IMPOTENCE & STERILITY
Impotence

- Inability of a person to perform sexual intercourse and achieve gratification

Frigidity

- Inability to initiate or maintain sexual arousal pattern in females
Sterility

- Inability of a male to beget children
- In females: inability to conceive children

Both Impotence and Sterility may co-exist
Medicolegal Importance

- CIVIL:
  - Nullity of marriage
  - Divorce
  - Adultery
  - Disputed paternity
  - Legitimacy
  - Suit of adoption
  - Claim for damages
• CRIMINAL:
  – Adultery
  – Rape
  – Unnatural sexual offences
Examination

- Previous illness (CNS)
- General Physical examination
- Local examination
- Microscopic examination
Causes of Impotence & Sterility in males

- Age
- Defects in development
- Acquired abnormalities
- Local diseases
- General diseases
- Psychic causes
• Psychic Cause

Quoad hanc

• A male may be impotent with one particular female but not with others
Causes of Impotence & Sterility in females

• Age
• Defects in development
• Acquired abnormalities
• Local diseases
• General diseases
• Psychic causes
Psychic Cause

• **Vaginismus**

Definite involuntary cramp like spasm of perineal muscles or levator ani or adductor muscles instead of rhythmic contractual response to orgasmic experience.
Sterilisation

- Compulsory
- Voluntary
  - Therapeutic
  - Eugenic
  - Contraceptive
Precautions

- Written consent of both wife and husband
- Checkup after vasectomy
  - Abstain for 3 months
- Complication of contraceptive pills
Artificial Insemination

- **Types**
  - AIH: Artificial Insemination Homologous
  - AID: Artificial Insemination Donor
  - AIHD: Pooled donor + husband semen
Medicolegal aspects

- Adultery
- Legitimacy
- Nullity of marriage and Divorce
- Natural Birth
- Unmarried woman or widow
- Incest
Precautions

- Consent
- Identity not to be revealed
- Donor should not know recipient
- Donor must be physically and mentally healthy
- Donor not relative
- Race and characteristic of donor should resemble with husband
• Couple should be psychologically fit
• Witness present at the time of insemination
• Pooled semen should be preferred
• Physician doing insemination should avoid delivering the child
In Vitro Fertilization

• Also called test tube babies: implantation of embryo into woman uterus

Surrogate mother

• A woman who by a contract agrees to bear a child for someone else
VIRGINITY
VIRGINITY

• A women who never had a sexual intercourse

• Defloration: Loss of virginity
Medicolegal Importance

- Nullity of marriage
- Divorce
- Defamation
- Rape
VIRGINITY

• Labia majora
  – rounded firm elastic
  – completely close vaginal orifice
  – intact posterior commissure

• Labia minora
  – small pink and sensitive
  – intact fourchette
VIRGINITY

• Clitoris is small
• Vestibule
  – narrow space between labia minora
• Mucosa of vagina
  – reddish with rugosities
  – sensitive to touch
  – walls are approximated
• Posterior Fourchette - Intact
• Hymen is intact
Hymen

- Thin fold of mucous membrane
- Type:
  - Semilunar or Crescentric
  - Annular
  - Infantile
  - Verticle
  - Septate
  - Cribriform
  - Imperforate
Cause of hymen rupture

- Accident
- Masturbation
- Surgical Operation
- Foreign body
- Ulceration
- Scratching
- Sanitary tampon

Carunculae Hymenales or Myrtiformes
Medicolegal importance

• Hymen rupture only presumptive not absolute proof of virginity
  • Intact Hymen
  • Normal fourchette
  • Narrow vagina with rugose walls
FALSE VIRGIN

• Female who has had sexual intercourse without rupture of hymen
• due to elasticity of hymen
• edges of hymen are undulate
• hymenal opening can easily admit two fingers
PREGNANCY
PREGNANCY

• When a female carries a fertilized ovum in uterus
• Between puberty & menopause

**SIGNS**

- Presumptive
- Probable
- Sure or positive or conclusive
PRESUMPTIVE SIGNS

- Amenorrhea
- Morning sickness
- Salivation, perverted appetite, irritability, Fatigue
- Changes in Breasts
  - increase in size & tense
  - deposit of pigment around nipple and Montgomery tubercles (sebaceous gld)
  - Colostrum can be squeezed (3rd mth)
PRESUMPTIVE SIGNS

