M_InpObstNursePQ (700+ Questions) - Quiz Questions with Answers

1.

Late in pregnancy, a patient often develops supine hypotension because of

partial occlusion of the vena cava and aorta

decreased peripheral collateral circulation

increased blood flow to the placenta

Explanation:

Late in pregnancy, a patient often develops supine hypotension because of partial occlusion of the vena cava and aorta from the weight of the uterus. This impedes venous return from the lower extremities although increased collateral circulation during pregnancy helps to compensate. Remaining in the supine position for long periods of time could decrease fetal oxygenation as well. The lateral recumbent position relieves the pressure on the vena cava and aorta, allowing the blood pressure to increase and symptoms to decrease.

2.

With suspected fetal hypoxia, a cord blood gas specimen is obtained during delivery by

withdrawing blood from the vein/artery before the cord is clamped or cut and before placental expulsion

placing one clamp and withdrawing blood above the clamp before cutting the cord

double clamping a 10 to 20 cm segment, cutting it out, and then withdrawing blood from the segment

Explanation:

With suspected fetal hypoxia, a cord blood gas specimen is obtained during delivery by double clamping a 10 to 20 cm segment, cutting it out, and then withdrawing blood from the segment. The segment can be placed on ice temporarily as cord blood gas can be accurately assessed for 60 minutes. An arterial sample is preferred over venous, but paired sampling is recommended. A pH of 7.24 or less is associated with neurological compromise. A base excess of 12 mmol/L or more is predictive of motor or cognitive impairment.

3.

If a mother suffers from severe postpartum depression and expresses intense dislike of her infant, the initial intervention should be to

provide treatment for depression

ask the mother if she plans to hurt her infant

ensure safety of the infant

Explanation:

If a mother suffers from severe post-partum depression and expresses intense dislike of her infant, the initial intervention should be to ensure safety of the infant. The mother should not be left alone with the infant at any time until her condition improves. While treatment for maternal depression is appropriate, the condition may persist for weeks or months after treatment is initiated, and if the mother is experiencing some psychosis or inappropriate thoughts, she may not be forthcoming if asked about harming her infant.

4.

If a neonate is bobbing his head and holding his hands in fists, this probably indicates

neurological impairment

hunger

pain

Explanation:

If a neonate is bobbing his head and holding his hands in fists, this probably indicates hunger. Signs of hunger may be subtle with crying (squawking) typically the last sign. Once an infant begins crying and acting frantic, the child may have difficulty latching on. Other signs of hunger include licking, sucking motions, rooting, bringing hands to mouth or face, and trying to suck a finger stroking the infant's cheek or lower lip. If the neonate is consistently underfed, the infant may become listless and show less interest in nursing.

5.

The type of human milk that provides passive immunity to the neonate is

colostrum

transitional

mature foremilk

Explanation:

Colostrum, which is produced by the breast for the first 2 to 4 days, serves to provide passive immunity to the neonate through high levels of immunoglobulins (antibodies). Although colostrum, which is thick and buttery in appearance, is produced in low volume (teaspoons), it is three times higher in protein (because of antibodies) than mature milk and lower in fats and

carbohydrates and is adequate for the small stomach of the neonate. Colostrum also has laxative action and promotes passage of meconium.

6.

Folic acid/folate deficiency in the mother places the fetus at risk for

hypoxic encephalopathy

IUGR

neural tube defects

Explanation:

Folic acid/Folate deficiency places the fetus at risk for neural tube defects, cleft lip, and cleft palate and is more common with multiple gestations than singleton. With folate deficiency, red blood cells enlarge (macrocytic) instead of divide so the number of circulating blood cells decreases. Pregnant women should take 0.4 mg daily and those at high risk 1 to 4 mg daily along with an iron supplement. Women with a previous infant born with neural tube defect should take 4 mg daily for the month preceding pregnancy and for the first trimester.

7.

Following an amniocentesis, the pregnant patient should be advised to avoid strenuous activities for at least how long?

24 hours

36 hours

48 hours

Explanation:

Following an amniocentesis, the pregnant patient should be advised to avoid strenuous activities for at least 24 hours in order to prevent bleeding. After the needle is removed, the insertion site should be reexamined with ultrasound to note movement of fluid that may indicate bleeding. Additionally, the patient should remain under observation for vital signs and fetal assessment for at least an hour after the procedure. Some mild cramping is normal, but dizziness, hypotension, severe cramping, and fever or chills may indicate complications.

8.

A neonate born at 36 or more weeks' gestation with moderate hypoxemic-ischemic encephalopathy should be treated with hypothermia for how long?

24 hours

48 hours

72 hours

Explanation:

A neonate born at 36 or more weeks' gestation with moderate hypoxemic-ischemic encephalopathy should be treated with hypothermia (with induced temperatures of 33.5°C/92.3°F to 34.5°C/94.1°F) for 72 hours, with the treatment initiated within 6 hours and the neonate slowly warmed over a 4-hour period at the conclusion of therapy. Studies show that neonates treated with hypothermia had lower rates of neurological impairment and lower rates of mortality than those who received alternative treatments.

9.

On the maternal serum screen, a high level of alpha-fetoprotein indicates a possibility of

trisomy 21 (Down syndrome)

neural tube defect

trisomy 18 (Edwards syndrome)

Explanation:

On the maternal serum screen, a high level of alpha-fetoprotein indicates a possibility of neural tube defect. However, levels may also be high with multiple gestations, other fetal abnormalities (gastroschisis), and fetal death. Many false positives occur because of inaccuracy in gestation age because the test is most accurate if done between weeks 16 to 18 although it can be done anytime between weeks 14 and 22. The alpha-fetoprotein level identifies about 85% of fetuses with neural tube defect.

10.

Breast self-stimulation is often done to facilitate the

nonstress test

vibroacoustic stimulation test

contraction stimulation test

Explanation:

The contraction stimulation test (CST) evaluates the fetal heart rate response to contractions. The test requires contractions lasting at least 40 seconds in a 10-minute period of time. In order to stimulate contractions, the patient may be administered oxytocin or asked to carry out self-stimulation of the breasts because nipple stimulation results in increased production of

endogenous oxytocin. Baseline measurements are taken for the first 15 to 20 minutes before the CST is carried out.

11.

If a fetal scalp sampling shows pH of 7.23 with non-reassuring fetal heart rate, the response should be to

monitor and repeat sampling in 2 to 3 hours

monitor and repeat sampling in 15 to 20 minutes

immediately repeat sampling and, if no improvement, immediate delivery

Explanation:

If a fetal scalp sampling shows pH of 7.23 with non-reassuring fetal heart rate, the response should be to monitor the patient and repeat the sampling in 15 to 20 minutes. The normal fetal blood pH is 7.25 to 7.35. If the pH falls to a pH of 7.2 or less, then immediate delivery is indicated because acidosis is present and presenting a risk to the fetus. The sample is taken transvaginally with a special lancet that punctures the fetal scalp rather than cuts in order to prevent bleeding.

12.

The Doppler scan is used to

determine the size and shape of the placenta

determine the implantation site of the placenta in the uterus

measure the flow of blood from the uterine arteries to the placenta

Explanation:

The Doppler scan (uterine artery Doppler) is used to measure the flow of blood from the uterine arteries to the placenta to determine if placental insufficiency is present. The probe emits high-frequency sound waves, which are echoed back, and the frequency at which this occurs is translated into images and graphs that show blood flow. Doppler is used in conjunction with a placental ultrasound, which is done to determine the size and shape of the placenta as well as the placental location, umbilical cord insertion, and number of umbilical blood vessels.

13.

When eliciting the scarf sign in a neonate, the infant's elbow crosses the midline of the chest, probably indicating a

preterm infant

term infant

postterm infant

Explanation:

If eliciting the scarf sign in a neonate and the infant's elbow crosses the midline of the chest, this probably indicates a preterm infant. At full-term, the elbow should not cross the midline. For the scarf test, the neonate should be placed supine. One arm is grasped and the hand pulled toward the opposite shoulder and then the position of the elbow is assessed in relation to the midline of the chest.

14.

Fetal heart rate patterns are categorized as baseline,

periodic, and episodic

normal, and abnormal

accelerated, and decelerated

Explanation:

Fetal heart rate patterns are categorized as baseline, periodic, and episodic. The baseline pattern must persist over at least 2 minutes in a 10-minute period and must exclude accelerations and decelerations or other types of variability. The baseline heart rate pattern is utilized when assessing changes, such as accelerations. Periodic heart rate patterns are those that occur during uterine contractions while episodic heart rate patterns are those that occur when the uterus is resting.

15.

When the nadir of a deceleration corresponds to the peak of the contraction, it is classified as

late deceleration

early deceleration

variable deceleration

Explanation:

Early deceleration: *The nadir of a deceleration corresponds to the peak of a contraction with the duration from onset to nadir is at least 30 seconds. The decrease in fetal heart rate is symmetrical and gradual.* ***Late deceleration:*** *Similar to an early deceleration in appearance and duration except that the nadir follows the contraction.* ***Variable deceleration:*** *Abrupt fall in heart*

rate below baseline greater than 15 bpm for at least 15 seconds but less than 2 minutes, occurring irrespective of contractions.

16.

The anesthetic technique that poses the least risk to the fetus is

spinal

epidural

pudendal block

Explanation:

The anesthetic technique that poses the least risk to the fetus is the pudendal block, which involves injection of a local anesthetic to block the pudendal nerve. The block is done in the second stage of labor, usually shortly before delivery to relieve perineal pain and pain associated with episiotomy. While risks to the fetus are minimal, it is possible to directly inject the anesthetic into the fetus. Some infants may show intoxication after delivery with hypotonia, apnea and even seizures in severe cases, but the infant usually recovers well.

