

# Intrauterine death

# Definition

## IUD

Fetus die in utero before labour starts .

## Stillbirth

Is delivery of a baby with no signs of life after 24 weeks of pregnancy .

# Aetiology

## A- Fetal causes :

1. Cord accidents (true knots in cord ,or constriction of cord round a limb ) .
2. Feto – fetal transfusion .
3. Feto-maternal haemorrhage.
4. Chromosomal & genetic disease.
5. Structural abnormality.

# Fetal causes

6. Infection: TORCH , high fever from any disease .
7. Anaemia of fetal origin e.g alpha-thalassemia.

## B.Direct maternal effects

- 1.Obstetric cholestasis .
2. Metabolic disturbances e.g diabetic ketoacidosis.
- 3.Reduced oxygen states e.g cystic fibrosis .
- 4.Uterine abn. E.g Ashermann's syn.
- 5.Antibody production e.g Rhesus disease .

# C-Maternal – placental effects

1. PET
2. Renal disease
3. Antiphospholipid syn.
4. Thrombophilia
5. Smoking
6. Drug abuse e.g cocaine.

# Symptoms & diagnosis

Decrease fetal movement in as many as 50% of cases .

Breast may diminish in size .

In cases of HT ; BP may sometimes fall.

After 24 weeks ; failure to hear fetal heart sound with a stethoscope .

Uterus may be found to be smaller than duration of pregnancy .

# Diagnosis

U/S ; no FH.

U/S may show;

- 1.Spalding's sign :overlapping of the skull bones ( occur a week after fetal death ) .
- 2.Roberts sign ; presence of gas in the fetal heart .seen after 2 days .
3. oligohydramnios.
- 4.Signs of fetal hydrops.



# Diagnosis

PT become –ve within a week after the death of the fetus.

testing for DIC twice weekly is recommended

# Delivery timing

Women should be offered the choice of when they would like to deliver .

In the majority of cases labour soon follows death of the fetus , but ST labour does not occur for several weeks .

In these cases there is no urgent call for interference , unless the complications

Of hypofibrinogenemia & DIC occur .

Estimated risk is 30 per cent if the fetus has been retained for 4 weeks.

testing for DIC twice weekly is recommended.

Clearly if there are conditions that pose a risk to maternal safety (abruption, pre-eclampsia, infection) then advice on expediting delivery needs to be given..

# Induction of labour

By vaginal PG pessaries or gel .

Extraamniotic infusion of PG rarely used now .

Extraamniotic saline also effective .

Intraamniotic injection of PG or hypertonic solution of urea.

More recently , combinations of antiprogesterone (mifepristone ) & PG analouge ( misoprostol) has been used .

A standared protocol is :

Mifeprostone : 200 mg 24-48 hours before induction .

- Mifepristone: 200 mg 24–48 hours before induction.
- ●● Misoprostol: 50–100 mcg pv 6 hourly for 24 hours.
- Vaginal use of misoprostol is associated with fewer side effects of pyrexia and shivering than oral use

Oxytocin augmentation will be required for some women.

Mechanical methods are rarely required now that misoprostol is widely available.

Membranes should be left intact as long as possible , because of risk of ascending anaerobic uterine infection from growth of bacteria in the dead placental & fetal tissues if labour does not follow quickly .



# IUD+ PREVIOUS C/S

For women who have IUFD and who have had a previous CS, the risk of uterine rupture is increased in IOL.

Mifepristone alone (200 mg tds for 2 days).

Vaginal prostaglandin E2 can be used

# IUD+ PREVIOUS C/S

If misoprostol is used a reduced dose is recommended, but the exact dose profile of greatest safety is not yet known.

Mechanical methods have been used for women with previous CS.

# Immediate postnatal care

PPH is not uncommon, especially where there is pre-eclampsia, abruption, prolonged fetal death or infection.

Prolonged chorioamnionitis and repeated small abruptions predispose to retained placenta. When this occurs it should be dealt with quickly and antibiotic prophylaxis given.

An assessment of thrombosis risk should be made for each woman using standard tools

# investigations

Fetus should be examined carefully after birth .

Fetal investigations :

1. Fetal blood for karyotype .
2. Fetal skin for karyotype.
3. Fetal blood for infection screening (TORCH ) .
4. Full fetal x-ray .

# Maternal investigations

A- maternal blood for :

1. Infection screen.
2. Lupus anticoagulants .
3. Anticardiolipin antibodies .
4. Thrombophilia screening .
5. Bile salts , Hb A1C .
6. Kleihauer test .
7. Anti Ro antibodies if fetus is hydropic.

B-Maternal genital swabs should be taken if infection is suspected .

C-Maternal urine sent for urine drug screening .

# C- Placental investigations

1. Swabs for infection.
2. A small sample for karyotype.
3. Whole placenta should be sent for pathology.