Nursing management during complicated labour and delivery Poor Progress of labour(prolonged labour or obstructed labour)

Causes of prolonged labour:(3P)

- 1-less than 2 to 3 contractions in 10 minutes.
- 2-Fetal macrosomia, malposition, malpresentation.

3-Narrow pelvis(especially if not diagnosed early in ANC).

Complication of prolonged labour(obstucted labour)

- Prolonged labor results in:
- 1-Maternal exhaustion, dehydration
- 2-Increased incidence of infection
- 3-Postpartum hemorrhage due to uterine atony
- 4-Nonreassuring fetal status
- 5-Fetal sepsis from pathogens ascending from birth canal
- 6-Fetal death.

7-Prolonged pressure on fetal head resulting in:

Excessive molding

Caput succedaneum

Cephaolhematoma.





8-Rupture uterus

Nursing Plan

- Frequent monitoring of vital signs, FHR and contractions
- Administer oxytocin
- Assess bladder for distention and empty every 2 hours . Assess for signs of infection
- Maternal fever
- Chills
- Foul-smelling amniotic fluid
- Fetal tachycardia

Provide emotional support.

Provide information and encourage questions.

Prepare for surgical delivery.

Fetal distress in labour

- 1-Increase contraction frequency
- < 2 min frequency, > 90 seconds duration
- 2-Painful due to uterine
- muscle anoxia
- 3-Ineffective in dilating and

effacing cervix

Reduced uteroplacental exchange resulting in fetal hypoxia and sometimes in ruptured membranes patients meconium stained liqour can be noted and all these changes lead to fetal distrees which recorded by the sonicaid or more accurately by CTG.

Nursing Plan

Stop oxytocin Increase IV rate Administer O2 by face mask Position in side-lying position **Provide support and encouragement** Monitor contractions and fetal status Notify health care provider Assist with amniotomy Administer pharmacologic agents as ordered – sedation Monitor maternal fatigue

Cephalopelvic Disproportion

It is an anatomical disproportion between the fetal head and the maternal pelvis , this can be due to large head , small pelvis or a combination of both.

Usually occur in:

- 1-short stature women
- 2-previous pelvic frecture
- 3-metabolic bone disease

4-malposition of the head(OP).

5- fetal macrosomia weighing more than 4500 g (postterm, IDM,)

So CPD lead to

Lack of fetal descent in presence of strong contractions

Labor usually prolonged(moulding and caput formation), CPD may make cesarean only available method of birth.

Vaginal birth may be possible depending upon type of CPD

Continuous fetal monitoring if labor is allowed to progress

Requires notification of health care provider for early decelerations, labor dysfunction, or nonreassuring fetal status

McRobert's manuever – legs to chest & suprapubic pressure(shoulder dystocia)

Cesarean birth performed if fetus is greater than 4500 g.

Shoulder Dystocia

McRobert's Maneuver



Shoulder dystocia

Shoulder dystocia occurs when a baby's head is delivered through the vagina, but his shoulders get stuck inside the mother's body. This creates risks for both mother and baby.



Risk factors for shoulder dystocia

A pregnant woman may be at risk for shoulder dystocia if: Her baby is very large. (macrosmic baby)

She has <u>diabetes</u>.

She is <u>pregnant with more than one baby</u>.(multiple pregnancy)

She is <u>obese</u>.

Postterm pregnancy.

She had a shoulder dystocia in the past.

Her labor is induced.

She gets an <u>epidural</u> to help with pain during labor.

She has an operative vaginal birth.(forceps or a vacuum)

complications of shoulder dystocia

Fetal:

1-brain anoxia

2- Injury to the nerves of the shoulder, arms and hand. This may cause paralysis(Erb's palsy)3-death

Maternal:

Tearing of the uterus, vagina, cervix or rectum
Postpartum haemorhage.

