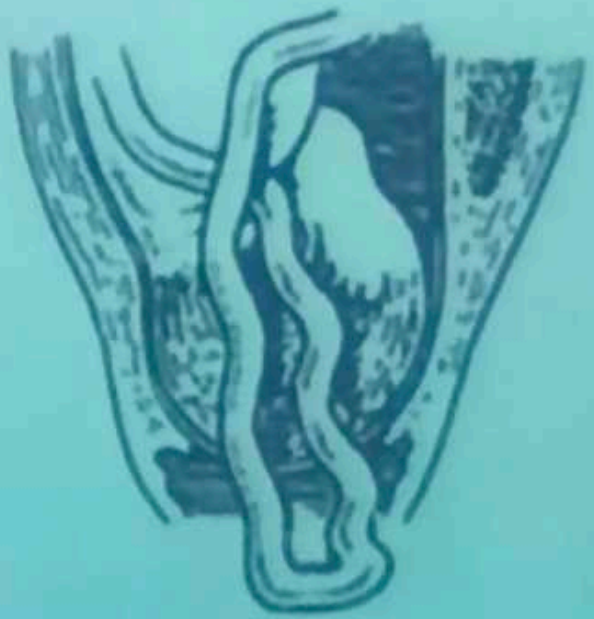
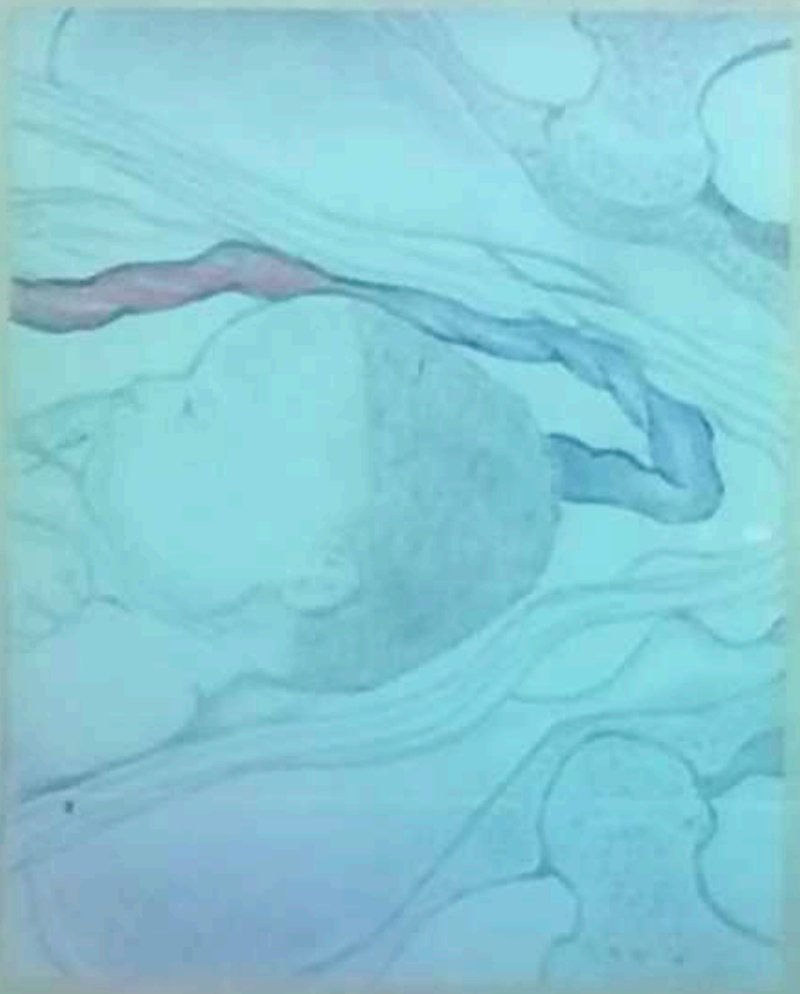
Cord presentation &prolapse

