

# ABORTION



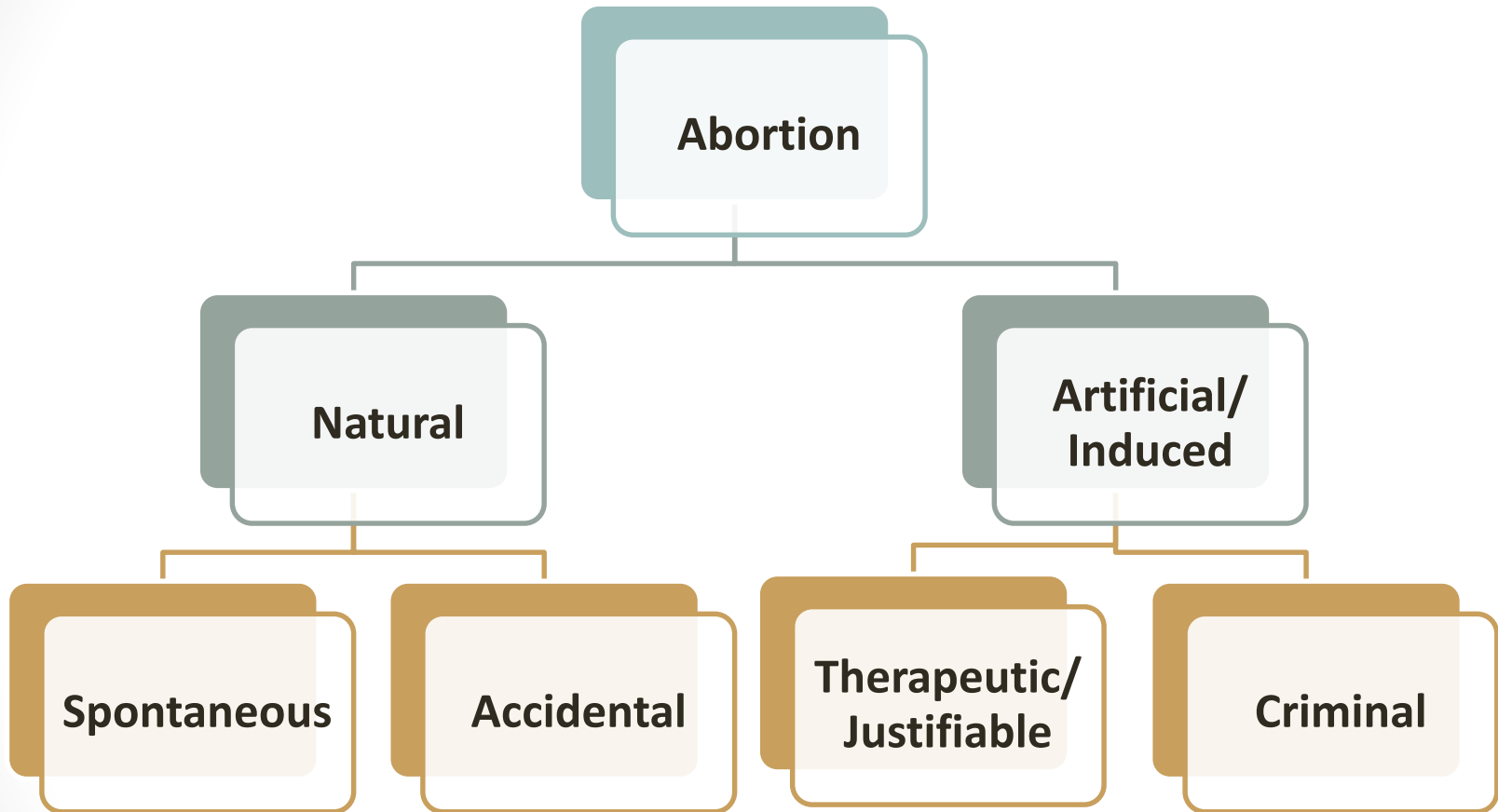
Dr. Kalpesh Zanzrukiya

# DEFINITION

- **ABORTION (MISCARRIAGE)** – premature expulsion of the foetus from the mother's womb at any time of pregnancy, before full term pregnancy is completed.