17.

A risk factor most commonly associated with artificial rupture of the membranes (amniotomy) after the head is engaged is

infection

hemorrhage

breech delivery

Explanation:

The maternal risk factor most commonly associated with artificial ruptures of the membranes (amniotomy) after engagement of the head is infection, especially if labor is prolonged. If the amniotomy is done before the head is engaged to 0 station or more, then there is some risk that the fetus will turn to breech position. Another risk factor is prolapse of the umbilical cord. Some physicians provide antibiotic prophylaxis prior to amniotomy, but this practice has neither been supported nor refuted by research.

18.

The primary risk associated with a midline episiotomy is

hemorrhage

urinary incontinence

laceration

Explanation:

The primary risk associated with a midline episiotomy is laceration, despite the fact that episiotomy is often done to prevent lacerations. Additionally, small lacerations often cause less discomfort than episiotomy and heal more rapidly. The episiotomy may extend into third- or fourth-degree lacerations, involving the rectal sphincter and mucosa. Episiotomy should not be done routinely to speed delivery but may be indicated with forceps-assisted delivery or arrested descent. Episiotomies may also be done with a mediolateral incision, but this is rarely done in the United States.

19.

For forceps-assisted and vacuum-assisted delivery, if the leading edge of the fetal skull is at station +2 or lower, it is classified as

outlet

low

midpelvis/midforceps

Explanation:

For forceps-assisted and vacuum-assisted delivery, if the leading edge of the fetal skull is at station +2 or lower, it is classified as low. The classification system for assisted delivery includes specific criteria.

- *Outlet: Scalp is visible as fetal head is on perineum. Positions are ROA, LOA, ROP, or LOP.*
- *Low: Leading edge of fetal skull at station 2+ or lower.*
- *Midpelvis/midforceps: Fetal head engaged and above +2 station.*

Different types of forceps are used for the different classifications.

20.

The most common complication that occurs because of excessive force on the fetal neck during delivery is

brachial plexus injury

spinal cord injury

respiratory distress

Explanation:

The most common complication that occurs because of excessive force on the fetal neck during delivery is brachial plexus injury, which is often associated with shoulder dystocia. Five degrees of injury include:

- *First: Stretching of nerve fibers with recovery within a few days.*
- *Second: Compression and swelling of the nerve with recovery usually complete but takes longer.*
- *Third: Damage to the nerve sheath with full recovery not possible.*
- *Fourth: Formation of a neuroma that interferes with nerve regeneration.*
- *Fifth: Complete loss of nerve function because of injury of the nerve at the spinal cord.*

21.

The Caesarean incision that carries the greatest risk of subsequent uterine rupture with vaginal birth is

low transverse

low vertical

midline vertical (classic)

Explanation:

The Caesarean incision that carries the greatest risk of subsequent uterine rupture with vaginal birth is midline vertical (classic). Only patients with low transverse incisions, the most common type of incision currently done, are considered for vaginal birth after Caesarean (VBAC). Risk factors that preclude VBAC include small pelvis, previous Caesarean for prolonged labor, previous uterine rupture, and obstetric complications (such as placenta previa). A physician and anesthesiologist/anesthetist must be on site and available in case emergency Caesarea is required.

22.

The three classic signs of placental separation after delivery are

uterus falls, blood gushes, and cord lengthens

uterus rises, blood gushes, and cord lengthens

uterus rises, blood gushes, and cord shortens

Explanation:

The three classic signs of placental separation after delivery are rise in the uterus, gush of blood, and lengthening of the cord. Extrusion of the placenta usually occurs within 30 minutes of delivery. Slight tension is usually placed on the cord during delivery of the placenta, but excessive tension may result in tearing of the cord or inversion of the uterus and must be avoided. The placenta should be carefully examined after delivery to determine if it is complete as placental fragments increase risk of maternal hemorrhage.

23.

For a multipara, protracted labor is diagnosed when descent of the presenting part is less than

1 cm per hour

2 cm per hour

3 cm per hour

Explanation:

For a multipara, protracted labor is diagnosed when descent of the presenting part is less than 2 cm per hour. For a nullipara, protracted labor is less than 1 cm per hour. Other abnormal labor patterns include prolonged latent phase when there is no progress from the latent to the active

phase after more than 20 hours for multiparas and more than 14 hours for nulliparas and arrest disorders, including secondary arrest of dilation and arrest of descent.

24.

Following birth, which hormone stimulates the alveolar cells of the breast, promoting production of milk?

Estrogen

Prolactin

Progesterone

Explanation:

Following birth, the hormone that stimulates the alveolar cells of the breast, promoting production of milk, is prolactin, which increases in response to the neonate's suckling. Suckling also promotes release of oxytocin, which promotes the letdown reflex by increasing contractility of the muscles of the mammary ducts. After milk production is well established, prolactin levels decrease, and most milk production is then facilitated by oxytocin. During pregnancy, estrogen promotes proliferation of breast ducts and progesterone the development of lobules and alveoli.

25.

In a neonate with poor ventilation, the blood gas findings that indicate respiratory acidosis are

decreased pH, increased base (PHCO3), and pCO2 and paO2 within normal limits

increased pH, decreased PCO2, increased PO2, and base within normal limits

decreased pH, increased PCO2, and PO2 and base within normal limits

Explanation:

*In a neonate with poor ventilation, the blood gas findings that indicate **respiratory acidosis** are decreased pH (less than 7.25), increased PCO_2 (greater than 40 mm Hg) and PO_2 and base ($PHCO_3$) within normal limits. **Metabolic acidosis** is indicated by decreased pH, increased base ($PHCO_3$), and PCO_2 and PaO_2 within normal limits. **Respiratory alkalosis** is indicated by increased pH, decreased PCO_2, increased PO_2, and base within normal limits. **Metabolic alkalosis** is indicated by increased pH and base and PCO_2 and PO_2 within normal limits.*

26.

The Montevideo units needed for normal progress of labor are at least

100

150

200

Explanation:

The Montevideo units needed for normal progress of labor are ≥200. The Montevideo units are calculated by multiplying the number of contractions during a 10-minute period times the average intensity, above baseline, of the contractions. To be effective, a contraction must generate at least 25 mm Hg of peak pressure although 50 to 60 mm Hg is considered optimal. Additionally, for labor to be effective, at least 3 contractions are needed in a 10-minute period.

27.

On the New Ballard Score for assessment of gestational age, a score of zero (0) indicates how many weeks' gestation?

20

24

40

Explanation:

On the New Ballard Score for assessment of gestational age, a score of zero (0) indicates 24 weeks, the gestational age at which a fetus is considered viable. Scores range from -10 (20 weeks) to 50 (44 weeks) with each increase of 5 points on the scale indicating 2 additional weeks of gestation, so a score of +5 is equal to 26 weeks. The New Ballard Sore assesses 6 measures of neuromuscular maturity (posture, square window, arm recoil, popliteal angle, scarf sign, and heel to ear) and 6 measure of physical maturity (skin, lanugo, plantar surface, breast, eye/ear, genitals—male and female).

28.

Compound presentation of the fetus increases the risk of

umbilical cord prolapse

uterine rupture

hemorrhage

Explanation:

Compound presentation of the fetus increases the risk of umbilical cord prolapse with about 15% to 20% of compound presentations requiring Caesarean because of the prolapsed cord. With compound presentation (a rare event), one or more limbs (usually a hand or arm) prolapses along with the presenting part (usually the cephalic vertex). If the extremity does not retract spontaneously or cannot be retracted manually, Caesarean is usually required.

Compound presentation is more likely to occur with assisted obstetrics (amniotomy) and preterm labor.

29.

When using Cervidil® (dinoprostone) as a cervical ripening agent, it should be placed in the vagina and left in place for about how long?

2 hours

6 hours

12 hours

Explanation:

When using Cervidil® (dinoprostone) as a cervical ripening agent, it should be placed in the vagina and left in place for about 12 hours. During the first two hours after insertion, the patient should remain lying down so that the insertion stays in place. The insert, which is shaped like a thin tampon, is often used the night before a scheduled induction to begin cervical ripening. Cervidil® should only be used when the patient is near due date or when induction is a medical necessity.

30.

Normal uterine activity is defined as

no more than 5 uterine contractions in a 10-minute period of time averaged over a 30-minute period

at least 5 uterine contractions in a 10-minute period of time averaged over a 30-minute period

at least 8 uterine contractions in a 10-minute period of time averaged over a 30-minute period

Explanation:

Normal uterine activity is defined as no more than 5 uterine contractions in a 10-minute period of time averaged over a 30-minute period with at least 3 uterine contractions usually needed for effective labor. Tachysystole is defined as at least 5 uterine contractions in a 10-minute period of time averaged over a 30-minute period. While tachysystole may occur spontaneously, it may also result from assisted obstetrics procedures, such as amniotomy and use of oxytocin or misoprostol. Maternal hypertension and epidural anesthetics also increase risk of tachysystole.

31.

The most common reason for elevated bilirubin levels in a breastfed infant within a week of birth is

fatty acids resulting from cold stress

inadequate intake of breast milk

immature gastrointestinal tract

Explanation:

The most common reason for elevated bilirubin levels in a breastfed infant (breastfeeding jaundice) within a week of birth is inadequate intake of human milk. If the child does not nurse adequately because of excessive sleepiness, poor sucking, or infrequent nursing, the child may not ingest enough colostrum to benefit from its laxative effect, which helps to eliminate meconium, which is high in bilirubin. The mother may need assistance with breastfeeding to increase the neonate's intake and the production of milk.

