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Maternal Newborn ATI Remediation

1. Management of Care
    a. Assessment and Management of Newborn Complications: Priority Newborn Assessment
        - Ongoing emotional support to a client and their significant other is also imperative to the plan of care.
        - Intrauterine drug exposure can cause anomalies, neurobehavioral changes, and evidence of withdrawal in the neonate.
        - It is important to monitor the neonate for abstinence syndrome and increased wakefulness using the neonatal abstinence scoring system.
2. Safety and Infection Control
    a. Infection control: initiating isolation precautions for a client who has a bacterial infection
        - A nurse uses infection control practices to break the chain and thus stop the spread of infection.
        - Herpes zoster is a common viral infection that erupts years after exposure to chickenpox and invades a specific nerve tract.
        - Native immunity restricts entry or immediately responds to a foreign organism through the activation of phagocytic cells, complement, and inflammation.
3. Health Promotion and Maintenance
    a. Baby-Friendly Care: Preparing a Toddler for a Newborn Sibling
        - Bonding and integration of an infant into the family structure should start during pregnancy, and continue into the fourth stage of labor and throughout hospitalization.
        - Baby-friendly care can be promoted by delaying nursing procedures during the first hour after birth and through the first attempt of the client to breastfeed to allow for immediate parent-infant contact.
        - Culture, age, and socioeconomic status are factors that can influence the bonding process.
    b. Client Education and Discharge Teaching: Teaching a New Mother to Bottle Feed
        - It is important for a client to be able to perform self-care and recognize effects that suggest possible complications prior to discharge.
        - Discharge planning should be initiated at admission with time spent during the hospitalization on providing client education regarding postpartum self-care.
        - A nurse should use a variety of teaching strategies to promote learning and encourage return demonstrations.
    c. Contraception: Client Teaching About Proper Use of a Diaphragm
        - Contraception refers to strategies or devices used to reduce the risk of fertilization or implantation in an attempt to prevent pregnancy.

        - Motile sperm's ability to fertilize the ovum lasts an average of 48 to 72 hours.
        - Methos of contraception include natural family planning; barrier, hormonal, and intrauterine methods; and surgical procedures
    d. Expected Physiological Changes During Pregnancy: Calculating Estimated Date of Delivery
        - Presumptive signs are changes that the client experiences that make them think that they might be pregnant.
        - Positive signs of pregnancy include fetal heart sounds, visualization of fetus by ultrasound, and fetal movement palpated by an experienced examiner.
        - Blood and urine tests provide an accurate assessment for the presence of human chorionic gonadotropin.
    e. Therapeutic Procedures to Assist with Labor and Delivery: Indications for Discontinuing Oxytocin
        - External cephalic version is an ultrasound-guided hands-on procedure to externally manipulate the fetus into a cephalic lie.
        - A bishop score is used to determine maternal readiness for labor by evaluating whether the cervix is favorable by rating the following.
        - Cervical ripening by various methods increases cervical readiness for labor through promotion of cervical softening, dilation, and effacement.
4. Basic Care and Comfort
    a. Pain Management: Nursing Actions to Reduce Pain
        - Pain is a subjective and individual experience, and each client's response to the pain of labor is unique.
        - Provide client safety after any pharmacological intervention by putting the bed in a low position, maintaining side rails in the up position, placing the call light within the client's reach, and advising the client and their partner to call for assistance if they need to leave the bed or ambulate.
        - Nonpharmacological pain management measures reduce anxiety, fear, and tension, which are major contributing factors to pain in labor.
5. Pharmacological and Parenteral Therapies
    a. Contraception: Evaluating Teaching About Medroxyprogesterone
        - Implantable progestin prevents pregnancy by suppressing the ovulatory cycle and thickening cervical mucus.
        - Medroxyprogesterone is an intramuscular or subcutaneous injection given to a female client every 11 to 13 weeks.
        - Some advantages of the Medroxyprogesterone include being very effective and requires only 4 injections per year.
    b. Early Onset of Labor: Findings to Report to the Provider for a Client Who is Receiving Magnesium Sulfate
        - Understanding the importance of identifying the onset of early labor in a client who is pregnancy is crucial for maternal and fetal well-being.
        - Preterm labor is uterine contractions and cervical changes that occur between 20 and 36 weeks and 6 days of gestation.

- Shorter gestation is associated with increased neonatal risks.

c. Medical Conditions: Adverse Reactions of Magnesium Sulfate
   - Hyperemesis gravidarum is excessive nausea and vomiting that is prolonged 16 weeks of gestation or that is excessive and causes weight loss, dehydration, nutritional deficiencies, electrolyte imbalances, and ketonuria.
   - Iron-deficiency anemia occurs during pregnancy due to inadequacy in maternal iron stores and consuming insufficient amounts of dietary iron.
   - Gestational diabetes mellitus is an impaired tolerance to glucose with the first onset or recognition during pregnancy.

d. Medical Conditions: Client Teaching About Magnesium Sulfate
   - Cervical insufficiency is a variable condition whereby expulsion of the products of conception occurs.
   - Ferrous sulfate iron supplements are taken on an empty stomach and taken with orange juice to increase absorption.
   - Gestational hypertensive diseases are associated with placental abruption, kidney failure, hepatic rupture, preterm birth, and fetal and maternal death.

e. Prenatal Care: Immunizations for a Client Who Is at 30 Weeks of Gestation
   - Prenatal care involves nursing assessments and client education for pregnant clients and should take into account cultural considerations.
   - Prenatal care dramatically reduces infant and maternal morbidity and mortality rates by early detection and treatment of potential problems.
   - Nurses play an integral role in assessing a client's current knowledge, previous pregnancies, and birthing experiences.