# Classification



# Criminal abortion

- **Abortion that includes induced destruction and expulsion of the fetus from womb of the mother unlawfully, i.e. when there is no medical indication for it or not following MTP act.**
- **Usually - 2<sup>nd</sup> or 3<sup>rd</sup> month of pregnancy.**
- **UNSAFE ABORTION.**



# Abortionists

1. Expert – qualified doctors
2. Semiskilled – midwives, nurses, chemists etc.
3. Unskilled – layman, quacks

# METHODS USED FOR CRIMINAL ABORTION

## 1) During 1<sup>st</sup> mth

- violent exercises
- Hot baths
- Purgatives

## 2) During 2<sup>nd</sup> mth

- Abortifacient drugs per oral/vaginal/rectal

## 3) After 2<sup>nd</sup> mth

- mechanical interference by either woman herself or other person

- [I] general violence :
- act directly on uterus
  - or indirectly causes congestion f/b bleeding & uterine contractions causing expulsion of foetus
  - successful in those woman having some natural irritability of uterus

(1) Intentional – severe **pressure on abdomen** by knealing, blows, kicks, jumping, tight lacing & massage uterus from lower abdominal wall.

- **violent exercises** e.g. horse riding, cycling, jumping from height, running upstairs, carrying or lifting heavy weights.
- **cupping** – a mug is turned mouth downwards over a lighted wick & placed over hypogastrium. then the mug is pulled causing partial separation of placenta.
- Very **hot & cold hip baths** alternatively.

(2) Accidental - a general shake up in advance pregnancy(not usually used)

## [II] Local violence :

- act directly on uterus & perineum
- causes congestion f/b bleeding & uterine contractions causing expulsion of foetus

### 1. Syringing

- higinson's syringe
- Air + soap water forced into
- Toxemia, sepsis, shock, air embolism