32.

If maternal hypotension occurs during labor, the initial response should be to

administer a bolus of IV lactated Ringer's solution

reposition the patient to lateral position

administer ephedrine 5 to 10 mg intravenously

Explanation:

If maternal hypotension occurs during labor, the initial response should be to reposition the patient to lateral position (toward the left is preferable, but either side is acceptable) because lying flat during labor increases the risk of maternal hypotension and decreases uteroplacental blood flow. If the patient remains hypotensive, then a bolus of IV lactated Ringer's solution may be administered. If hypotension persists despite the other interventions, then ephedrine 5 to 10 mg intravenously may be administered.

33.

A transient sinusoidal fetal heart rate pattern with slight increase of rate over baseline may occur after administration of

magnesium sulfate

terbutaline

butorphanol

Explanation:

Butorphanol can result in a transient fetal heart rate pattern with a slight increase of rate over baseline. Butorphanol is a synthetic opioid that is commonly used for intrapartum management of pain at usual dose of 1 mg every 3 to 4 hours. It may be administered by IM, IV, or nasal spray. Because it has some narcotic antagonist effects, it can cause withdrawal symptoms in

patients who are addicted to opiate drugs or if other narcotics have been administered previously.

34.

Which NICHD category predicts normal fetal acid-base status?

I

II

III

Explanation:

NICHD categories:

- *Category I: Predicts normal fetal acid-base status with baseline fetal heart rate of 110 to 160, moderate baseline variability, and no late or variable decelerations although early decelerations may be evident.*
- *Category II: Indeterminate classification with all tracings varying from both Category I and Category III findings.*
- *Category III: Predicts abnormal fetal acid-base status with sinusoidal pattern and absent variability associated with recurrent late or variable decelerations or bradycardia.*

35.

Which anesthetic technique provides the best relief of pain during labor and delivery?

Epidural

Spinal

Pudendal block

Explanation:

The anesthetic technique that provides the best relief of pain during labor and delivery is the epidural. The epidural can provide continuous relief during both labor and delivery and does not pose the risk of spinal headache and provides less motor blockade. Additionally, there is a decreased risk of hypotension because of reduced risk of sympathetic blockade. Spinal is now usually reserved for Caesareans. The pudendal block provides relief primarily during delivery.

36.

A comfort measure to reduce perineal edema in the immediate postpartal period is

hot pack

ice pack

Sitz bath

Explanation:

A comfort measure to reduce perineal edema in the immediate postpartal period is application of an ice pack, especially for the first 24 hours. As the edema subsides, then a Sitz bath may provide comfort, especially if the patient has had an episiotomy. Swelling that is localized on one side may indicate that the patient has a hematoma and should prompt immediate evaluation to determine the cause of the bleeding.

37.

When using the Silverman-Anderson index to score respiratory difficulty in a neonate, a score of 10 indicates

severe respiratory distress

mild to moderate respiratory distress

normal respirations

Explanation:

When using the Silverman-Anderson index to score respiratory difficulty in a neonate, a score of 10 indicates severe respiratory distress. Five criteria, scored from 0 (normal) to 2 (severe) include:

Criteria	*0*	*1*	*2*
Chest/Abdominal Movement	*Synchronized respirations*	*Lag in inspiration*	*See-saw respirations*
Intercostal spaces	*No retraction*	*Slight retraction*	*Marked retraction*
Xiphoid	*No retraction*	*Slight retraction*	*Marked retraction*
Nares	*No dilation*	*Slight dilation*	*Marked dilation*
Expiratory sound	*No expiratory grunting*	*Expiratory grunting auscultated*	*Expiratory grunting audible*

38.

In a very obese pregnant patient, auscultation of the fetal heart rate usually requires

stethoscope

Doppler ultrasound

fetoscope

Explanation:

In a very obese pregnant patient, auscultation of the fetal heart rate usually requires Doppler ultrasound because the extra layers of abdominal fat muffle the fetal heart sounds. Doppler is most commonly used for external auscultation of the fetal heart rate in all patients because it is easy to use and may have a digital display. If the patient is giving birth under water, some Doppler devices can be used under water effectively.

39.

When preparing a patient for Caesarean, the internal fetal monitor is

left in place until the abdominal incision is completed

removed before the sterile abdominal skin prep

removed after the sterile abdominal skin prep

Explanation:

When preparing a patient for a Caesarean, the internal fetal monitor is removed after the sterile abdominal skin prep. If an external monitor is used, it is removed before the skin prep. Other preparations may include an antibiotic prophylaxis. If a low transverse incision is anticipated, then the pubic hair may be clipped. An indwelling catheter may be inserted to ensure that the bladder is empty in order to prevent damage to the bladder.

40.

During the fourth stage of labor immediately after birth, the diameter of the contracted uterus for a singleton birth on palpation should be approximately

10 to 15 cm

15 to 20 cm

20 to 25 cm

Explanation:

During the fourth stage of labor (which lasts for 1 to 4 hours) immediately after delivery, the diameter of the contracted uterus for a singleton birth on palpation should be approximately 10 to 15 cm with the fundus palpated at or below the umbilicus. With multiple gestations, large infants, or multiparous women, the contracted uterus may be somewhat larger. The uterus should be assessed for firmness and massaged if soft to prevent bleeding and to help expel clots.

41.

The first Leopold maneuver is to

palpate the lateral sides of the uterus

palpate the fundus of the uterus

palpate the bottom of the uterus

Explanation:

The first Leopold maneuver is to palpate the fundus of the uterus in order to differentiate between breech and cephalic presentation. The second maneuver is to palpate the lateral sides of the uterus, supporting one side while palpating with the other to feel the fetal limbs and back.

The third maneuver is to palpate the bottom of the uterus at the suprapubic area to confirm the presentation. The fourth maneuver is to palpate both sides of the lower uterus to determine if the fetus's head is flexed or extended.

42.

When palpating to determine the pattern of contractions, the best place to position the hands is usually the

mid-uterus

suprapubic area

uterine fundus

Explanation:

When palpating to determine the pattern of contractions, the best place to position the hands is usually on the uterine fundus. The fingertips should be placed lightly on the area, taking care not to move the fingers or apply more than light pressure because deeper pressure might stimulate a contraction, and this may result in an inaccurate assessment of the pattern. The time a contraction begins and ends should be noted as well as an estimate of the intensity of the contraction.

43.

Following an amniotomy or spontaneous rupture of the membranes, the maternal temperature should be assessed at least every

hour

two hours

four hours

Explanation:

Following an amniotomy or spontaneous rupture of the membranes, the maternal temperature should be assessed at least every two hours because ruptured membranes increase the risk of infection, usually from endogenous bacteria. One of the first signs of maternal fever may be an increase in the fetal heart rate of greater than 160 bpm. Any maternal temperature greater than 38°C/100.4°F is cause for concern and should be reported to the physician and trigger further evaluation.

44.

A drug that may be administered to treat hypertonic contractions related to the use of prostaglandin gel for cervical ripening is

terbutaline

oxytocin

misoprostol

Explanation:

A drug that may be administered to treat hypertonic contractions related to the use of prostaglandin gel for cervical ripening is terbutaline or magnesium sulfate. The patient should be placed in side-lying position and administered oxygen by facemask at 8 to 10 L/min to improve oxygenation of the fetus because the hypertonic contractions interfere with blood flow to the placenta. Hypertonic contractions are most likely to occur about an hour after application of prostaglandin gel.

45.

A contraindication of external version of a fetus is

hydramnios (polyhydramnios)

previous Caesarean with low transverse incision

engagement of presenting part

Explanation:

A contraindication of external version of a fetus is engagement of the presenting part. Version should only be carried out if vaginal birth is expected. Other contraindications include a malformed uterus, cephalopelvic disproportion, previous Caesarean with vertical incision (increases risk of rupture), placenta previa, multiple gestations (version may be done with second twin after first is delivered but not with first twin), oligohydramnios, ruptured membranes, nuchal cord, and uteroplacental insufficiency. In rare instances, placental abruption may occur with version.

46.

A patient with lupus erythematosus places the fetus at risk if she takes which medication during pregnancy?

Prednisone

Methotrexate

Plaquenil® (hydroxychloroquine)

Explanation:

A patient with lupus erythematosus places the fetus at risk if during pregnancy she takes methotrexate or cyclophosphamide. Both of these medications should be discontinued at least 30 days prior to the patient becoming pregnant. Plaquenil® (hydroxychloroquine) and prednisone may be continued during pregnancy. A patient with lupus should be stabilized for at

least 6 months before attempting to become pregnant because pregnancy may exacerbate symptoms, and the patient may have antibodies that increase risk of miscarriage or stillbirth in late pregnancy.

47.

Postpartal dyspareunia may occur when a woman is breastfeeding because

the woman is overtired

estrogen production is low

the woman experiences psychological withdrawal

Explanation:

While many women are overtired when breastfeeding and some may experience psychological withdrawal from intimacy, the primary cause of postpartal dyspareunia is low production of estrogen. Until estrogen production increases, the vaginal mucosa is atrophic and dry, and the walls are thin, contributing to dyspareunia. Lactation suppresses ovarian function and production of estrogen, so the mucosa doesn't usually return to normal or the vaginal walls to pre-pregnancy thickness while breastfeeding.

48.

