

CAUSES OF DEATH ASSOCIATED WITH ANESTHESIA AND SURGERY

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DEATHS ASSOCIATED WITH ANAESTHESIA

INEXPERIENCE

Many deaths occurs due to inexperience and failure to adopt precautions when clearly indicated

a) Inadequate depth of anaesthesia

Intubation and bronchoscopy may cause vagal inhibition if depth of anaesthesia is inadequate

b) Inadequate ventilation

Hypoxia , sudden death due to heart failure

c) Post operative respiratory obstruction

By tubing or swabs

- D) breathing circuit disconnection
- E) between staff
- F) haste
- G) distraction
- H) excessive pressure on airways leads to rupture of lungs
- I) positive pressure ventilation-converts a simple pneumothorax into tension pneumothorax
- J) intubation of esophagus instead of trachea

- CLINICAL FACTORS
- A) underventilation
- B) low blood volume
- C) inadequate transfusion
- D) anoxia causes cerebral damage
- E) inadvertent hypothermia
- F) hyperpyrexia
- G) inhalation of regurgitated material (vomit) especially during the post operative period

- TECHNICAL MISHAPS
- A) administration of incompatible blood
- B) infusion of wrong drug or fluids .
- eg) sodium citrate for normal saline, they both are colourless and have virtually similar labels.
- Ether injected in error for a local anasthetics. Labels should be checked as well as odor to prevent such incidents
- Administration of adrenaline in error for cocaine
- C) equipment failure
- D)inadvertent inhalation of gauze and other swabs, dentures
- E) mislabelling of oxygen and anasthetic gases
- F) explosion of fires- ignition of inflammable anasthetic vapour by an electrical spark. Most dangerous inflammable mixtures are cyclopropane-oxygen and ether-oxygen . Spark may arise from a faulty electrical appliances, x-ray apparatus, stastic electricity or from a surgical diathermy electrode.

common adverse reactions associated with anesthetic agents

- Malignant hyperpyrexia , malignant hyperthermia or malignant hyperthermia syndrome is a rare life threatening condition triggered by exposure to certain general anesthetics ,nearly all gas anesthetics, and the neuromuscular blocking agent succinylcholine .
- Althesin-violent bronchospasm
- Chloroform-hepatotoxic,rarely produce ventricular fibrillation
- General anesthesia-most common causes of sudden death under general anesthesia is acute neurogenic cardiovascular failure
- Halothane- hepatotoxic ,liver necrosis, malignant hyperpyrexia
- IV infusions can cause air embolism
- Lignocaine- can cause generalized convulsions and death

- A) in contrast to earlier years, anesthesia is associated with low mortality today and is estimated to be just 1 in 10,000 with proper care in administration.
- B) low blood volume, underventilation, aspiration, and vomiting and collapse following intravenous block are the main factors in the few deaths reported
- C) ketamine as well as fentanyl and its derivatives are known for their abuse potential even among the general population
- Ketamine has become a popular drug of abuse in several western countries, users apparently desire the hallucinogenic side effects

Mathew perrys cause of death was related to the 'acute effects of ketamine' according to an autopsy report. It also listed drowning ,coronary artery disease, and the effects of buprenorphine as contributing factors in perrys death. Perry was reportedly on ketamine infusion therapy for depression.



Propofol is increasingly being used as an intravenous drug of abuse.

Michael Jackson is alleged to have died due to an overdose of propofol that was administered to him by his personal physician to help him sleep, since he suffered from severe insomnia.



DEATHS ASSOCIATED WITH SURGICAL OPERATIONS

- Causes of death due to surgical operation includes;
- 1) Inexperience
- Inadvertent mechanical disruption of a vital organ during a procedure (catheter being passed through coronary artery, right atrium, right ventricle, or pulmonary artery perforate through)
- 2) Air Embolism
- Occurs more commonly in surgery of CNS – embolism of cerebral venous sinuses when they are opened in sitting posture
- During laminectomy procedure
- Operation in the region of the axilla
- 3) Massive hemorrhage
- From slipped ligatures, uncontrollable oozing
- 4) Accidental perforation of a viscera
- 5) Nosocomial infections

The background is a solid olive green color. It features several abstract, organic shapes in a lighter shade of green. These shapes are located in the top left, top right, and bottom left corners. Some of these shapes contain a pattern of small white dots.

THANKYOU