

ABORTION

- Abortion is expulsion of fetus/embryo weighing <500gms i.e. <22wks, <154 days. When it is not capable of independence survival.
(foetal loss before viability)
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TYPES OF ABORTION

SPONTANEOUS

- a. Threatened abortion
- b. Inevitable abortion
- c. Incomplete abortion
- d. Complete abortion
- e. Missed abortion
- f. Septic abortion

INDUCED

- a. Legal
- b. Illegal

SPONTANEOUS ABORTION

- **Abortion occurs without any medical or mechanical mean.**
- **Pregnancy ends spontaneously before viable gestational age.**

FETAL

Chromosomal

Trisomy 16

Monosomy

Polyplidy ...etc

Abnormal zygotic development

Other genetic abnormalities

MATERNAL

Demographic

age

2 or more previous miscarriage.

Endocrine Abnormalities

Thyroid

D.M

LPD

INFECTIONS

Immunological disorders

a. Autoimmune

anti-phospholipid antibodies

i) lupus anticoagulant

ii) anticardiolipin antibodies

b. Alloimmune

Anatomical factor

uterus– mullerian malformations

Asherman's syndrom

fibriods

cervix– cervical incompetence.

Exposure

coffeine, cigarette, alcohol, cocain, NSAIDS,

Lead, herbicides, Radiations etc

Physical truma

Unexplain

THREATENED ABORTION

Def- It is a process of miscarriage at state where recovery is possible.

p/v bleeding-slight, may be brownish or red coloured

Pain- Not more but mild discomfort at suprapubic region. Abd.cramps and low backache.

H/O- No H/o passing product of conception.

Examination-

P/v- Uterus soft and corresponding to period of gestation.

Cervix- closed os and cervix is long.

Treatment-

AIM is conservative therapy.

- ✗ 1. Rest- Bed rest at least 48 hrs.
- ✗ 2. Avoid heavy work and coitus, purgation upto 16th wk.
- ✗ 3. Drugs- Diazepam 5mg BD.
- ✗ 4. Inj. HCG and Inj. Progesteron given.

INEVITABLE ABORTION

- ✗ **Def-** Process of abortion at stage from which continuation of pregnancy is not possible.
- ✗ **S/S**
 - P/v bleeding increases.
 - Pain-intensely painful uterine cramps.
colicky in nature.
- ✗ **Examination-**
 - H/o- no passing of POC.
 - Cervix-internal os open/dilated.
 - Uterus- soft, enlarge.

× Treatment-

AIM Accelerate the process of expulsion.

1.Before 12 wks-

D and E with curettage by blunt curette under GA or Suction evacuation followed by curette.

2.After 12 wks-

Uterine contraction accelerated by oxitocin drip
(10 units in 500 ml) 40-60 drops/min.

If placenta retained- Remove by ovum forcep.

If not separated- Digital separation.

INCOMPLETE ABORTION

Def-

When entire product of conception are not expelled, instead a part of it is left inside in the uterine cavity.

S/S

H/o expulsion of fleshy mass p/v but continuation of abd. Pain and persistent p/v bleeding present.

Examination-

P/v- Uterus size < period of amenorrhoea.

OS- open, admitted tip of finger

× Treatment-

aim of treatment- To convert incomplete abortion to complete abortion.

1.Oxytocin drip- 10-20 units in 500ml.

2.IV/IM- 0.2mg ergometrine.

400 mcg misoprostol

2.Suction evacuation

3.If tissue lying loose,ovum forcep used for picking fragments.

4.After S and E- uterus finally explored with metallic curette.

COMPLETE ABORTION

Def-

When product of conception are expelled, it is called complete abortion.

C/f-

H/o- expulsion of fleshy mass.

Bleeding- trace or absent.

Pain- subside

Examination-

P/v- uterus smaller than period of amenorrhoea and little firmer.

Cervix- OS is closed.

Treatment-

First inspect the expelled product of conception or do USG for confirmation that cavity is empty.

MISSED ABORTION

- ✗ **Def-** When fetus is dead and retained inside the uterus called missed abortion or early fetal demise.

Clinical Features—

brownish vag discharge

subside pregnancy signs

retrogression of breast changes

ut smaller than period of gestation

cervix firm

no FHS

BEFORE 12 WKS

- ✗ Repeted hemorrhage in choriodecidual space.
↓
- ✗ Distrupt villi from attachment
↓
- ✗ Slight bleeding
↓
- ✗ Clotted blood with ovum

AFTER 12 WKS

- ✗ Macerated mummified
↓
- ✗ Liqour get absorbed
↓
- ✗ Placenta pale thin adherant.

MANAGEMENT

UT < 12 WKS

- ✗ 1. misoprostol 600-800mcg
- ✗ 2. mifepriстон 800mg
- ✗ 3. S and E

UT > 12 WKS

- ✗ 1. misopriстон 200mcg 4 hrly
- ✗ 2. oxytocin 10-20 units in 500 ml saline 25 drops/min
- ✗ 3. evacuation

SEPTIC ABORTION

- ✗ Any abortion complicated by infection is called as septic abortion.

Grading—

- I. Infection localized to ut.
- II. Parametrium, tubes, ovaries
- III. Peritonitis, endotoxic shock, renal failure.

CLINICAL FEATURES—

Pyrexia with chills
increase pulse rate
pain in abdomen

P/V-P/S—

Purulent discharge
tender ut.
boggy feel of ut

COMPLICATIONS

✗ Haemorrhage

✗ Injury

✗ Spread of infection

peritonitis

endotoxic shock

renal failure

✗ REMOTE

Chronic debility

ectopic pregnancy

secondary infertility

emotional depression.

MANAGEMENT

✗ Grade I

Antibiotics

Prophylactic- anti gas gangrene serum

anti tetanus serum

Incomplete– evacuation of ut.

Analgesic/sedatives.

Grade II

Antibiotics

surgery –Evacuation(withheld for 48 hrs)
posterior colporaphy

Grade III

Antibiotics

laprotomy

INDUCED ABORTION

DEFINITION

Induced abortion is medical or surgical termination of pregnancy before the period of viability.

- **Legal**
- **Illega**

METHODS OF TERMINATION

IN IST TRIMESTER

Medical

mifepristone

mifepristone + misoprostol

methotrexate + misoprostol

tamoxifen + misoprostol

Surgical

vacuum aspiration

S & E

D & E

IN IIND TRIMESTER

Prostaglandins

D & E

Intra uterine instillation

Oxytocin infusion

Hysterotomy

MEDICAL ABORTION

1. Mifepristone :- Analog of progestin, blocking effect of progesterone. 200mg
2. Misoprostol :- PGE₁ improve efficacy of abortion 400mcg/800mcg

Effective upto 63 days

Successful when used within 49 days

SURGICAL ABORTION

Vacuum aspiration

MVA (manual vacuum aspiration)

upto 12 wks

missed,blighted,molar pregnancy etc

endometrial biopsy

Contraindication :-

- 1. ut size >12 wks**
- 2. acute cervicitis**
- 3. bleeding disorders**
- 4. ectopic pregnancy**
- 5. multiple fibroids**