DEFINITIONS

• **Infanticide**

• Latin word  infanticidium

• Deliberate, unlawful, destruction of child under the age of one year, by act of commission or act of omission
  
  • Sec 302  PPC-2\textsuperscript{ND} amendment

• **It is necessary to prove that child was born alive**
Definitions

• **Foeticide**
  • Destruction of the fetus any time prior to birth
  • Isqat-i-Hamal sec 338-A PPC (2\textsuperscript{nd} amendment)
  • Isqat-i-janin sec 338-B

• **Neonaticide**
  • Destruction of infant in the first month
English infanticide act 1938

- Where a woman by any willful act or omission causes the death of a child being under the age of 12 months but at time the balance of her mind was disturbed by having given birth or the effect of lactation, she may be dealt with as if she had committed manslaughter.
CONCEALMENT OF BIRTH

• Relatively minor crime in most jurisdictions and is basically an offence against registration
• Section 329 of PPC
• Abandonment of child under 12 years of age
• Section 328 PPC
Viability

• Potential ability of an infant to survive after birth. An immature fetus may be born alive, but be incapable of maintaining an independent existence
• condition of the particular fetus
• state of medical knowledge
• facilities available
• In English law, a period of 24 weeks is fixed for the onset of viability, for the purposes of the Infant Life (Preservation) Act, 1929.
viability

• Charge of infanticide
• Fetal developmental changes
• By Hasse’s formula
  • Crown heel length of a fetus
  • Up to 5 months
• Age of fetus = square root of the length of fetus
Developmental changes

- Length
- Weight
- Eyelids
- Pupillary membrane
- Hands/feet
- Fingers/toes
- Nail growth
- Placental weight
- Hairs
- Ossification centers talus, sternum
- Meconium in colon
'LIVE BIRTH' AND 'SEPARATE EXISTENCE'

- Legal criteria for separate existence.
Still birth

- Baby is stillborn if after 24 weeks gestation, 'it did not at any time after being completely expelled from its mother, breathe or show any other sign of life
Dead born child

- One which has died in utero and may show the signs of rigor mortis, maceration or mummification.
Maceration
Role of doctors in case of infanticide

- To assist in identifying the mother, if she is unknown.
- Bags, blankets and newspapers can assist to a greater or lesser degree in the police search for the mother
- Cut end of umbilical cord
- Blood grouping
- DNA
Estimate maturity of the child

- If a child is shown to be that premature, there is a strong presumption that it would not long survive a birth away from medical attention.
Maturity criteria

- Immature weight less than 2000g
- Crown heel length
- Crown rump length
- Vernix caseosa
- Pupillary membrane
- Finger nails
- Umbilical cord
- Meconium
- Testicles
- Ossification centers
To determine whether or not the child was live born

- Law presumes found dead born dead
Establishment of respiration

- Live born
- Still born
• Hydrostatic test /flotation test
• Static test (Fodere’s test)
• Histology of lungs
  • Epithelial lining is cuboidal (unrespired lungs)
  • Flattened with dilatation-pavement epithelium
• Birth line

• Breslau’s second life test

• Wredin’s test
Criteria to diagnose live birth

- Viable child
- Well expanded lungs
- Vital reaction in the stump of the umbilical cord
- Presence of milk
Determine length of survival of child

- Changes in skin
- Caput succedaneum
- Umbilical cord
- Circulation
- Fetal hemoglobin
Changes in skin
• Caput succedaneum
Umbilical cord
Circulation
Fetal hemoglobin
Cause of death

- **Natural**
  - Immaturity /premature
  - Congenital anomalies
  - Disease
  - Sudden infant death syndrome

- **Accidental causes**
  - Prolong labour
  - Precipitate labour
  - Cord around the neck

- **Criminal causes**
  - Acts of omissions
  - Acts of commissions
    - Carefully distinguish injuries due birth trauma ,normal anatomical structure and post mortem damage
Autopsy procedure

- External examination
- Clothes and wrappings
- Marks of violence
- Foreign bodies in upper respiratory tract
- Examination of head
- Decomposition changes
- Maturity data
- Umbilical cord
- Placenta
Internal examination

- Head
- Neck
- Lungs
- Abdomen
- Other viscera
- Genitals
- Limbs
Ossification centers

- Sternum
- Femur
- Calcaneum
Sudden infant death syndrome
• Sudden or unexplained death of any infant who was well prior to death, whose death remain unexplained even after death
• Through autopsy
• Lab investigations
• Toxicological analysis

• Age 2 weeks -2 years (2 months -4 months)
• Death rate 2-3 %
• Low birth weight
• Male
• Lower income families
• Smoking or drug addiction
• Seasonal upper respiratory disease
• Babies die during sleep
• Death is silent

At Autopsy

• Trachea contains edematous fluid
• Petechial hemorrhages on pluera, pericardium and thymus
• Microscopic evidence of respiratory inflammation
Battered Babies

CAFFEY SYNDROME
Definition

- Clinical condition in Young children under the three years of age, who have received non-accidental violence or injury, one or more occasion, at the hands of adults responsible for child care
Types of abuse

- Physical abuse
- Nutritional abuse
- Sexual abuse
- Intentional drugging
- Neglect of medical care
- Emotional abuse
• Must be considered when
• In whom the degree and type of injury is at variance with the history given
• When injuries of different ages and in different stages of healing are present
• Purposeful delay in seeking medical attention
• Evidence of fracture of any bone subdural hemorrhage, failure to thrive
• Who dies suddenly
Range of injuries

• Bruises
• 1-2 cm in diameter
  • Bruises of different ages

• Bruising around the limbs
  • especially the wrist and forearms, upper arms, thighs
  • in small infants - around the ankles.

• Face especially cheeks
  ▪ Chest and abdomen associated with visceral injury
Skeletal damage

- Multiple fracture
- common in METAPHYSIS and EPIPHYSIS of growing bone
- Avulsion and chipping
- Blood accumulate under the raised periosteum
- calcify within 7-14 days (egg shell appearance)
- Swinging the child by the
  - wrist or ankles
  - violent shaking
Damage to chest cage

- sequential callus formation seen in a vertical line down one or both paravertebral gutters.
- These form a 'string-of-beads' appearance on X-ray
- These multiple posterior fractures are more common in small infants who have been picked up by adult hands under the armpits and squeezed from side to side.
- **Knobbing fracture**
• Visceral injury
• Damage to eyes, ear and mouth
• Burns
• Bite marks