

Autopsy in special circumstances

Examination of pneumothorax

➤ X-ray /CT scan

DEMONSTRATION OF PNEUMOTHORAX AT AUTOPSY

- 16 gauge needle attached to 25 ml syringe filled with water
- Inserted through intercostal space into pleural cavity
- Air bubble will appear in the syringe

- Make pocket containing water in the side of chest after cutting skin along with muscle away from rib cage
- Inverted graduated glass cylinder is held over the water
- Small incision made on Intercostal space
- Gas bubble replace water in the cylinder

Thrombosis

- Open pulmonary artery before any other part of heart

Can be pulled out by making a longitudinal incision

- Exposure and transection of calf muscles
 - Longitudinal cutting of superficial skin
 - Transverse cut on muscles
 - Expose vein
- Junction between thrombus and vein wall provide most information about thrombus

ANTE MORTEM THROMBUS

- Transverse ridges
- Coiled upon itself
- Size of femoral veins
- Popping out as sausages from the transected vein

POSTMORTEM CLOTTING

- Smooth/shiny
- Yellow in color (chicken fat clot)
- soft and red (currant jelly)
- Flabby
- Does not pop out
- Bends under the influence of gravity

Embolism

- Solid
- Liquid
- Air

Embolism

- Fat embolism
 - Intrinsic fat embolism
 - Extrinsic fat embolism
- Pulmonary fat embolism
- systemic /arterial fat embolism

Pulmonary fat embolism

- Must open under water with pair of scissors before the heart and lungs
- Squeezed out fluid from the lungs
- Stained for fat
- Sudan III or osmic acid

- Systemic /arterial
 - Punctate hemorrhages in the white matter of brain
 - Diagnosis confirmed microscopic examination of frozen section of tissue stained

Air embolism

- Pulmonary /venous
-
- Systemic /arterial
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POSTMORTEM ARTEFACTS

- **Cause**

- Postmortem phenomena
- Interference by scavengers
- Post mortem handling



Introduce during systemic death

- **Therapeutic**

Introduce during systemic death

- **Agonal**

Improper autopsy procedure

Introduce during postmortem period

Decomposition changes

Internal

- Pancreas

- Esophagus

- Acute pancreatitis

- Strangulation

- Neck fracture

•Stomach

- Autolytic rupture
gastromalacia

•Myocardium

- Rigor

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- dark discoloration of posterior part due to hypostasis

•Corrosive poisoning

- Ragged, irregular margins

•Ulcer

- Indurated, regular, punched out defect
- Left ventricular hypertrophy
- infarction

- **Liver**

- **Mesentery**

POSTMORTEM ARTEFACTS DUE TO PREDATORS

- Ants

- Abrasion

- Position,margins,lack of bleeding

- Rats/rodent

- Fish

- Incised wounds

- vulture

- Lacerated wound

POSTMORTEM BURNING

INDUCE DURING AUTOPSY

Exhumation

Disinterment of dead body for post-mortem examination (Re-examination)

Done upon orders of the Court by an authorized medical officer / a Medical Board designated by the Provincial Government

Exhumation Procedure