In the immediate postpartal period, a patient's white blood count increases from 15,000 mm^3 to 28,000 mm^3, probably indicating

normal physiological response

puerperal infection

coagulation disorder

Explanation:

If a patient's white blood count increases from 15,000 mm^3 to 28,000 mm^3 in the immediate postpartal period, it probably indicates a normal physiological response. Leukocytosis (up to 30,000 mm^3) is common during labor and the early postpartal period with most of the increase attributed to neutrophils, which increase in response to inflammation and pain. The leukocytosis recedes and levels usually return to baseline normal by about 6 days after delivery.

49.

Patients often experience bradycardia during the early postpartal period because of

hypervolemia

anesthetic effects

increased stroke volume

Explanation:

Patients often experience bradycardia (pulse rate of 50 to 60) during the early postpartal period because of increased stroke volume. Hypervolemia is generally present at term, offsetting blood lost during delivery. Transient increased cardiac output occurs after delivery when blood that had been diverted to the placenta returns back into maternal circulation. Additionally, circulation increases because of less pressure on the vessels. Cardiac output may remain elevated for about 48 hours after delivery, resulting in increased stroke volume.

50.

If a postpartal rubella antibody screen shows a patient is not immune to rubella, the patient should

receive the vaccination in 28 days

receive the vaccination immediately

receive the vaccination after stopping breastfeeding

Explanation:

If a postpartal rubella antibody screen shows a patient is not immune to rubella, the patient should receive the vaccination immediately. Usually the screening is done prenatally although the patient cannot receive the vaccine during the pregnancy but is advised to receive it after childbirth to prevent risks to future pregnancies. Women who receive the vaccine should avoid becoming pregnant for at least 28 days after the vaccination because rubella vaccine contains a live virus.

51.

The best method for a patient to suppress lactation is to

wear a support bra and apply cold packs

avoid wearing a bra and apply warm packs

take estrogen for suppression

Explanation:

The best method for a patient to suppress lactation is to wear a support bra and apply cold packs. The patient should also avoid anything that may stimulate production of milk, such as a warm shower or nipple stimulation. While medications were once routinely given to suppress

lactation, they are usually avoided because of potential adverse effects. Ice packs or other cold compresses may help to depress milk production and relieve discomfort.

52.

While adapting to the maternal role, the puerperal phase in which the mother is most receptive to patient education is

taking-in

taking-hold

letting go

Explanation:

While adapting to the maternal role, the puerperal phase in which the mother is most receptive to patient education is taking hold. Phases include:

- *Taking in (1 to 2 days): The patient remains somewhat passive, tending to her own needs, taking in details about the neonate, and discussing labor and delivery.*
- *Taking hold (several days): The patient takes a more active role and questions her competence, seeking out information. This is the most teachable time.*
- *Letting go: The patient begins to let go of previous lifestyle and learns to accept the real infant as opposed to the one imagined.*

53.

Before placing the intrauterine pressure catheter, the physician or midwife should review the maternal

complete blood count

platelet count

ultrasound report

Explanation:

Before placing the intrauterine pressure catheter, the physician or midwife should review the ultrasound report to determine the location of the placenta because insertion of the catheter is contraindicated with placenta previa. Before catheter placement, the membranes must have ruptured spontaneously or by amniotomy. Once in place, the IUPC is connected to an electronic monitor. Normal resting pressure is 20. Pressure ranges by phase:

- *Latent: 20 to 40 mm Hg*
- *Active: 50 to 70 mm Hg*
- *Transition: 70 to 90 mm Hg*
- *Second stage, pushing: 70 to 100 mm Hg*

54.

If a precipitous birth occurs and a nuchal cord is evident after delivery of the fetal head, the initial response should be to

grasp the cord with curved fingers and pull it over fetal head

double clamp and cut the cord

keep fingers under the cord to pull it away from the neck

Explanation:

If precipitous birth occurs and a nuchal cord is evident after delivery of the fetal head, the initial response should be to grasp the cord with curved fingers and pull it over the fetal head. In most cases, this maneuver is successful, but if it is not, then the cord should be double clamped and

cut before delivery of the rest of the body to prevent asphyxia. The mother should be advised to pant and stop pushing until the cord is dealt with.

55.

Red splotchy areas with white papules in the center on the back and chest of a neonate 24 hours after delivery probably indicate

nevus flammeus (port-wine stain)

nevus vascularis (strawberry hemangioma)

erythema toxicum

Explanation:

Erythema toxicum: *Red splotchy area with white or yellow papules in the center on the back and chest of a neonate 24 to 48 hours after birth (sometimes up to 2 weeks). Usually disappears within a few hours or days.* ***Nevus flammeus*** *(port-wine stain): permanent pink to dark red to purple birthmark. Can occur throughout body.* ***Nevus vascularis*** *(strawberry hemangioma): Raised dark red rough-surfaced lesion, usually on the scalp. Grows for 5 to 6 months but recedes by school age without treatment.*

56.

Placing the newborn infant against the mother's bare skin helps to reduce

evaporative heat loss

conductive heat loss

convective heat loss

Explanation:

Placing the newborn infant against the mother's bare skin helps to reduce conductive heat loss, which occurs when the neonate contacts objects with lower temperature than the neonate's skin. Drying the neonate immediately helps prevent evaporative heat loss and providing a warm environment, free of drafts, helps prevent convective heat loss. Placing the child into a radiant warmer transfers heat from the warmer to the neonate through radiation.

57.

A series of ultrasound scans after the 20^{th} week show that the fetal head is growing normally but the abdominal circumference is lower than expected. This may indicate which of the following?

Down syndrome

Neural tube defect

Placental insufficiency

Explanation:

A series ultrasound scans after the 20^{th} week showing that the fetal head is growing normally but the abdominal circumference is lower than expected may indicate placental insufficiency, common in patients who are diabetic, hypertensive, or anemic. With placental insufficiency, the supply of oxygen and nutrients to the fetus is impaired, so the fetus responds by sending the nutrients to the most critical organs (the heart, brain, and lungs) and the other abdominal organs receive less, so they develop more slowly.

58.

If a labor patient is standing during a contraction and having severe back pain, she should

sit down

lean forward

lean backward

Explanation:

If a labor patient is standing during a contraction and having severe back pain, she should lean forward because the fetus will then fall anteriorly, relieving pressure on the sacral promontory and reducing pain. Standing during contractions allows gravity to assist with fetal descent, and contractions are sometimes less painful. However, if the patient stands for long periods, she may become very tired, and standing and walking during contractions prevents electronic fetal monitoring unless telemetry is available.

59.

Idiopathic cardiomyopathy of pregnancy is a condition that

precedes pregnancy and exacerbates due to the stress of pregnancy

develops in the last month of pregnancy or soon after birth without preexisting cardiac disease

develops in the first trimester of pregnancy and must be monitored throughout the pregnancy and delivery

Explanation:

Idiopathic cardiomyopathy of pregnancy develops with the last month of pregnancy or the first 5 to 6 postpartal months and is not associated with pre-existing myocarditis, endocarditis, or cardiac disease. Idiopathic cardiomyopathy is characterized by left ventricular systolic dysfunction. Typical symptoms are similar to heart failure and include dyspnea (the most common symptom), orthopnea, cough, palpitations, and chest pain. The heart is markedly

enlarged, and the ejection fraction is less than 45%. Idiopathic cardiomyopathy increases risk of thromboembolia, so the woman is often treated with heparin. Treatment is similar to that for heart failure although if it occurs prior to delivery, ACE inhibitors are withheld because of adverse effects to the fetus. Management includes bedrest, diuretics, and digoxin.

60.

If 10% to 20% of the placental surface is detached but the mother and fetus are not in distress, the placental abruption is classified as

grade 1, mild

grade 2, moderate

grade 3, severe

Explanation:

Grades of placental abruption:

- *Grade 1: 10% to 20% of the placental surface is detached but the mother and fetus are not in distress. Uterus may be tender and mild tetany evident.*
- *Grade 2: 20% to 50% of the placental surface is detached with or without external bleeding. Uterine tenderness and tetany are evident. While the mother is not in shock, the fetus shows distress.*
- *Grade 3: over 50% of the placental surface is detached with severe uterine tetany, maternal shock, and frequently coagulopathy. The fetus is deceased.*

61.

If vaginal fluid contains blood, the nitrazine test for the presence of amniotic fluid

may show a false positive

may show a false negative

is unaffected by blood

Explanation:

If vaginal fluid contains blood, the nitrazine test for the presence of amniotic fluid may show a false positive because the pH of blood ranges from 7.35 to 7.45 and the pH of amniotic fluid ranges from 7.0 to 7.5, so they may react similarly. A pH in the range of 6.5 to 7.5 is considered positive for amniotic fluid in the absence of other factors (blood, semen, urine) that may affect results. The test sample should include vaginal secretions from the posterior vagina but not the mucous plug.

62.

To reduce the risk of hemorrhagic disease after birth, a neonate should receive

vitamin B9 (folic acid)

vitamin C

vitamin K

Explanation:

To reduce the risk of hemorrhagic disease after birth, a neonate should receive vitamin K. Neonates are born with low levels of vitamin K, which is necessary to activate clotting factors. Additionally, while platelet levels are near adult level, the platelets do not respond effectively to stimuli for several days after birth. Combined, these factors increase the risk of hemorrhage, but this risk is markedly reduced if the neonate receives an IM injection of vitamin K.

63.