• Linea nigra and vulva
  – becomes darker

• Quickening
  – feeling of movement of foetus

• Mucus membrane of vagina
  – changes from pink to violet
    (Chadwick’s Sign)

• Frequency of micturition
IN DEAD

- Presence of foetus
- Uterine thickness and increase in size
- Chorionic villi on microscopic examination
- Corpus luteum in ovary
Pseudocyesis
- Spurious or Phantom pregnancy
- All signs similar to that of normal pregnancy

Superfecundation
- Fertilisation of two ova which have been discharged from the ovary at the same period by two separate acts of coitus committed at short interval

Superfoetation
- Fertilisation of a second ovum in a woman who is already pregnant
MEDICOLEGAL ASPECTS

- Excuse to attend the court as witness
- Convicted woman as a bar to hard labour or execution
- Feigns pregnancy to get higher share after death of husband
- Breach of promise of marriage
- Blackmail
MEDICOLEGAL ASPECTS

- Defamation
- Greater compensation from persons
- More alimony
- Motive of suicide or murder
- Criminal abortion
- Concealment of birth or pregnancy
- Terminate pregnancy under MTP Act
DELIVERY
DELIVERY

Expulsion or extraction of the child at birth
TO LOOK FOR......

• Signs of recent delivery
  – in living
  – in dead

• Signs of remote delivery
  – in living
  – in dead
RECENT DELIVERY IN LIVING

- Look pale and exhausted
- After pains - intermittent uterine contractions and relaxations
- Breasts enlarged
  - hyperpigmentation around nipple & Montgomery tubercles
  - striae
  - colostum can be squeezed
- Abdomen is lax
  - striae gravidarum and linea nigra
RECENT DELIVERY IN LIVING

- Vulva - bruised and gaping
- Vagina - roomy
- Uterus - enlarged
- Internal os - begins to close in 24hrs
- External os - soft and patent
  - Admits two fingers
  - Vaginal discharge – lochia
RECENT DELIVERY IN LIVING

- Lochia rubra
  - first 3 days
- Lochia serosa
  - next 3 days
- Lochia alba
  - next 3 days
- Biological tests
  - positive for 1 week
RECENT DELIVERY IN DEAD
RECENT DELIVERY IN DEAD

- All the local signs in living
- Size of uterus
- Ovaries and fallopian tubes are congested
- Histologically endometrium may show chorionic villi and trophoblastic epithelium
- After 2 months not possible to give exact period of delivery
REMOTE DELIVERY IN LIVING
REMOTE DELIVERY IN LIVING

- Breasts are lax, soft, and pendulous, nipples enlarged
- Linea alba and linea nigra, and walls are lax
- Scars in the perineum
- Internal os is not well defined
- External os is transverse, irregular, fissured, and may admit tip of little finger
REMOTE DELIVERY IN DEAD
REMOTE DELIVERY IN DEAD

- Body of uterus is twice the length of cervix
- Walls of uterus are concave from inside
- Mucosal folds in cervical canal disappear
- Edges of cervix may show scars
- External os enlarged and internal os not well defined
- Placental site is elevated tinged with blood pigment up to 6 months
- Endarteritis obliterans seen in blood vessels
MEDICO LEGAL ASPECTS

• Legitimacy
• Abortion / infanticide
• Feigned delivery
• Concealment of birth
• Disputed chastity
• Blackmail
NULLITY OF MARRIAGE
Cases of void marriage

- Bigamy
- Marriage in prohibited relationship
Cases of voidable marriage

- Non-consummation of marriage owing to Impotence
- Unsoundness of mind
- Consent by fraud, force or misrepresentation
- Pregnancy at time of the marriage
Grounds for Divorce

- Adultery
- Cruelty
- Desertion
- Change of religion (APOSTASY)
- Unsoundness of mind
Grounds for Divorce