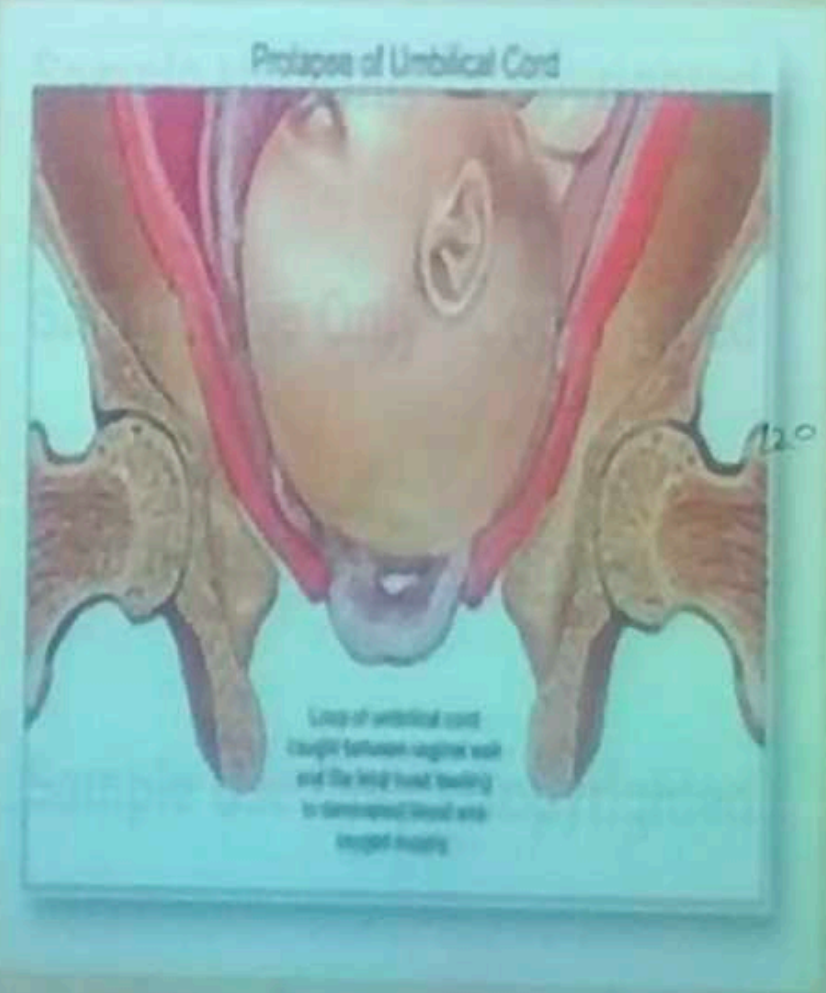
Cord Presentation
Membranes Intact



Cord Prolapse
Membranes Ruptured

Cord presentation vs. Cord prolapse





INCIDENCE

- Over all incidence - 0.1% -0.6%
- Primi gravida - 0.4 %
- Multi gravida - 0.6 %
- Cephalic presentation - 0.3 %
- Breech - Frank - 0.9 %
  - Complete - 5 %
  - Footling - 10 %
- Shoulder presentation - 15 %
- Contracted pelvis - 4-6 times more.

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ETIOLOGY OR RISK FACTORS - 1

- **Non engagement of fetal head:**

1. Unengaged or poorly applied presenting part
2. High parity - weak muscles
3. Unstable lie - weak muscles
4. Malpresentations
5. Breech presentations

ETIOLOGY OR RISK FACTORS -2

- **Related to Uterine and Pelvic factors:**
  1. Polyhydramnios
  2. Long umbilical cord
  3. Low lying placenta
  4. Contracted Pelvis

ETIOLOGY OR RISK FACTORS -3

- **Related to Fetal factors**:
  1. Prematurity
  2. Low Birth Weight
  3. Second twin
  4. Congenital malformations

ETIOLOGY OR RISK FACTORS -4

- **Related to clinical procedures:**

1. ARM in high presenting part
2. External cephalic version
3. Stabilizing induction of labor
4. Manual rotation of fetal head in OP position
5. Application of fetal scalp electrode
6. Internal podalic version of second twin

COMPLICATIONS:

- **Neonatal morbidity and Mortality** - as high as 50 % due to
  1. Hypoxia - is due to cord compression by the presenting part and also due to vasospasm of umbilical vessels
  2. Operative trauma
  3. Delay in transport
  4. Congenital malformations
  5. Prematurity
- **Maternal morbidity :**

DIAGNOSIS

- Overt cord can be seen in the vagina or outside the vagina- feel pulsations
- Variable deceleration and bradycardia on CTG following rupture of membranes.
- Fetal bradycardia - following fundal pressure
- Meconium stained liquor

