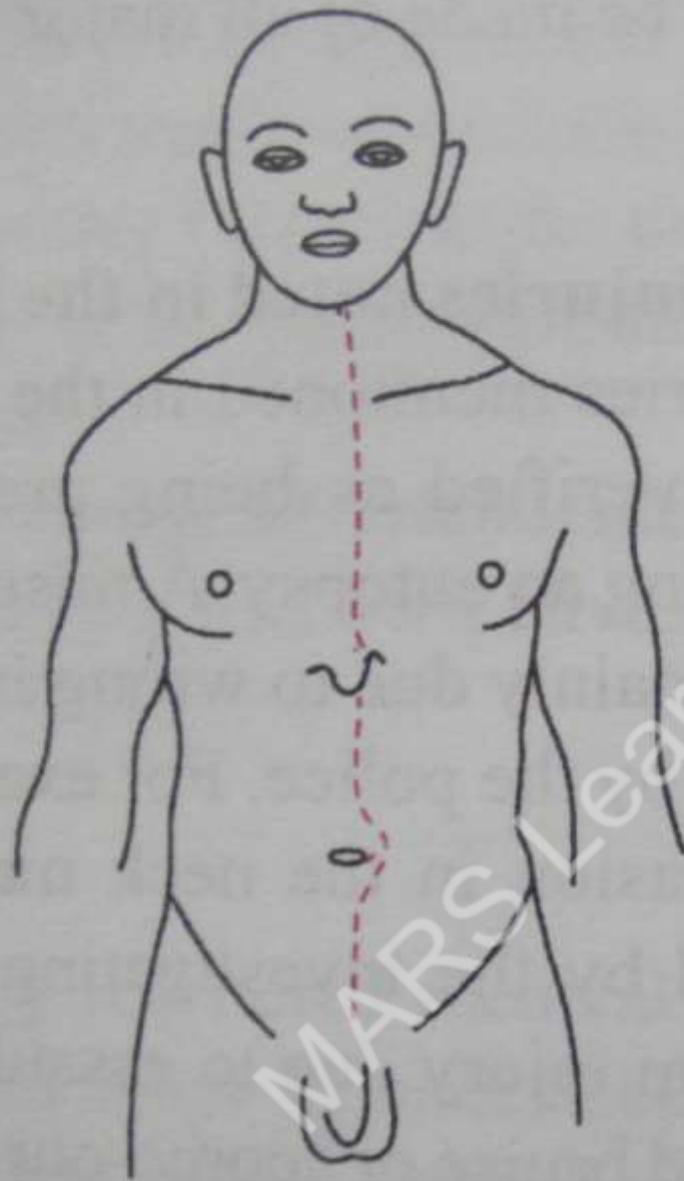
- Identification
 - Cause of death
 - Time since death
 - Manner of death
 - Injuries
- ❖ Negative autopsy- Autopsy does not explain the cause of death

