Lesson 3: Precipitate and Emergency Delivery

3-1. GENERAL

There are times when labor progresses so rapidly that the nurse is faced with the task of delivering the baby even within the confines of a hospital setting. And, in addition, there are times when a woman begins labor in a variety of physical settings and during a variety of climatic disturbances away from a medical facility. During these situations is when the nurse has the primary responsibility for providing a physically and psychologically safe experience for the woman and her baby. It is important that the nurse maintains composure and keeps calm. Whenever possible, the patient should be told what to anticipate and what she can do to cooperate effectively. Working as a team is essential and can be accomplished if confidence is instilled by competence in both the physical and emotional aspects of care.

3-2. TERMS AND DEFINITIONS

a. Precipitate Delivery. This refers to a delivery which results after an unusually rapid labor (less than three hours) and culminates in the rapid, spontaneous expulsion of the infant. Delivery often occurs without the benefit of asepsis.

b. Emergency Delivery. This refers to an unplanned, non delivery room, non-hospital birth which occurs as a result of precipitous labor, geographical distance from the hospital, or other cause for the unexpected delivery.

NOTE: Be aware that the following information also applies to emergency delivery. However, all situations/factors may not be applicable due to the setting (hospital/non-hospital); but it will be to your advantage to be knowledgeable and skilled with all of the following information.

3-3. FACTORS THAT MAY PREDISPOSE A WOMAN TO A PRECIPITATE DELIVERY

There are common factors which may cause a woman to deliver rapidly. These factors include:

a. A multipara with relaxed pelvic or perineal floor muscles may have an extremely short period of expulsion.

b. A multipara with unusually strong, forceful contractions. Two to three powerful contractions may cause the baby to appear with considerable rapidity.

c. Inadequate warning of imminent birth due to absence of painful sensations during labor.

3-4. DANGER OF PRECIPITATE DELIVERY

There are several misfortunes associated with precipitate delivery for both the mother and the infant. They are classified as maternal and neonatal.

a. Maternal

(1) May cause lacerations of the cervix, vagina, and/or perineum. Rapid descent and delivery of an infant does not allow maternal tissues adequate time to stretch and accommodate the passage of the infant.

(2) There may be hemorrhaging originating from lacerations and/or hematomas of the cervix, vagina, or perineum. There may also be hemorrhaging from the uterus. Uterine atony may result from muscular exhaustion after unusually strong and rapid labor.

(3) There may be infection as a result of unsterile delivery.

b. Neonatal

(1) May cause intracranial hemorrhage resulting from a sudden change in pressure on the fetal head during rapid expulsion.

(2) May cause aspiration of amniotic fluid, if unattended at or immediately following delivery.

(3) There may be infection as a result of unsterile delivery.

3-5. NURSING CARE TO PREPARE FOR ANTICIPATED PRECIPITATE BIRTH

a. Assess Patient for an Impending Precipitous Delivery Situation.

(1) Patient has previous obstetric history of rapid labor/delivery.

(2) Patient complains of a sudden, intense urge to push.

(3) Notable increase in bloody show.

(4) Sudden bulging of the perineum.

(5) Sudden crowning of the presenting part.

b. Call for Help. Do not leave the patient unattended.

LESSON OBJECTIVES

3-1. Define precipitate and emergency delivery.

3-2. Identify three factors which may predispose a woman to precipitate delivery.

3-3. Identify descriptive statements that refer to the dangers of a precipitate delivery.

3-4. Select those procedures that are used to provide the nursing care for a patient having a precipitate delivery.

3-5. Select nursing interventions used during the delivery of an infant.