PREVENTION

- Ultrasound examination for malpresentation and cord presentation.
- Avoid ARM in unengaged head
- Routinely doing PVE following spontaneous rupture of membranes.
- Controlled ARM in poly hydramnios - Stabilizing induction.
- Bradycardia and variable decelerations - do either vaginal examination or speculum examination

MANAGEMENT

- Depends upon viability of the fetus and absence of fetal malformations.
- Quick action should be taken to expedite the delivery.
- Survival of fetus depends on swift action

  Prepare for Emergency interventions like Cesarean section and or Instrumental delivery.
- Multidisciplinary approach or Team work is required

MANAGEMENT

- Discontinue IV oxytocin infusion
- Oxygen by mask - 15 lits/ mt
- CORD - C - call for help
  - O - organize for delivery
  - R - Relieve pressure
  - D - Delivery

Funic repositioning: with soaked warm saline reposition into vagina

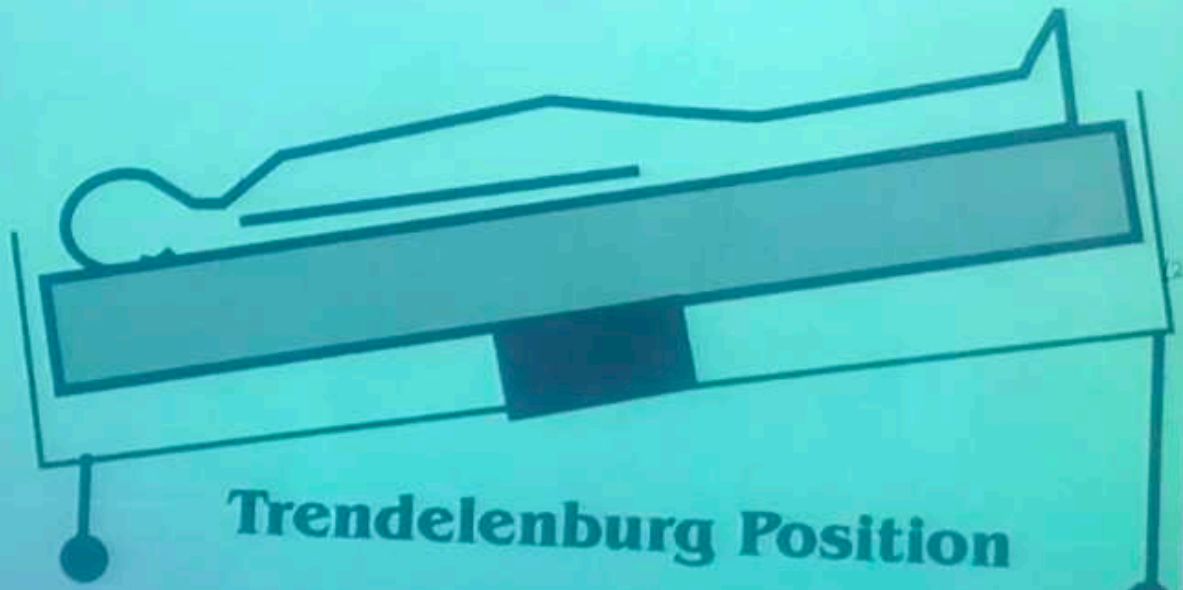
ELEVATING THE PRESENTING PART

- Avoid presenting part pressure over cord by **digital or manual pressure.**
- Instruct the patient to not to exert pressure or pushing.
- Bladder filling with 500 700 ml of saline.
- Tocolysis? Inj.Terbutaline 250 microgams SCly
- **Positioning** of the patient:

1. Knee chest position
2. Trendelenburg position
3. Exaggerated Sims or lateral position

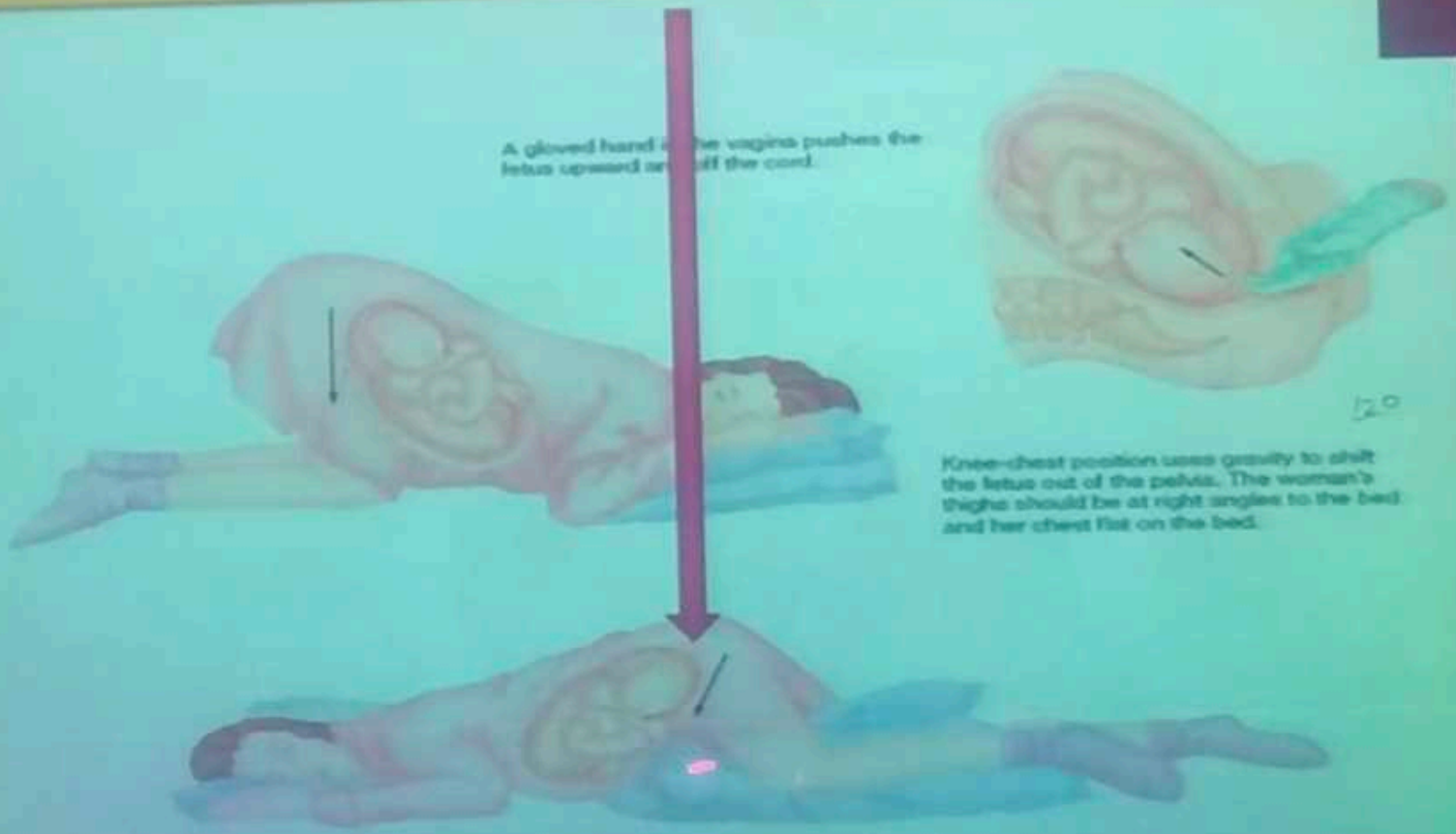
Knee chest position

TRENDELENBURG POSITION



Trendelenburg Position

EXAGGERATED SIM'S POSITION



A gloved hand in the vagina pushes the fetus upward and off the cord.

Knee-chest position uses gravity to shift the fetus out of the pelvis. The woman's thighs should be at right angles to the bed and her chest flat on the bed.

The woman's hips are elevated with two pillows; this is often combined with the Trendelenburg (head down) position.