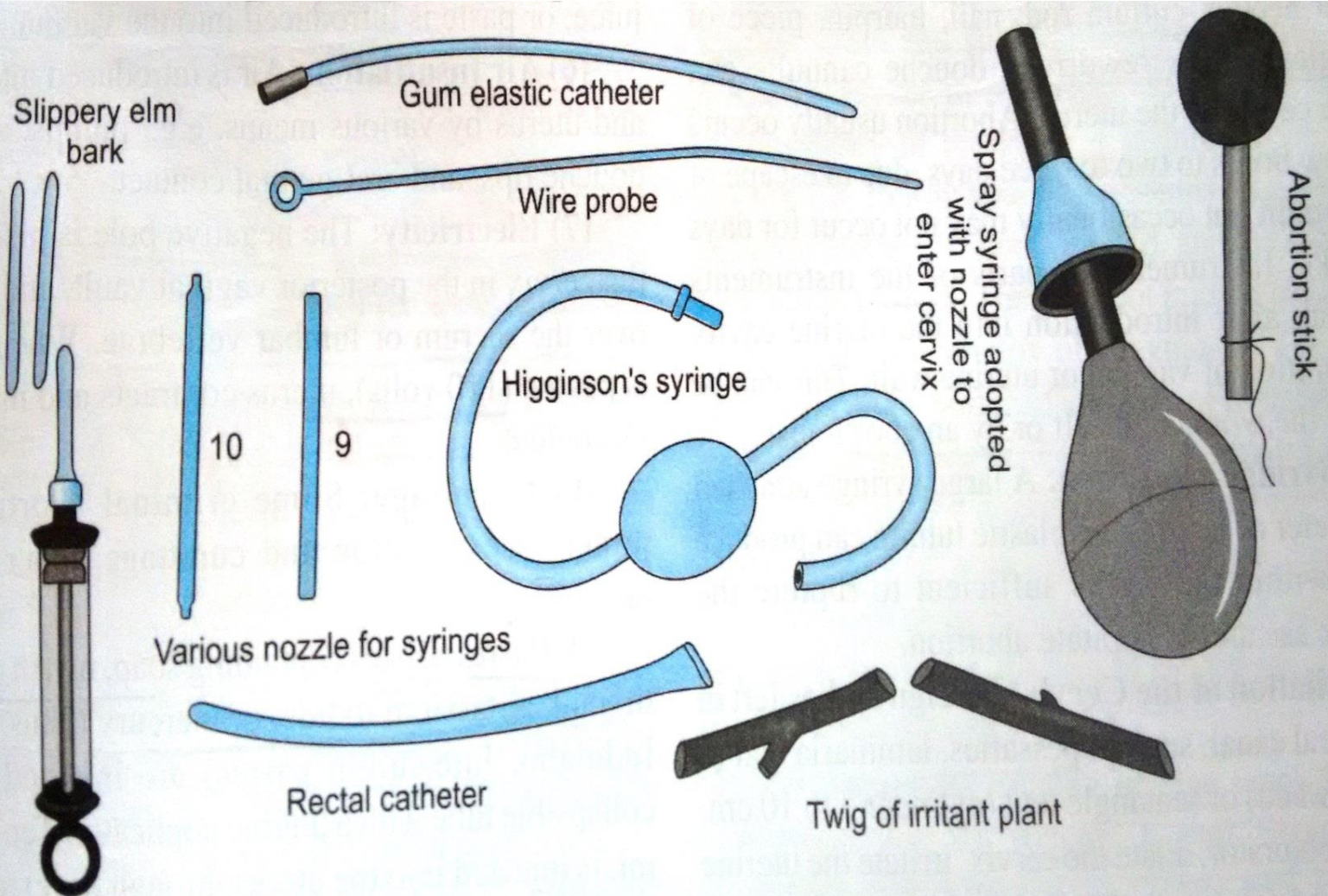
### 2. Membrane rupturing

- Uterine sound, catheter, probe, pencil, stick, needle, road, hairpin, screwdriver

### 3. Cervical dilatation

- Slippery elm bark, Pessary, laminaria tent



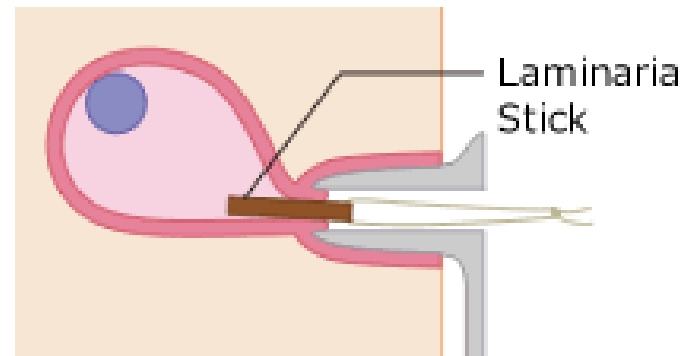


**Fig. (17-1).** Common instruments used to procure criminal abortion.

# Cerebra thevetia twig



## Laminaria tent sticks



4. Air insufflation – pumps, syringe, cannula

5. Abortion stick

- 12 – 18 cm long
- One end – cloth/gauge/cotton with juice of marking nut, calotropis, asafoetida, paste of arsenic, lead, mercury, copper, Dhatura...
- Twig of irritant plant – calotropis, nerium odorum, cerebra thevetia, plumbago rosea

6. Electricity

### [III] Abortifacient Drugs :

- act directly/indirectly on uterus
- causes congestion f/b bleeding & uterine contractions causing expulsion of foetus

#### 1) Acting directly on uterus

- Ecboolics** – ergot, quinine, lead oleate, lead plaster
- Emmnagogues** – borax, savin, rue, laborum, sanguinarine, estrogens