3-6. Select descriptive statements that refer to the nursing care after a precipitate delivery.
c. Obtain a Sterile Obstetric or Precipitate Delivery Pack, if Available. The pack contains a variety of supplies to include towels, drapes, sanitary pads, and so forth. Priority equipment includes:

1. Gloves - sterile gloves are preferred as they help promote asepsis, however, if non-sterile gloves are available they should be utilized as protection for the nurse.
2. Towel/cloth-to provide a friction surface for control of delivery of the fetal head.
3. Bulb syringe-for aspiration of amniotic fluid from the infant's mouth.
4. Hemostats or cord clamps-to clamp the umbilical cord.
5. Scissors-to cut the episiotomy/cord.
6. Dry blanket/towel-to wrap the infant after delivery.

d. Provide the Cleanest Environment Possible. If no sterile equipment is available this should include:

1. Paper, towel, blanket, or coat to place under the patient's buttocks.
2. Ligating material such as string, yarn, or shoelaces to tie the cord.
3. A sharp instrument such as scissors, a knife, or a razor to cut the cord.
4. A dry cloth to wrap infant after delivery.

e. Provide for Asepsis to the Greatest Extent Possible.

1. Pour Betadine® over the patient's perineum if time does not permit for perineal prep.
2. Wash your hands and glove, if possible.

f. Support the Patient

1. Keep the patient informed of plans for delivery.
2. Speak in a calm tone and provide direction to available assistants (e.g., significant other).
3. Encourage the patient to pant or blow through contractions to slow the delivery process and to decrease the force of expulsion.
4. Provide for privacy, but do not leave the patient alone.

3-6. NURSING CARE FOR MANAGEMENT OF PRECIPITATE DELIVERY

See figure 3-1.

a. Check for Presence of an Intact Amniotic Sac.

1. If the membranes do not break spontaneously, they should be ruptured just prior to or with the delivery of the head.
2. Caution must be taken to prevent the membranes from covering the infant's mouth as the first breath is taken, otherwise aspiration of amniotic fluid can occur.

b. Support the Perineum and Infant's Head.

1. Apply support to the perineum with your dominant hand (usually right hand) using a towel or cloth. When available, turn your hand with your palm facing the fetal head and fingers pointed downward, and apply firm pressure against the perineum with the flattened fingers.
2. Apply support to the fetal head with your nondominant hand. Spread your middle three fingers; place your fingers against the anterior aspect of the head.
3. Increase the pressure of the dominant hand in a downward motion against the perineum as the fetal head extends. This will assist in "sliding" the perineum over the fetal face. If the perineum is not flexible enough to deliver the fetus without lacerations, maintain firm pressure. This will help to minimize the extent of lacerations.
(4) Provide mild downward pressure with the nondominant hand against the fetal head as the fetal head extends. This will guide the head away from the anterior vulva and minimize lacerations around the urethra.

(5) Take special care to avoid excessive pressure on the fetal head. Never attempt to delay delivery by applying pressure on the fetal head.

(6) Combine efforts of the right and left hand. This will result in a slow, controlled extension of the fetal head.

c. Assist With the Actual Delivery of the Head. This should be accomplished between contractions to slow the force of expulsion.

d. Coach the Patient to Pant/Blow. This should be done as the head delivers. However, she may be required to bear down slightly to assist with delivery of the large diameter of the head. Panting and blowing helps to avoid pushing after delivery of the head to allow time to bulb suction amniotic fluid from the infant's mouth.

e. Bulb Suction Amniotic Fluid from the Infant's Mouth. Place your finger into the infant's mouth to allow insertion of the syringe.

f. Allow Rotation. Allow the infant to spontaneously accomplish external rotation.

g. Check for a Nuchal Umbilical Cord. Slide one or two fingers along the anterior side of the infant's head and neck to the shoulder to assess for the presence of a nuchal (around the neck) umbilical cord.

   (1) If there is a loosely wrapped cord, the cord should be lifted and slid over the infant's head. This is known as "reducing" the cord.

   (2) If there is a tight nuchal cord, the cord must be clamped twice and cut between the clamps.

   (3) If the cord is loose, but cannot be lifted over the infant's head, it may be slid over the delivering body.

   NOTE: A nuchal cord occurs in about 25 percent of all deliveries.

h. Allow Infant to Complete External Rotation. After complete rotation, place your hands so that the palms are flat against the sides of the infant's head.

i. Coach the Patient to Push and to Pant/Blow. Tell the patient when to push and when to pant/blow. This will assist with a controlled delivery of the shoulders.