The nurse must educate the new mother that a contraindication to breastfeeding is

fetal macrosomia

type II diabetes

infection with HIV/AIDS

Explanation:

*Some maternal **contraindications** to breastfeeding include:*

- *Infection with HIV/AIDS.*
- *Use of antiretroviral medications.*
- *Active tuberculosis (not treated).*
- *Infection with human T-cell lymphotropic virus (I or II).*
- *Illicit drug use.*
- *Use of chemotherapeutic agents.*
- *Radiation therapy (may require only interruption during treatment).*
- *Use of other medications that pass into the breast milk and may harm the child.*
- *Presence of herpes on the breast.*
- *Presence of varicella lesions on the breast (may resume after lesions crust).*

64.

A patient is in active labor and has contractions every 8 minutes lasting for 45 seconds and increasing in intensity by 25 mm Hg during contractions. This patient is likely experiencing

hypertonic labor

hypotonic labor

normal labor

Explanation:

A patient who is in active labor and has contractions every 8 minutes lasting 45 seconds and increasing in intensity by 25 mm Hg during contractions, compared to average amplitude of 40 to 50 mm Hg, is likely experiencing hypotonic labor. Because the contractions are often irregular and have low amplitude, cervical dilation is usually slowed or may arrest so that labor becomes prolonged without interventions. Treatment may include rupture of membranes and/or oxytocin to strengthen the contractions.

65.

A pregnant patient who presents with sudden onset of severe uterine pain with slow increase in fundal height but no vaginal bleeding should be assessed for

abruptio placentae

bladder retention

fecal impaction

Explanation:

A pregnant patient who presents with sudden onset of severe uterine pain with slow increase in fundal height but no vaginal bleeding should be assessed for abruptio placentae. Up to 80% of patients with abruptio placentae exhibit vaginal bleeding, but bleeding may be contained between the uterine wall and the placenta, resulting in maternal shock without obvious bleeding. If the fetus is at term, bleeding is severe, or the mother or fetus is in jeopardy, immediate delivery is indicated.

66.

During the second stage of labor, when does external rotation occur?

As the fetus descends from station 2+ to 4+

Before delivery of the head

After delivery of the head

Explanation:

During the second stage of labor, external rotation occurs after delivery of the head. The head is delivered face down but then externally rotates so that the face is toward the right or left (facing maternal inner thighs) in order to allow passage of the shoulders and body. If shoulder dystocia occurs, delivery may halt at this time. McRoberts technique, in which the patient elevates the knees to the chest position, may reduce the angle and allow expulsion.

67.

Supporting a patient's request that she receive an opioid and an epidural during labor is an example of the ethical principle of

autonomy

beneficence

justice

Explanation:

Supporting a patient's request that she receive an opioid and an epidural during labor is an example of the ethical principle of autonomy, which recognizes that people that the right to make their own decisions about care. Beneficence is taking action that benefits another, such

as providing pain relief immediately when needed. Justice requires fair and equal treatment to all, making sure that resources and health care are distributed in a fair manner.

68.

What is a contraindication of oxytocin infusion?

Eclampsia

Non-reassuring fetal heart rate

Dystocia

Explanation:

A contraindication for oxytocin infusion is a non-reassuring fetal heart rate. Other contraindications include cephalopelvic disproportion, transverse lie, placenta previa, vasa previa, previous classic uterine incision or uterine surgery, and invasive carcinoma of the cervix. Oxytocin is used to stimulate uterine contractions, thus inducing or augmenting labor, and may be indicated for suspected fetal jeopardy, dystocia, post-term pregnancy, eclampsia, fetal death, chorioamnionitis, and multiple maternal medial problems, such as renal disease or uncontrolled diabetes mellitus.

69.

If the biophysical profile shows a score of 8 with normal amniotic fluid volume, what is the required intervention?

No intervention needed

Induction of labor

Repeat test the same day

Explanation:

A normal biophysical score is 10 (score of 2 on 5 different measures). A score of 8 with normal volume of amniotic fluid suggests very little risk to the fetus and no intervention is required. If, however, the amniotic fluid volume were abnormal, this would suggest chronic asphyxia and increased rate of perinatal mortality with a week, so birth should be induced. A score of 6 indicates possible asphyxia, 4 probably asphyxia, 2 almost certain asphyxia, and 0 certain asphyxia.

70.

For an elective Caesarean, the most important preoperative measure is to

determine the method of anesthesia

position the patient correctly

confirm fetal maturity

Explanation:

For an elective Caesarean, the most important preoperative measure is to confirm fetal maturity is at least 39 weeks. Confirmation may be done by (1) finding documentation of fetal heart sounds for 30 weeks by Doppler ultrasound/20 weeks by auscultation, (2) noting a 36-week interval since positive pregnancy test by laboratory, (3) supporting gestation of at least 39 weeks by ultrasound completed between weeks 6 and 11, and (4) noting clinical history and later ultrasound that supports at least 39 weeks' gestation.

71.

A cordocentesis can be performed after how many weeks' gestation?

16

18

20

Explanation:

A cordocentesis (also known as percutaneous umbilical cord blood sampling—PUBS), guided by ultrasound, can be performed after 18 weeks of pregnancy, as risks are higher at earlier gestation. If the placenta is located on the posterior wall of the uterus, the needle is inserted through the amniotic fluid to the umbilical cord near attachment to the placenta, but if the placenta is located on the anterior or lateral walls, the needle must first go through the placenta. Cordocentesis can be used to identify fetal abnormalities, infections, anemia, and congenital alloimmune thrombocytopenia.

72.

Velamentous insertion of the umbilical cord is commonly associated with

singleton gestations

abruptio placentae

placenta previa

Explanation:

Velamentous insertion of the umbilical cord is commonly associated with placenta previa, vasa previa, and multiple gestations. With velamentous insertion, the umbilical cord vessels divide at a distance from the placenta, protected only by the thin placental membranes, which may become compressed or injured during pregnancy, labor, and delivery. Because the vessels lack

the protection of Wharton's jelly, they are especially susceptible to tearing, resulting in fetal hemorrhage. If the vessels precede the fetus at the internal os, this is termed vasa previa.

73.

During the fourth stage of labor, lochia should generally not exceed

one saturated pad per hour

one saturated pad per 2 hours

two saturated pads per hour

Explanation:

During the fourth stage of labor, lochia should generally not exceed one saturated pad per hour as excessive drainage may indicate hemorrhage. Small clots are common in the lochia rubra, but large clots may indicate excessive bleeding. When changing the pad, it's important to examine the buttocks and back to determine if overflow drainage has pooled. If the uterus is firm but there is a continuous trickle of bright red blood, this may be an indication of laceration.

74.

The initial postpartal intervention indicated for a soft boggy uterus is to

apply an ice compress

massage the fundus until firm

apply a warm compress

Explanation:

The initial postpartal intervention indicated for a soft boggy uterus is massaging the fundus until it is firm with the dominant hand while supporting the inferior uterus with the non-dominant hand to prevent trauma. If the fundus does not contract with massage, then further evaluation is indicated to determine if placental fragments remain. After the fundus becomes contracted, the nurse should push firmly downward on the fundus to expel clots that may have pooled.

75.

When determining the baseline fetal heart rate, the fetal heart must be monitored for at least

2 minutes

5 minutes

10 minutes

Explanation:

When determining the baseline fetal heart rate, the fetal heart must be monitored for at least 10 minutes. The baseline rate is the average rate during that time period, rounded to the nearest 5 bpm. The normal fetal heart rate is 110 to 160 bpm at term with a slightly increased rate for the preterm fetus. Fetal tachycardia is defined as either over 150 bpm or over 160 bpm for at least 10 minutes, while bradycardia is defined as either under 110 bpm or under 120 bpm for at least 10 minutes.

76.

The most common visual complaint during pregnancy is

myopia

blurred vision

hyperopia

Explanation:

The most common visual complaint during pregnancy is blurred vision. The pregnant woman tends to retain fluid, and this retention along with decreased intraocular pressure causes some thickening of the cornea and change of shape during the first trimester, resulting in blurring of vision. However, these changes usually resolve within the first 8 weeks of pregnancy, so the visual changes should not be cause for changing prescriptions for corrective lenses. Pregnant women also commonly complain of dry eyes, which may be relieved by the use of artificial tears.

77.

With battledore placenta, the greatest maternal risks are for

preterm labor and bleeding

postpartal hemorrhage

late abortion and pre-term labor

Explanation:

Battledore placenta*: The umbilical cord inserts into the placenta at or near the placental margin. Maternal risks include preterm labor and bleeding. Risks to the fetus include prematurity and fetal stress.* ***Succenturiate placenta:*** *at least 1 accessory lobe of fetal villi develops on the placenta. Maternal risk includes postpartal hemorrhage although there are few fetal risks.* ***Circumvallate placenta:*** *A ring of chorion and amnion surround the umbilical cord on the fetal side of the placenta. Maternal risks include late abortion, antepartal hemorrhage, and pre-term labor. Fetal risks include IUGR, preterm birth, and mortality.*

78.

When a woman is using paced breathing during labor, the rate of breathing should be no more than

one and a half times normal rate

two times normal rate

three times normal rate

Explanation:

When a woman is using paced breathing during labor, the rate of breathing should be no more than two times normal rate because a faster rate may result in hyperventilation. If using slow-paced breathing, the rate should be no slower than half the normal rate (usually 6 to 9 breaths per minute) to ensure that oxygenation remains adequate. Breathing during the first stage of labor may include cleansing breaths, slow-paced, modified paced, and pattern paced ("hee hoo") breathing. Breathing in short puffs may help control the urge to push.

79.