Management

- Goal: Safe delivery before neonatal asphyxia and/or nerve injury
- 7 minutes!!!
- Episiotomy
- Suprapubic Pressure
- McRoberts Maneuver, If no benefit then.....
- Zavenelli
- Push back the delivered fetal head into birth canal and perform an emergency c/s

Cord Prolapse

Bed rest is recommended if engagement has not occurred and membranes have ruptured Assess for nonreassuring fetal status



Examiner's fingers must remain in vagina

Have patient assume knee-chest position, Trendelenburg position, or side-lying position with hips elevated on pillow .

Apply oxygen

Vaginal birth may be attempted if completely dilated and pelvic measurements adequate

Cesarean section is delivery of choice.



Abnormal Presentations







TYPES OF ABNORMAL PRESENTATION:

- 1-Breech presentation
- 2-Shoulder presentation(in transverse lie)
- **3-Face presentation**
- **4-Brow presentation**
- 4-Compound presentation.

Breech Presentations

Occurs when the buttock of the fetus become the lowest most in the mother's pelvis.

Incidence: 3% at term

Types:

Frank breech(extended legs)

Complete breech(flexed legs) Incomplete breech(footlings)







Risk of breech presentation

1-Increased risk of prolapsed cord

2-Increased risk of cervical spinal cord injuries due to hyperextension of fetal head during vaginal birth

- 3-Increased risk of birth trauma (especially head) during any type of birth
- 4-Increased incidence of cesarean birth

Amniotic Fluid

It's a clear pale straw-colourd fluid, initialy in pregnancy secreted by the amnion over the placenta and sac but later f rom the fetal excretion(kidney and lung) Function:

1-protect the fetus from mechanical injury.2-permit movement of the fetus, promoting development of the musculoskeletal system.

3-prevent adhesion between the fetus and the amnion.

4-permit fetal lung development.

5-maintain a constant temperature.

6-during labour it equalizes intrauterin pressure. Too much or too little amniotic fluid is linked to problems in development and pregnancy complications.

polyhydramnios.

Is a condition in which there is too much amniotic fluid around the fetus. It occurs in about 1% of all pregnancies. Causes:

Maternal: DM.

Fetal:

1-Gastrointestinal abnormalities that block the passage of fluid.

2-Abnormal swallowing due to problems with the central nervous system or chromosomal abnormalities.

3-Twin-to-twin transfusion syndrome.

4-Heart failure.

5-Congenital infection.

symptoms of Polyhydramnios

- Discomfort in the abdomen, dyspnoea, indigestion and heartburn.
- Rapid growth of uterus.
- Uterine size (fundal height) greater than expected for gestational age.
- Uterine contractions.

Risk of Polyhydramnios

Too much amniotic fluid can cause the mother's uterus to become overdistended and may lead to preterm labor or premature rupture of membranes (the amniotic sac). also associated with birth defects in the fetus. When the amniotic sac ruptures, large amounts of fluid leaving the uterus may increase the risk of placental abruption (early detachment of the placenta) or umbilical cord prolapse (when the cord falls down through the cervical opening) where it may be compressed.

Oligohydramnios

Oligohydramnios is a condition in which there is too little amniotic fluid around the fetus. It occurs in about 4% of all pregnancies.

Causes:

- 1-Premature rupture of membranes (before labor)
- 2-Intrauterine growth restriction (poor fetal growth)
- 3-Post-term pregnancy
- 4-Birth defects, especially kidney and urinary tract malformations
- 5-Twin-to-twin transfusion syndrome

symptoms of oligohydramnios

Leaking of amniotic fluid when the cause is rupture of the amniotic sac ie heavy vaginal discharge.

Decreased fetal movement

Uterine size (fundal height) smaller than expected for gestational age.

Decreased amount of amniotic fluid on ultrasound.

Risk of oligohydraminos

Amniotic fluid is important in the development of fetal organs, especially the lungs. Too little fluid for long periods may cause abnormal or incomplete development of the lungs called pulmonary hypoplasia.

Intrauterine growth restriction (poor fetal growth) is also associated with decreased amounts of amniotic fluid. Oligohydramnios may be a complication at delivery, increasing the risk for compression of the umbilical cord and aspiration of thick meconium (baby's first bowel movement).