#### 2) GUT Irritants

- Oil of pennyroyal, tansy, turpentine, cantharides
- KMnO<sub>4</sub> tablets

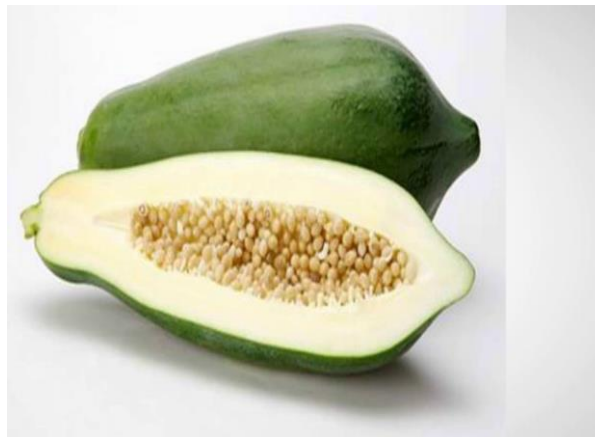
### 3) GIT Irritants

- Saline cathartics -  $\text{MgSO}_4$
- Purgatives – castor oil, croton, jalap, senna, phenolphthelin
- Emetic – tartar

### 4) Other poisons

- Inorganic – Hg, As, Sb, Pb, Cu
- Organic – cantharides, unripe fruits of pappaiya, pineapple, carrot seeds, juice of calotropis, marking nut, plumbago rosea, methi, saffron





SEMECARPUS ANACARDIUM (MARKING-NUT TREE)

# Complications

- Uncontrolled Haemorrhage
- Incomplete abortion and retained products of conception
- Embolism – Air, Amniotic fluid, Fat
- Infections, Sepsis & toxemia
- Perforation of uterus, vagina, cervix tear
- Local & systemic poisoning effect of poisons used
- Shock
- Coma
- Death - MC cause of death – hemorrhagic shock
- Late complications  
Uterine septa formation, adhesions, menstrual abnormalities,  
Sterility – temporary or permanent, fistula formation

## **criminal abortion & doctor :**

- 1) Abortion due to homicidal trauma
- 2) Due to abortion, lady demands compensation
- 3) Lady tries to conceal criminal abortion and therefore pregnancy.
- 4) Lady is being blackmailed for being pregnant & causing abortion.
- 5) Abortion resulting in excessive haemorrhage & other complications
- 6) During or after abortion, the lady dies.



# BEFORE MEDICAL EXAMINATION

- 1) Record preliminary data.
- 2) Obtain **written informed consent**.
- 3) Take **detailed history** of stage of pregnancy;  
time , place & method of criminal abortion;  
complications,  
any treatment received for it,  
any known drug allergy.
- 4) **Register MLC case & Inform to police.**
- 5) Maintain professional secrecy.
- 6)
  - consult a senior colleague for advise
  - if patient is likely to die, arrange for **dying declaration**.
  - if patient dies – **do not issue death certificate**,  
inform police & send body for **P.M. examination**.

# MEDICAL EXAMINATION

## [A] EXAMINATION OF MOTHER

### 1) If living -

- i. General condition & level of consciousness
- ii. Signs of pregnancy
- iii. Systemic examination
- iv. Evidence of abdominal injury
- v. Evidence of genital injury
- vi. Foreign bodies/discharge in genitals
- vii. Evidence of poisoning

### 2) If dead - Detailed examination of pelvic block during P.M.

- I. Examination of pelvic organs – injuries, foreign bodies, signs of sepsis
- II. Uterus - external features, injuries, contents in cavity(foreign bodies, poison, products of conception, blood, discharge)
- III. Condition of fetus.