AUTOPSY

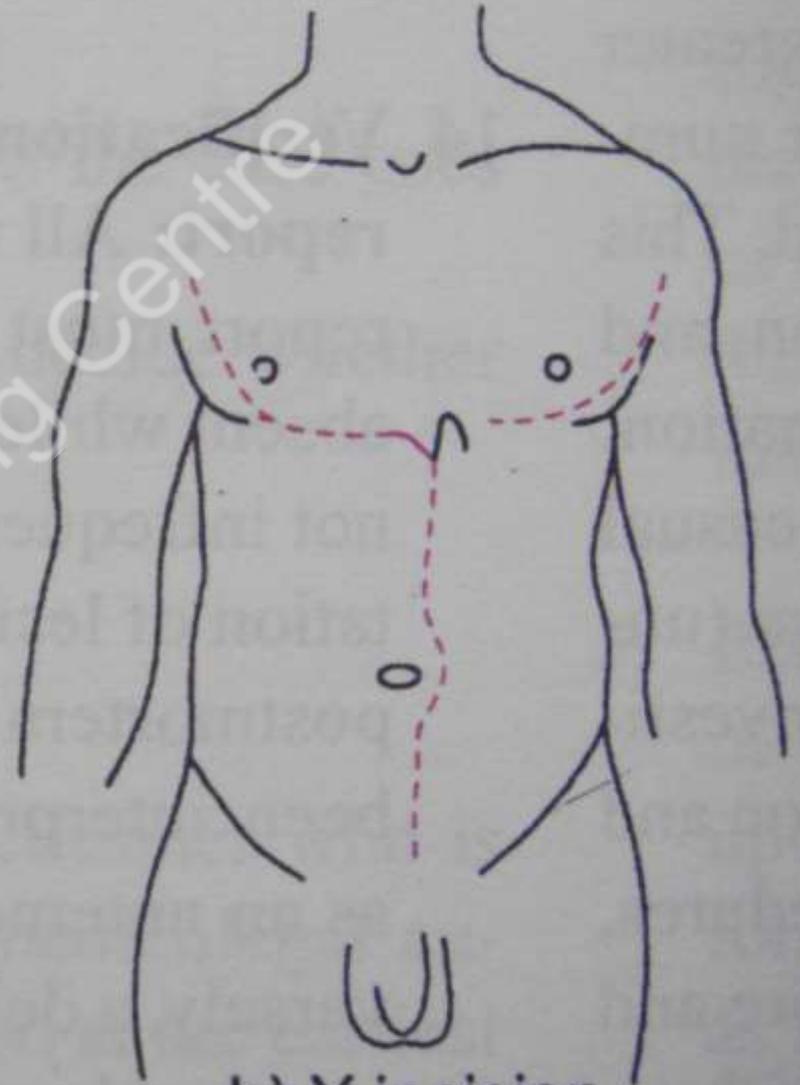
Procedure:

- Body
- Head

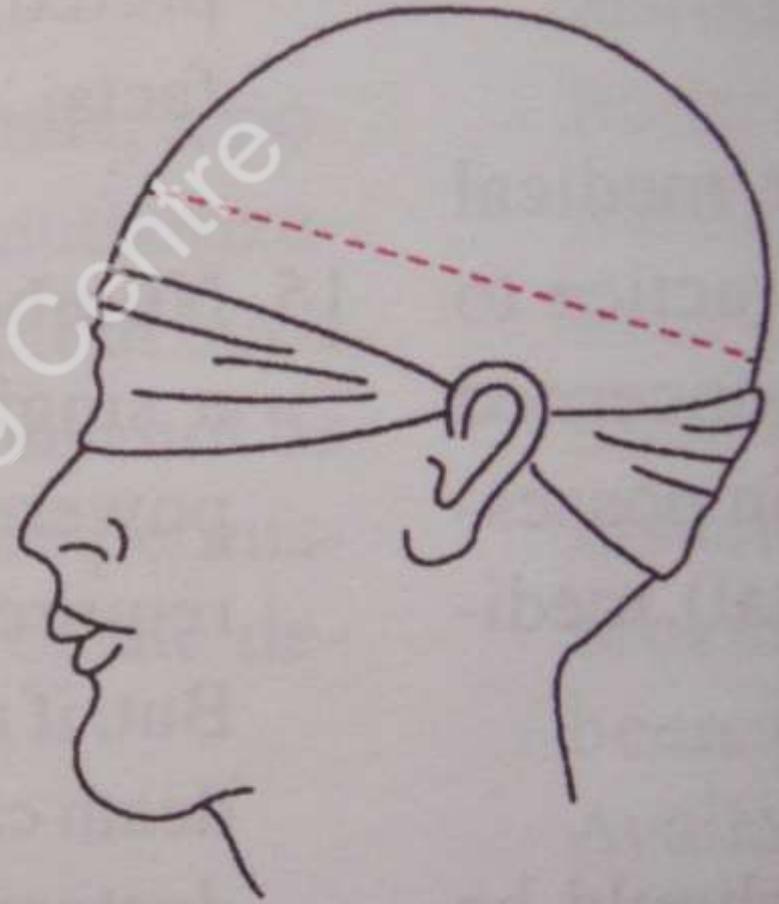
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a) I incision



b) Y incision



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Fig. 7.2 Scalp and skull incision