- Leprosy and Venereal disease
- Renouncing the world
- Husband guilty of rape, sodomy or bestiality
- Mutual consent
LEGITIMACY
Legitimate child is a child born during the continuance of a valid marriage between his mother and any man or within 280 days after its dissolution by divorce or death of husband and the mother remaining unmarried.
LEGITIMACY

- Nullity of marriage
- Divorce
- Inheritance of property
  - Superfecundation - same cycle
  - Superfoetation - different cycles
- Adoption cases
- Suppositious children
Fecundation Ab Extra

- Pregnancy by mere deposit of semen on the vulva without penetration
- Non-consummation of marriage
- Can contest for nullity of marriage even after birth of a child
ABORTION
ABORTION

Expulsion of products of gestation at any period of gestation before full term
TYPES

• Natural
  – Spontaneous
  – Accidental

• Artificial
  – Legal / Justifiable
  – Criminal
NATURAL ABORTION

- Diseases
- Sudden shock
- Accidents
- Abnormal pregnancy
- Abnormalities of foetus
LEGAL ABORTION

• MTP Act 1971
  • Therapeutic / Risk to mother
  • Eugenic / Abnormal foetus
  • Humanitarian / Rape
  • Social / Environmental
  • Emergency
MTP Act 1971

• **Duration**
  - < 12 weeks: One doctor
  - 12-20 weeks: Two doctors

• **Doctor**
  - Registered
  - Experienced / Trained
  - Authorised / Certified
  - At approved place
  - With written consent
CRIMINAL ABORTION

- Widows
- Unmarried females
- Extra-marital
- Female foeticide
- At 2\textsuperscript{nd} – 3\textsuperscript{rd} month pregnancy
- Sections 312 - 316 IPC
- PNDT Act
- 3-10 years imprisonment
METHODS OF ABORTION

• Drugs / Medicines
• Mechanical / Violence methods
  • General
  • Local
    – Unskilled
      » Self instrumentation
      » Abortion stick
    – Semiskilled
      » Syringing
      » Dilatation of cervix
    – Skilled
      » Curettage
      » Electrical
EXAMINATION OF

• Living female
  • Signs of pregnancy / abortion
  • Injuries

• Dead female
  • Signs of pregnancy / abortion
  • Cause of death

• Dead foetus
  • Age / Sex
  • Cause of death

• Other aborted material
AGE OF FETUS

- Developmental features

- Hess’ Rule
  - < 5 months IU
  - > 5 months IU

\[ \text{Age} = \sqrt{\text{Length in cm.}} \]

\[ \text{Age} = \frac{\text{Length in cm.}}{5} \]
INFANTICIDE
INFANTICIDE

- 302 IPC
- New born child / Infant / Dead-born
  - Wrappings
  - Appearance
  - Decomposition
  - Maturity / Age / Sex
  - Malformation / Injury
  - Umbilical cord / Placenta
QUESTIONS?

- Child
  - Still-born or Dead-born
  - Alive-born
  - Age / Sex
  - Cause of death
VIABLE FETUS

> 52 cm
> 2000 kg
> 210 days IU
> 7 months age IU

Testes in scrotum
Labia closing vulva
Meconium in large intestine
Femur, Tibia, Cuboid ossification centers
TESTS

Hydrostatic Test
(Lung floatation Test)

Static Test
(Fodere’s Test)

Stomach-Bowel Test
(Breslau’s second life Test)
DIFFERENCES

LIVE BORN • STILL BORN

Chest drum shaped • Chest flat
Chest size > Abdomen • Chest size < Abdomen
Space b/w ribs wide • Space b/w ribs narrow

More differences on PM
DEATH OF NEWBORN

• Natural
  • Immaturity, malformation, diseases, others

• Accidental
  • During birth – Prolonged labor, cord prolapse, cord knots, premature separation, mother’s death,
  • After birth – Suffocation, precipitate labor

• Criminal
  • Commission – suffocation, strangulation, drowning, injuries, poisoning, etc.
  • Omission – birth, cord, discharges, protection, food, etc,
OTHER CASES

• Abandoning of children
  • 317 IPC

• Concealment of birth
  • 318 IPC

• Cot deaths / SIDS
  • Natural
  • Unexplained

• Sexual offences
  • Natural & Unnatural
  • 376, 377 IPC