DO'S AND DON'TS

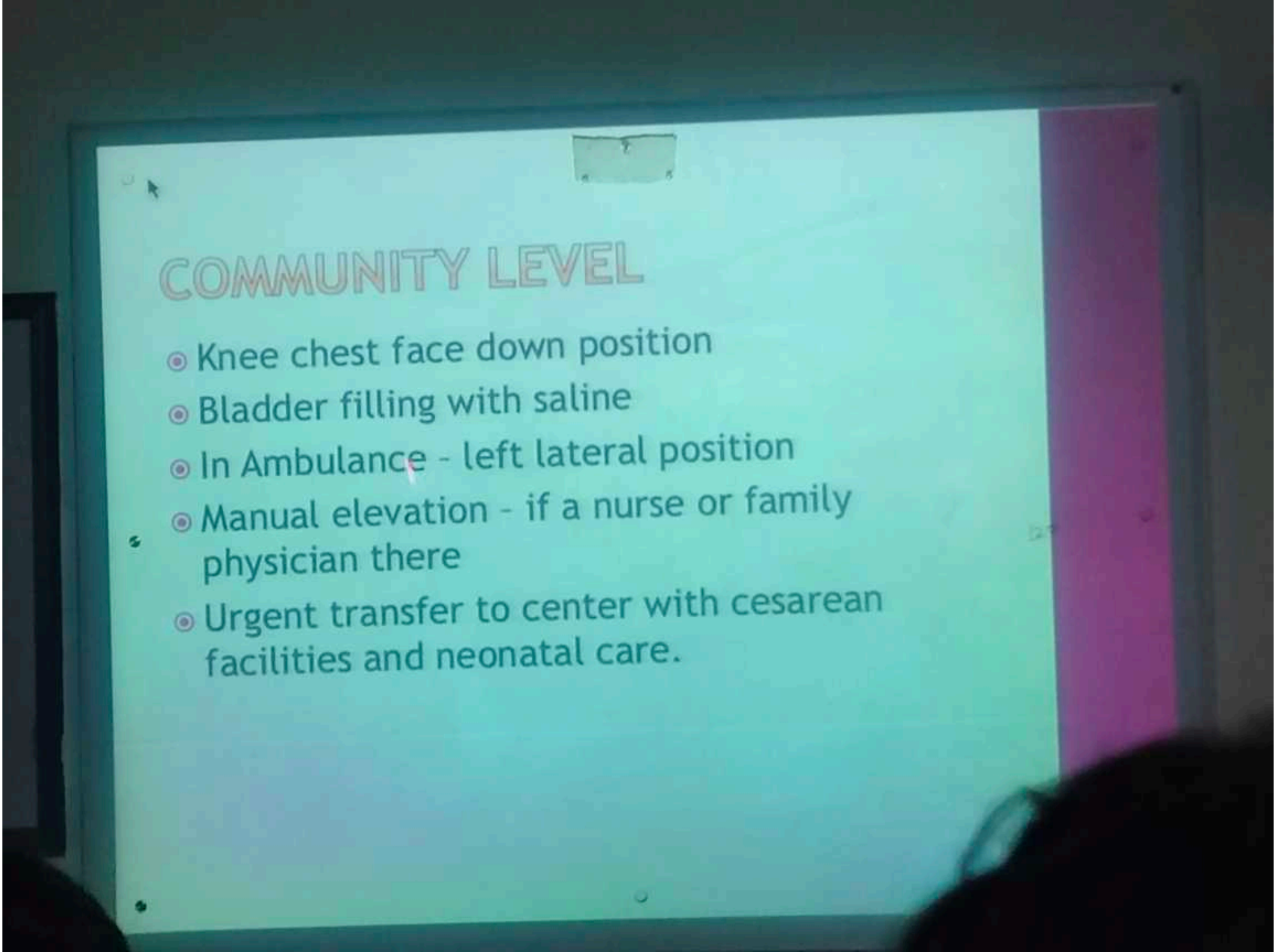
Do's -

- Replace the cord into the vagina to prevent from vasospasm with saline soaked pad
- Continuous monitoring of FHR
- Inform the patient
- Minimal handling of cord

Don'ts -

Replace inside the uterus

Excessive handling of the cord.


COMMUNITY LEVEL
Knee chest face down position
Bladder filling with saline
In Ambulance - left lateral position
Manual elevation - if a nurse or family physician there
Urgent transfer to center with cesarean facilities and neonatal care.

- **Extreme prematurity with cord prolapse:**

1. **Below or around 24 weeks** - counsel the patient.

If she wishes to continue pregnancy if FHR is normal and patient willing for up to 3 weeks

If patient does not agree allow for vaginal delivery with or without oxytocin infusion

FETAL MORTALITY

- Overall - 50 %
- First stage of labor - 75 %
- Second stage - 50 %
- Neonatal death - 4 %
- Perinatal mortality - 20 %
- Asphyxia - Hypoxic ischaemic encaephlopathy
  - Cerebral palsy

PROGNOSIS

- Good with vertex presentation than Breech.
- Good in Primigravida than in multi.