The cervix is considered uneffaced at

2 cm

3 cm

4 cm

Explanation:

The cervix is considered uneffaced at 4 cm (0% effacement). Effacement refers to thinning of the cervix, with the length of the cervix expressed in numbers of centimeters, and the degree of

effacement in percentages. Complete effacement (100%) occurs when the cervix has completely thinned. Some patients efface slowly over the weeks prior to labor, especially if the fetal head is in the pelvis and applying pressure to the cervix, but others efface after onset of labor.

80.

During pregnancy, where are vascular spiders most common?

Face, arms, and upper torso

Abdomen, breasts, and thighs

Palms of the hands

Explanation:

During pregnancy, vascular spiders (spider like vessels from dilated arterioles and small veins surrounding the arteriole filled with blood) are most common on the face, arms, and upper torso and may occur in pregnant women because of increased levels of estrogen, so they recede after delivery. Palmar erythema (redness of the palms) is also caused by increased estrogen levels. Striae gravidarum ("stretch marks") occur on the abdomen, breasts, and thighs and are caused by stretching of the skin.

81.

Edema of the fetal scalp resulting from pressure of the head against the cervix is called

cephalohematoma

caput succedaneum

molding

Explanation:

Caput succedaneum: *Edema of the fetal scalp resulting from pressure of the head against the cervix (or from suction of vacuum-assisted delivery). The swelling crosses suture lines and is usually soft and resolves within the first 12 hours after delivery.* ***Cephalohematoma:*** *Bleeding between the periosteum and the skull. The swelling is usually firm, most commonly over parietal areas, and does not cross suture lines.* ***Molding:*** *An overlapping of cranial bones at suture lines. This condition usually resolves within a week.*

82.

An extra-long umbilical cord often results in

fetal death

transient decelerations

umbilical cord rupture

Explanation:

An extra-long umbilical cord often results in transient decelerations because of knots that have formed. The average length of the umbilical cord is 55 cm. A longer cord rarely results in fetal death, but knots can form in the cord if the fetus is active and, although these are rarely pulled tight enough to completely restrict blood flow, they may tighten during contractions, resulting in decelerations. Knots are more likely to form in identical-twin pregnancies than singleton.

83.

The fetal head is considered engaged at which station?

-1

0

+1

Explanation:

The fetal head is considered engaged at station zero (0), the level of the ischial spines. Station refers to the position of the presenting part in relation to the ischial spines. If the presenting part is above station zero, then the station is expressed in negative numbers with each number referring to a centimeter (-1, -2, -3). If the presenting part is below the ischial spines, the station is expressed in positive numbers (+1, +2, +3).

84.

The fundal height is no longer an accurate estimate of gestation after how many weeks?

30

34

36

Explanation:

The fundal height, the measure from the pubic bone to the top of the uterus, is no longer an accurate estimate of gestation after 36 weeks because the fetus usually changes position in preparation for delivery, and the uterus changes shape. However, between weeks 16 and 36, the fundal height is a good estimate of weeks of gestation in a normal singleton pregnancy with each cm of height equal to a week of gestation, so 22 cm height equals 22 weeks' gestation.

85.

With the vibroacoustic stimulation test, stimulus with an artificial larynx or other device is applied to the maternal abdomen for

1 to 3 seconds

5 to 10 seconds

1 to 2 minutes

Explanation:

With the vibroacoustic stimulation test, the maternal abdomen is stimulated with an artificial larynx or other device for 1 to 3 seconds. Usually, stimulus is applied for 1 to 2 seconds and repeated up to 3 times with time extending to 3 seconds in order to stimulate fetal movement. A positive or reactive finding is an increased fetal heart rate of 15 bpm or more for at least 15 seconds; however, a nonreactive result does not always indicate fetal abnormality but indicates the need for further testing.

86.

Fetal bradycardia with variable decelerations during uterine contractions may indicate

placenta previa

abruptio placentae

prolapsed cord

Explanation:

Fetal bradycardia with variable decelerations during uterine contractions may indicate prolapsed cord. In some cases, the cord may be seen protruding from the vagina, especially after rupture of the membranes if the presenting part is high, or felt on digital exam. Immediate action is required to prevent fetal hypoxia. The patient is placed in modified Sims' or knee chest position and the examiner inserts fingers into the vagina to hold the presenting cord off of the cord while awaiting emergent treatment, such as Caesarean.

87.

The nonstress test (NST) measures the

fetal heart rate

fetal movement

fetal breathing movement

Explanation:

The nonstress test (NST) measures the fetal heart rate in relation to fetal movement. Normally, the heart rate should increase during activity and decrease at rest. A reactive (normal) NST shows that, for a fetus at 32 or more weeks' gestation, the fetal heart rate increases by at least 15 bpm for at least 15 seconds after a fetal movement. A reactive NST on a fetus at under 32 weeks should show increase of at least 10 bpm for at least 10 seconds.

88.

Following birth, fetal characteristics during the first period of reactivity include

sleepiness and/or prolonged sleeping

alert state and movement of limbs

periods of apnea and regurgitation

Explanation:

Following birth, fetal characteristics during the first period of reactivity, which begins at birth and lasts for 30 minutes to 2 hours, include an alert state and movement of limbs. The neonate appears wide-awake and may appear hungry and begin rooting. The neonate will begin nursing if offered a breast. Respirations may be quite rapid, up to 80 per minute, and the heart rate may be elevated to 180 bpm although the respiratory rate and heart rate gradually slow as the infant enters a period of sleep.

89.

When being assessed for the biophysical profile, what is the normal fetal breathing movement (FBM)?

1 FBM lasting ≥30 seconds in 30 minutes

2 FBM lasting ≥30 seconds in 30 minutes

3 FBM lasting ≥30 seconds in 30 minutes

Explanation:

When being assessed for the biophysical profile, the normal fetal breathing movement (FBM) should be one FBM lasting at least 30 seconds in 30 minutes, scored as 2. If there is no FBM of at least 30 seconds in a 30-minute period, it is scored as zero (0). FBMs are often irregular with periods of apnea and can be detected on ultrasound by about weeks 10 to 11 of gestation. Although FBM does not actually exchange air, the thorax rises and falls, and this helps prepare the fetus for breathing after birth.

90.

With acute respiratory distress syndrome (ARDS) in the neonate, the goal of therapy is to maintain oxygen saturation greater than

>85%

>90%

>95%

Explanation:

With acute respiratory distress syndrome (ARDS) in the neonate, the goal of therapy is to maintain oxygen saturation greater than 90%. If ARDS is mild, oxygen administration per nasal prongs or mask may be adequate, but if levels fall under 90% then endotracheal intubation with mechanical ventilation or high-frequency oscillatory ventilation may be indicated. ARDS is characterized by tachypnea, crackling rales, decreased lung volume, cyanosis, hypotension, and tachycardia. In the early stages, respiratory alkalosis is common but later develops into hypercarbia and respiratory acidosis.

91.

A maternal indication of amniotic fluid embolism is

respiratory distress

hypertension

hypertonic uterus

Explanation:

A maternal indication of amniotic fluid embolism is respiratory distress. Amniotic fluid embolism occurs when a bolus of amniotic fluid with particles of debris (such as hair or

meconium) enters the maternal blood and travels to the lungs, most commonly after rupture of the membranes. Thick meconium, which can clog the pulmonary vein, poses the most risk. Patients may develop coagulopathy with DIC. The amniotic fluid may also cause maternal venospasm and pulmonary hypertension, leading to left ventricular failure.

92.

The first stage of labor is the time period between onset of labor and

cervical dilation of 8 cm

cervical dilation of 10 cm

delivery of infant

Explanation:

The first stage of labor is the time period between the onset of labor and cervical dilation of 10 cm. Phases:

- *Latent: This phase may vary widely in duration but is commonly 10 to 12 hours in multiparas and about 20 hours in primigravida. The cervix begins effacement and contractions increase in frequency and intensity.*
- *Active: The cervix dilatation is at 3 to 4 cm at onset and 8 to 9 cm at the end with this phase lasting about 5 hours for primigravida and 2 hours for multiparas.*
- *Deceleration phase: Dilatation completes and delivery is imminent.*

93.

Fetal tone evaluates

extension and return to flexion

gross body movements

fetal resting position

Explanation:

Fetal tone, part of the biophysical profile (BPP), evaluates extension and return to flexion. To be scored as normal (2), the fetus should exhibit at least one episode of extension with return to flexion of limbs/trunk or hands. Fetal tone is scored as absent (0) if there is no movement or if there is slow extension with partial return flexion or movement of a limb in full extension.

94.

If the mother is Rh- and the father Rh+ (homozygous), what are the odds that the fetus will be Rh+?

25%

50%

100%

Explanation:

If the mother is Rh- and the father Rh+, the chance that the fetus will be Rh+ is 100% because every fetus will receive the Rh+ antigen from the father who provides half of the genetic makeup. With a first pregnancy, typically the fetus develops no problems because antibodies have not yet formed against the Rh+ antigen, but subsequent pregnancies are at high risk for the development of erythroblastosis fetalis, a hemolytic disease, unless the mother receives RhoGAM® (Rh immune globulin) during the first pregnancy at 28 weeks' gestation and within 3 days after delivery.

95.

The purpose of the Leopold maneuvers is to determine fetal

movement, size, and presentation

lie, presentation, and position

size, lie, and presentation

Explanation:

The purpose of the Leopold maneuvers is to determine fetal lie, presentation, and position:

- *Lie: Long axis of fetus in relation to long axis of mother, typically longitudinal (99%) although may be transverse or on rare occasions oblique.*
- *Presentation: Refers to the presenting part, usually cephalic or breech with longitudinal lie.*
- *Position: Refers to the relation of the presenting part to the maternal pelvis, typically left or right. If the presenting part faces anteriorly or posteriorly, this is referred to as anterior or posterior asynclitism.*

96.