## [B] EXAMINATION OF FOETUS & placenta with umbilical cord

- 1) Age
  - Ht, wt, head, chest & abd circumference, bony centres ossifications, developmental stage
- 2) Whether viable or not (Hydrostatic test etc.)
- 3) Any injury – mechanical/ chemical/ thermal
- 4) Cause of death
- 5) Time since death

# SAMPLES PRESERVED FOR ANALYSIS

- 1) Soiled cloths
- 2) Instrument/ object used for criminal abortion
- 3) Blood sample for chemical & microbiological analysis
- 4) Any foreign body in genital tract
- 5) Vaginal, uterine & rectal swabs for microbiological analysis
- 6) Uterus, bladder & rectum with their contents for histopathology & chemical analysis
- 7) viscera for chemical analysis
- 8) Blood sample/ tissue from abortus fetus & mother for DNA analysis

Any questions ??

Guin G, Gupta A, Khare S, Chandra M, Kalkur S. A study of septic abortions: trends in a tertiary hospital. J Obstet Gynecol India. 2005 May;55(3):257-60.

**Guin G, Gupta A, Khare S, Chandra M, Kalkur S.**

**A study of septic abortions: trends in a tertiary hospital**

**A prospective study was carried out in pre-RCH (phase I), post-RCH (phase II) and post revised Medical Termination of Pregnancy (MTP) act (phase III), to analyze the changing trends, study the impact of various government policies.**

**There was a significant increase in the incidence of septic abortion in phase III over phase I. a linear trend of increasing incidence of septic abortion. There is a need to popularize the Government Health Care setups as providers of free, quick and quality abortion services.**

# CRIMINAL ABORTION & LAWS

- **MTP Act**
- **PC-PNDT Act.**
- **IPC 312** – criminal abortion with consent of pregnant lady-  
punishment up to 3yrs/fine/both  
    If quickening of child(>20wks pregnancy)  
        – 7 yrs imprisonment & fine
- **IPC 313** – criminal abortion without consent of pregnant lady-  
punishment up to 10yrs/life & fine
  - done after PNDT & female fetus - imprisonment for life & fine
- **IPC 314** – during criminal abortion the pregnant lady dies -  
punishment up to 10yrs & fine
  - done after PNDT & female fetus - imprisonment for life & fine

- **IPC 315** - during criminal abortion the child dies - punishment up to 10yrs/fine/both
  - done after PNDT & female fetus - imprisonment for life & fine
- **IPC 316** - during criminal abortion the child dies beyond quickening - punishment up to 10yrs & fine
  - done after PNDT & female fetus - imprisonment for life & fine
- **IPC 511** – Attempted criminal abortion – punishment up to half of term provided for offence.



MCQ

# MCQ 1

- What is the mechanism of 'abortion stick' used in criminal abortion ?
  - a) Uterine contractions
  - b) Stimulation of uterine nerves
  - c) Uterine infection and necrosis
  - d) Placental separation

# MCQ 2

- A 30yrs old woman brought to emergency with C/o bleeding per vagina, on examination she is in hypovolemic shock, her relatives gives history that she has pregnancy of 3mths and she fell down from stairs 20mins ago at home. Which of following findings indicates unnatural abortion?
  - a) Injuries over legs, hips, abdomen and both hands
  - b) No local genital injuries
  - c) A blood stained cloth with some unknown tablets in vagina
  - d) No signs of any local disease/ infection

# MCQ 3

- A dead body of 22yrs old girl brought to mortuary for PM examination. The PM conducting doctor is having suspicion of criminal abortion. All following samples are necessary to be preserved for further analysis except...

- a) Soiled cloths
- b) Nail clippings
- c) Blood sample
- d) Vaginal, uterine & rectal swabs

# MCQ 4

Which of following is the most common cause in case of death after criminal abortion?

- a) Septicemia
- b) Air embolism
- c) Amniotic fluid embolism
- d) Hemorrhagic shock

# MCQ 5

- 'Attempt to do a criminal abortion in a pregnant female' is punished under which section of IPC ?
  - a) 375
  - b) 511
  - c) 312
  - d) 314