6. Reduction of Risk Potential
   a. Assessment and Management of Newborn Complications: Caring for a Newborn Whose Mother Has Type 2 Diabetes Mellitus
      - A healthy term newborn's blood glucose should be between 40 and 60 mg/dL.
      - Hypoglycemia in the first 3 days of life is defined as a blood glucose level less than 40 mg/dL.
      - Glucose levels should be measured in newborns who have risk factors or manifestations of hypoglycemia.

   b. Assessment of Fetal Well-Being: Education About Abdominal Ultrasound
      - Ultrasound is a procedure lasting approximately 20 min that consists of high-frequency sound waves used to visualize internal organs and tissues by producing a real-time, three-dimensional image of the developing fetus and maternal structures.
      - An ultrasound allows for early diagnosis of complications, permits earlier interventions, and thereby decreases neonatal and maternal morbidity and mortality.
      - An external abdominal ultrasound is a safe, noninvasive, painless procedure whereby an ultrasound transducer is moved over the client's abdomen to obtain an image.

   c. Assessment of Fetal Well-Being: Reviewing Results of Nonstress Test

- Nonstress test is the most widely used technique for antepartum evaluation of fetal well-being performed during the third trimester.
- Disadvantages of a NST include a high rate of false nonreactive results with the fetal movement response blunted by sleep cycles of the fetus, fetal immaturity, maternal medications, and nicotine use disorder.
- Indications for a stress test include ruling out the risk for fetal death in clients who have diabetes mellitus.

d. Newborn Assessment: Expected Findings for the Babinski Reflex
   - Adjustments to extrauterine life occur as a newborn's respiratory and circulatory systems are required to rapidly adjust to life outside of the uterus.
   - The establishment of respiratory function with the cutting of the umbilical cord is the most critical extrauterine adjustment as air inflates the lungs with the first breath.
   - Apgar scoring and a brief physical exam is done immediately following birth to rule out abnormalities.

7. Physiological Adaptation
   a. Bleeding During Pregnancy: Expected Findings for Client Who Has a Placenta Previa
      - Vaginal bleeding during pregnancy is always abnormal and must be investigated to determine the cause
      - Spontaneous abortion has occurred when a pregnancy ends as the result of natural causes before 20 weeks of gestation if a fetus weighs less than 500 grams.
      - Ectopic pregnancy is the abnormal implantation of a fertilized ovum outside of the uterine cavity usually in the fallopian tube, which can result in a tubal rupture causing a fatal hemorrhage.
   b. Infections: Manifestations of Cytomegalovirus in a Newborn
      - Since there is no treatment for cytomegalovirus exists, it is important to prevent exposure by frequent hand hygiene before eating, and after handling infant diapers and toys.
      - A cesarean section is recommended for all clients in labor who have active genital herpes lesions or early findings of impending outbreak.
      - Group B streptococcus infection is a bacterial infection that can be passed to a fetus during labor and delivery.
   c. Infections: Planning Care for a Client Who Has HIV
      - HIV is a retrovirus that attacks and causes destruction of T-lymphocytes.
      - HIV is transmitted from the mother to a neonate prenatally through the placenta and postnatally through the breast milk.
      - Use of internal fetal monitors, vacuum extraction, and forceps during labor should be avoided due to the risk of fetal bleeding.
   d. Infections: Potential Complications for a Client Who is in Labor and Has Gonorrhea
      - Neisseria gonorrhoeae is the causative agent of gonorrhea.
      - Gonorrhea is a bacterial infection that is primarily spread by genital-to-genital contact.

- If gonorrhea is left untreated in females, it can cause tubal scarring and can lead to PID, which can cause infertility.

e. Medical Conditions: Hyperemesis Gravidarum
   - Hyperemesis gravidarum poses as a risk to the fetus for intrauterine growth restriction, small for gestational age, or preterm birth if the condition persists.
   - Risk factors of hyperemesis gravidarum includes maternal age younger than 30 years old, multifetal gestation, diabetes, and gastrointestinal disorders.
   - Expected findings include weight loss, increased pulse rate, decreased blood pressure, poor skin turgor and dry mucous membranes.

f. Oxygen and Inhalation Therapy: Need for Suctioning
   - Oxygen is used to maintain adequate cellular oxygenation and used in the treatment of many acute and chronic respiratory problems.
   - Pulse oximetry is used to monitor the effectiveness of inhalation therapies.
   - Common treatment methods for children who have respiratory issues are nebulized aerosol therapy, suctioning, and artificial airway.

g. Pain Management: Responding to Hypotension Following Epidural Anesthesia
   - Anxiety and fear are associated with pain because as fear and anxiety increase, muscle tension increases and thus the experience of pain increases, becoming a cycle of pain.
   - Nurses should assess beliefs and expectations related to discomfort, pain relief, and birth plans regarding pain relief methods for clients in labor.
   - Behavioral manifestations of pain include crying, moaning, screaming, gesturing, writhing, avoidance, withdrawal, and inability to follow instructions.

h. Postpartum Disorders: Assessment Findings of Hypovolemia
   - It is imperative for a nurse to have a thorough understanding of each disorder and initiate appropriate nursing interventions to achieve positive outcomes.
   - Thrombophlebitis of the lower extremities can be of superficial or deep veins, which are most often of the femoral, saphenous, or popliteal veins.
   - Inversion of the uterus is the turning inside out of the uterus and can be partial or complete.