Absence of the Moro reflex on one side only in a neonate may indicate

fractured scapula

cerebral palsy

fractured clavicle

Explanation:

Absence of the Moro reflex on one side only in a neonate may indicate a fractured clavicle or brachial plexus injury. Damage to the central nervous system, such as may occur with cerebral palsy, often results in bilateral absence of the reflex. The Moro reflex is elicited by allowing the infant's head and trunk to fall slightly backward when the infant is raised. A positive Moro reflex includes immediate extension and abduction of the arms (and sometimes the legs) with fingers fanning and forming a C-shape with a return of the limbs to the flexed state.

97.

The last fetal system to mature functionally is the

cardiovascular

renal

respiratory

Explanation:

The last fetal system to mature functionally is the respiratory system, so assessment of the respiratory system is especially important for preterm births under 36 weeks. If the respiratory system is immature, the neonate is unable to adequately ventilate the lungs and lacks adequate surfactants (phospholipids), which lower surface tension in alveolar sacs and facilitate ventilation. This condition is referred to as respiratory distress syndrome (RDS). With RDS, the neonate may exhibit chest retraction, nasal flaring, grunting respirations, and hypoxia.

98.

A common problem in the mouth during pregnancy is

gingivitis

tooth demineralization

decreased saliva

Explanation:

A common problem in the mouth during pregnancy is gingivitis because of hyperemia of the mouth and gum tissues resulting from increased levels of estrogen. Some patients may develop red, swollen, bleeding gums because of vascular hypertrophy, but these conditions recede after delivery of the fetus. Excessive salivation (ptyalism) is also common although the cause is unknown, Demineralization of the teeth is not associated with pregnancy although it is a common belief.

99.

The most frequent cause of postpartal hemorrhage is

vaginal laceration

uterine atony

retained placental fragments

Explanation:

The most frequent cause of postpartal hemorrhage (90%) is uterine atony. Following delivery, uterine contractions are needed to compress vessels and prevent bleeding from the placenta attachment site, but with uterine atony, the contractions are absent or ineffective. Predisposing factors include distended uterus (multiple gestations and hydramnios), precipitous and prolonged labor, and administration of magnesium sulfate. The uterus may respond to massage, oxytocin, or Methergine® (methylergonovine maleate), but surgical intervention (ligation of vessels, repair of lacerations, selective arterial embolization, or hysterectomy) may be required.

100.

Cervical effacement often begins

before the onset of true labor

at the onset of true labor

after the onset of true labor

Explanation:

Cervical effacement often begins before the onset of true labor, especially in the multiparous patient. As the cervix begins to efface, bloody show (blood-tinged mucous plug), which has served as a barrier to the cervical canal, is passed, sometimes all at once but at other times over a number of days. This usually occurs late in pregnancy and indicates cervical effacement is occurring. Effacement usually increases as lightening occurs with resultant increased pressure on the cervix and as Braxton Hicks contractions occur more frequently.

101.

Patients in labor are usually advised to come to the hospital when

contractions occur every 10 minutes for at least an hour

the membranes rupture

bloody show occurs

Explanation:

Patients in labor are usually advised to come to the hospital when the membranes rupture. Other indications include contractions that are occurring every 5 minutes for at least an hour,

significant vaginal bleeding (always a warning sign), or decreased fetal movement. On admission, both a focused review of systems to determine if possible, complications of pregnancy are present and a limited general physical examination are completed. Contractions should be assessed for intensity and duration and fetal heart tones auscultated immediately after a contraction.

102.

If massaging the uterus is ineffective for uterine atony, the next treatment is usually

oxytocin infusion

hysterectomy

uterine artery embolization

Explanation:

If massaging the uterus is ineffective for uterine atony, the next treatment is usually oxytocin infusion, which is often given routinely after delivery of the infant and after delivery of the placenta as a preventive measure. If the oxytocin is ineffective, bimanual massage may be tried and/or other medications, such as Methergine® (methylergonovine maleate) or Hemabate® (prostaglandin F-@-alpha). If the atony persists and bleeding cannot be controlled, then surgical intervention is indicated with hysterectomy a last resort.

103.

The cardinal movements of vertex presentation labor include engagement, flexion, descent, internal rotation, extension, external rotation, and

recovery

restitution

expulsion

Explanation:

The cardinal movements of vertex presentation labor include:

- *Engagement: Biparietal diameter of head descends below pelvic inlet to station zero (0).*
- *Flexion: Head flexes to decrease diameter.*
- *Descent: Fetus descends birth canal.*
- *Internal rotation: Again, decreases head diameter to allow passage through bony pelvis.*
- *Extension: Head and neck extend to correspond with curve of birth canal.*
- *External rotation: Head rotates after delivery to allow delivery of shoulders and body.*
- *Expulsion: Delivery of shoulders and body.*

104.

During labor, the fetal descent causes the bladder to

descend

ascend

move laterally

Explanation:

During labor, the fetal descent causes the bladder to ascend relative to the lower portion of the uterus and the cervix. Because of this and resultant pressure, the patient may experience difficulty urinating and may develop urinary retention. The patient should be assisted to urinate frequently, sitting upright in the bathroom if possible, because urinating on a bedpan is usually

more difficult. In some cases, patients may require straight catheterization to reduce a distended bladder.

105.

During contractions in the second stage of labor, the patient should be encouraged to

relax muscles

push

avoid pushing

Explanation:

During contractions in the second stage of labor, the patient should be encouraged to push as the patient is fully dilated. Pushing at this stage aids the contractile force of the uterus in facilitating delivery. The mother should be instructed to carry out an extended Valsalva maneuver as each contraction starts, inhaling, holding her breath, and bearing down to help increase intra-abdominal pressure. The patient usually feels the urge to bear down and push.

106.

The maneuver that is used to avoid laceration or episiotomy during delivery is

modified Ritgen

Leopold

Valsalva

Explanation:

The maneuver that is used to avoid laceration or episiotomy during delivery is the modified Ritgen maneuver, which involves applying upward pressure from the coccygeal region beneath the fetal head to apply pressure on the fetal chin with one hand while the other hand is on the vertex. This maneuver helps to extend the fetal head, ensuring that the chin delivers slowly and the head follows the curve of the birth canal so that the musculature of the perineum does not tear during delivery.

107.

In a multiparous woman, what is the lowest Bishop score that predicts labor induction will be successful?

5

7

9

Explanation:

In a multiparous woman, the Bishop score that predicts that labor induction will be successful is 5 or more while it is 9 or more for a nulliparous woman. The Bishop score is a rating system to determine readiness for induction based on scores of 0 to 3 in 4 different measures: dilation (cm), effacement (percentage), station (cm), and cervical consistency (firm, medium, soft), and cervical position (posterior, mid-position, anterior). The fifth measure, cervical position (posterior, mid-position, anterior), is scored only 0 to 2.

108.

A vaginal pH of 7.2 probably indicates the presence of

inconclusive results

vaginal fluid

amniotic fluid

Explanation:

A vaginal pH of 7.2 probably indicates the presence of amniotic fluid. Normal vaginal fluid is more acidic with pH ranging from 4.5 to 5.5 while amniotic fluid is more alkaline with pH ranging from 7.0 to 7.5. However, blood has a pH that is similar to that of amniotic fluid and semen is highly alkaline, so the presence of either of these two substances may produce a pH that is suggestive of amniotic fluid.

109.

Following birth of an infant, signs of placental separation usually begin within

5 minutes

15 minutes

30 minutes

Explanation:

Following birth of an infant, signs of placental separation usually begin within 5 minutes, but it may take up to 30 minutes to expel the placenta and membranes. Signs include globular shaped uterus, rise in fundus, sudden expelling of a gush of blood or a trickle of blood, and extended length of the umbilical cord as it is pushed exteriorly by the descending placenta. The placenta may separate from the middle to the edges and be expelled with the fetal side presenting (Schultze mechanism) or may separate from the outer edges, rolling and present with the maternal side (Duncan mechanism).

110.

A tocotransducer detects

intensity of uterine contractions

frequency and duration of uterine contractions

resting tone of the uterus between contractions

Explanation:

A tocotransducer ("toco") detects the frequency and duration of uterine contractions. The tocotransducer has a pressure sensitive area that detects changes in the contour of the abdomen that occur with contractions. The sensor may also detect other movements, such as those associated with maternal respirations and fetal movements. The tocotransducer cannot provide a reliable estimate of the intensity of uterine contractions or the resting tone, and different maternal positions may affect the pressure against the tocotransducer.

111.

Prior to induction, it is most essential to assess for

cephalopelvic disproportion

psychological status

macrosomia

Explanation:

Prior to induction, it is most essential to assess for cephalopelvic disproportion (CPD) and fetal malpresentation because vaginal birth may not be possible and Caesarean may be required

rather than induction. Cephalopelvic disproportion may result from increased size of the fetus or from abnormally-shaped or small pelvis. Both pelvimetry (vaginal assessment of pelvic bones to determine pelvic size) and ultrasound may be used to assess for CPD, but examination is often inaccurate before labor because fetal molding may alter the proportions.

112.