   (1) The nurse applies gentle downward pressure on the head until the anterior shoulder delivers from under the pubic arch and becomes visible.

   (2) Support the infant's head and neck. The infant is gently pushed or lifted upward to facilitate delivery of the posterior shoulder.

j. Assist With Delivery of the Posterior Shoulder. After the delivery of the posterior shoulder, the infant's body is generally expelled rapidly. However, if the infant is large, the mother may have to assist by pushing.

k. Care for the Infant.

   (1) The nurse should cradle the infant against his (the nurse's) body with the infant's head supported by the palm of his hand and the body supported by the forearm. This method allows the nurse a free hand.

   (2) The infant should be held with his head tilted downward to facilitate the drainage of mucus and amniotic fluid from the upper airway.

   (3) The infant should be held at or below the level of the uterus until the umbilical cord stops pulsating to prevent loss of neonatal blood to the placenta.

   NOTE: The infant may cry or breathe spontaneously or with the clamping of the cord.

   (4) If the infant does not begin spontaneous respiration, he should be stimulated to breathe. You should place the infant on a flat surface and rub his back briskly. This can be achieved with the same motions required to dry the infant. Slap the soles of the infant's feet if more aggressive stimulation is required.

   (5) Do not "slap" the infant's buttocks. This action may produce sufficient bruising of a large surface area and may result in compromising circulatory volume.

   (6) Never suspend the infant by his feet. This action hyperextends the infant's spine which has been flexed throughout fetal development. Also, it increases the intracranial pressure and may cause capillary rupture and increases the chances of dropping the infant.

   (7) Dry and wrap the infant immediately to prevent heat loss. In an emergency setting, place wrapped infant in the mother's arms to be held close to her body to maintain warmth.

   (8) Check the infant frequently to assess for regular respirations.

   (9) Determine one (1) and five (5) minute APGAR scores.

l. Assist with Delivery of the Placenta.

   CAUTION: Never tug on the cord to attempt to speed delivery. This may avulse or tear the cord from the placenta. It may, also, encourage the uterus to invert.
(1) Observe for signs of placenta separation. There may be a sudden gush of blood, sudden lengthening of the cord, or a sudden rise in position of the uterus. This usually occurs 5 to 10 minutes after delivery.

(2) Coach the mother to bear down after these placental separation signs are noted. Bearing down will promote delivery of the placenta.

(3) Massage the uterus immediately after delivery of the placenta to promote uterine contraction - in emergency settings.

(4) Encourage the patient to breast-feed or to stimulate nipples to promote release of oxytocin - in emergency settings.

3-7. NURSING CARE AFTER A PRECIPITATE DELIVERY

a. Assist the mother into a comfortable position with her legs extended.

b. Provide a clean surface under the patient's buttocks.

c. Check uterine fundus every 10 to 15 minutes during the first hour to assure contraction of myometrium and normal lochial flow.
   
   (1) Gently massage the uterus if the fundus is soft or boggy.
   
   (2) Avoid overstimulation as myometrium will fatigue and result in severe atony.

d. Assess the amount of blood loss from the delivery. Normally, blood loss is less than 500 cc. Save all evidence of blood loss.

e. Assess for intactness of the placenta.

f. Provide for comfort and warmth of both patients. Promote fluids in the mother as tolerated.

g. Encourage the mother to void to prevent bladder distention.

h. Make notations about the birth to include:
   
   (1) Fetal position and presentation.
   
   (2) Presence of nuchal cord and method of reduction.
   
   (3) Color, character, and amount of amniotic fluid.
   
   (4) Time of delivery.
   
   (5) Sex of infant.
   
   (6) APGAR scores; need for stimulation or resuscitation.
   
   (7) Approximate time of placental expulsion, appearance, and completeness.
   
   (8) Maternal condition (affect, amount of bleeding, and status of uterine contraction).
   
   (9) Any unusual occurrences during the delivery.

Continue with Exercises

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