A patient who has hypertonic labor and is not progressing but experiencing a prolonged latent phase, increasing pain, and fatigue is likely a candidate for

Caesarean

increased sedation

induction

Explanation:

A patient who has hypertonic labor and is not progressing but experiencing a prolonged latent phase, increasing pain, and fatigue is likely a candidate for induction unless contraindications, such as extreme fatigue or cephalopelvic disproportion, are present. With hypertonic labor, the uterus does not adequately relax following contractions, and contractions are painful and ineffective so that effacement and dilatation do not occur adequately. Induction with oxytocin is often used to strengthen the contractions.

113.

A multiparous patient who is in active labor and dilating 0.8 cm per hour is likely experiencing

prolonged labor

normal labor

precipitous labor

Explanation:

A multiparous patient who is in active labor and dilating at 0.8 cm per hour is likely experiencing prolonged labor because the multiparous patient usually dilates approximately 1.5 cm per hour and the nulliparous patient 1.2 cm per hour. The patient should be assessed for hypertonic and hypotonic labor patterns as well as other complications, such as abnormalities in fetal presentation or size, to determine the cause of the prolonged labor.

114.

Following precipitous labor and birth, the mother is most as risk for

hypertension

hemorrhage

retained placenta

Explanation:

Following precipitous labor and birth, the mother is most at risk for hemorrhage, which is defined as at least 1000 mL of blood loss after delivery, vaginal or Caesarean. The hematocrit may show greater than 10% change from admission values. With hemorrhage, the patient is at increased risk of hypovolemic shock. Immediate treatment includes providing increased intravenous fluids, elevating feet and legs, and exploring the cause of bleeding, such as vaginal lacerations or retained placental fragments.

115.

Post-term pregnancy extends more than how many weeks?

40

41

42

Explanation:

Post-term pregnancy extends more than 42 weeks or 294 days after last menstrual period. Increased risks for both the mother and the fetus occur during labor and delivery. Labor is often induced, and delivery is more likely to include the use of forceps or vacuum-assisted delivery because the fetus is large for gestation age (LGA) or macrosomic. Caesarean may be indicated for cephalopelvic disproportion or malpresentation.

116.

The minimum anesthesia usually needed for forceps-assisted delivery is

spinal block

pudendal block

general anesthesia

Explanation:

Although forceps-assisted delivery is sometimes carried out with only local anesthetic, most patients cannot tolerate the use of forceps well without a minimum of a pudendal block. Regional anesthesia may be used in some circumstances and general anesthesia in emergencies although general anesthesia poses increased risk to the fetus. The criteria for

forceps application, including the fetus's position, station, and presentation, should be reviewed to ensure that the patient is a candidate prior to forceps-assisted delivery.

117.

What is an indication for vacuum-assisted delivery of a fetus?

Extended second stage of labor

Advanced cranial molding

Uncertain fetal station

Explanation:

The most common indication for vacuum-assisted delivery of a fetus is an extended second stage of labor because longer duration correlates with increased maternal risk from trauma (hemorrhage, lacerations, and chorioamnionitis). Vacuum-assisted delivery may also be utilized if the mother's health or state of exhaustion precludes normal delivery and if there is suspected fetal compromise. Contraindications include advanced cranial molding, uncertain fetal station or position, and malpresentation. Relative contraindications include preterm fetus, overlapping cranial bones, cephalopelvic disproportion, and probable macrosomia.

118.

When cervical laceration occurs during delivery, they are most common at what position?

3 and 9 o'clock

12 and 6 o'clock

10 and 4 o'clock

Explanation:

When cervical lacerations occur during delivery, they are most common at positions 3 and 9 o'clock. Cervical lacerations are most often identified with vaginal retractors when bleeding is persistent after delivery. The lacerations are sutured with absorbable sutures, so no further treatment is usually indicated. Minor lacerations often occur during delivery, but they usually require no treatment. Tears are more common after forceps-assisted and vacuum-assisted deliveries than normal vaginal births.

119.

A pregnant woman with preeclampsia who develops petechiae, hematuria, and oozing of blood at IV insertions site, likely has

sepsis

coagulopathy

anemia

Explanation:

A pregnant woman with preeclampsia who develops petechiae, hematuria, and oozing of blood at IV insertions site likely has coagulopathy, such as disseminated intravascular coagulation. DIC is an emergent condition that occurs secondary to another disorder, so immediate assessment should include coagulation studies. The patient should be tilted toward the left to increase blood flow to the uterus and should receive oxygen and blood products. Urinary output must be monitored carefully for signs of renal failure.

120.

Prior to administration of a narcotic to relieve labor pain, a nullipara should generally be dilated to how many centimeters?

3 to 4

4 to 5

6 to 7

Explanation:

Prior to administration of a narcotic to relieve labor pain, a nullipara should generally be dilated to 3 to 4 centimeters and a multipara to 4 to 5 centimeters. However, the patient should have stable vital signs and be without drug allergy drug dependence, or respiratory compromise; and the fetus should be at term and have FHR of 110 to 160 bpm with a reactive NST and no evidence of meconium staining. Additionally, the pattern of contractions should be well established and the presenting part engaged with progressive descent.

121.

Prior to the induction phase of Subutex® (buprenorphine) administration, the patient should abstain from drug use for how many hours?

6 to 12

12 to 24

24 to 48

Explanation:

Prior to the induction phase of Subutex® (buprenorphine) administration, the patient should abstain from drug use for 12 to 24 hours in order to avoid abrupt withdrawal symptoms when

the drug is administered. Induction may be controlled through administration of morphine to stabilize blood levels in the pregnant woman. During the stabilization phase, the patient should discontinue use of other drugs, and the drug dosage may require adjustment. During the maintenance phase, the patient's dose is stable and the patient should be progressing well.

122.

Which substance poses the highest risk for birth defects if used during pregnancy?

Marijuana

Cocaine

Alcohol

Explanation:

The substance that poses the highest risk for birth defects if used during pregnancy is alcohol, which can cause fetal alcohol syndrome and a wide range of defects, including impairment of the CNS with intellectual disability and hyperactivity, facial abnormalities, and growth restriction. Marijuana poses fewer risks but may be associated with learning disabilities and behavioral problems. Cocaine has a low risk of birth defects but does impair fetal growth resulting in low birth weight, smaller head, and shorter length.

123.

If the partner of a woman in labor and delivery begins shouting at her and hitting her, the best response is to

call security immediately

restrain the partner and call for help

stand between the patient and the partner

Explanation:

While the initial inclination may be to intervene and restrain the partner, this places the healthcare worker at risk of injury as well as the patient, so the best response is to immediately call security. Any intervention, such as calling out to the person to stop, should be done from a safe distance and preferably with additional staff members present. It's important to bear in mind that a person who is violent may carry a weapon, putting everyone in the vicinity at risk.

124.

A pregnant woman with organic mercury poisoning (methyl mercury) but few symptoms places the fetus at

virtually no risk of impairment

slight risk of impairment

high risk of impairment

Explanation:

A pregnant woman with organic mercury poisoning (methyl mercury) but few symptoms place the fetus at high risk of impairment. Even though the mother may have few symptoms of organic mercury poisoning, the fetus may be profoundly affected because the fetus is more sensitive to mercury than the adult. Mercury impairs the development of the central nervous system, so the child may have severe neurological abnormalities, including impaired memory, thinking abilities, visuospatial skills, and attention span as well as impaired motor skills.

125.

If signals from a fetal scalp electrode suddenly become completely erratic and stop, what is the most likely reason?

Fetal distress

Electrode dislodgement

Equipment malfunction

Explanation:

If signals from a fetal scalp electrode suddenly become completely erratic and stop, the most likely reason is electrode dislodgement. When applied to the scalp, the electrode only penetrates approximately 1 mm, so the electrode can easily become dislodged with fetal movement, and attachment is more difficult if the fetus has a lot of hair. Once an electrode is secured to the scalp, the lead wire extends through the patient's vagina and is attached to a leg plate for grounding. The unit beeps with each fetal heartbeat.

126.

A mother's smoking during pregnancy places the fetus at increased risk of

low birth weight

renal abnormalities

bradycardia

Explanation:

A mother's smoking during pregnancy places the fetus at increased risk of low birth weight and preterm birth. In addition, miscarriages and stillbirths are more common, and the fetus may exhibit tachycardia, respiratory problems, and birth defects. After birth, the child of a smoker is at increased risk of sudden infant death syndrome. The more that a pregnant woman smokes,

the greater the risk, so all pregnant women should be advised to stop smoking during pregnancy. Second-hand smoke after delivery continues to pose risks to the infant.

127.

Prior to delivery, a patient with immune thrombocytopenia (ITP) should have what minimum platelet count?

30,000 mm^3

50,000 mm^3

100,000 mm^3

Explanation:

Prior to delivery, a patient with immune thrombocytopenia (ITP) should have a platelet count of at least 50,000 mm^3 because of the risk of bleeding if a Caesarean is required. With a platelet count of at least 30,000^3, treatment is usually withheld until 36 weeks' gestation or earlier if birth is expected. The initial treatment is oral corticosteroids, usually started 10 days before anticipated due date or intravenous immunoglobulin. Transfusions are used only in emergent situations.

128.

Hypertension without proteinuria that develops after 20 or more weeks' gestation and persists 6 weeks into the postpartum period is classified as

chronic hypertension

preeclampsia

gestational hypertension

Explanation:

Hypertension without proteinuria that develops more than 20 weeks' gestation and persists 6 weeks into the postpartum period is classified as gestational hypertension (AKA transient hypertension and pregnancy-induced hypertension). If the hypertension persists more than 12 weeks postpartum (without any development of preeclampsia) or if it began prior to 20 weeks, then the hypertension is classified as chronic rather than gestational. Therefore, the final diagnosis of hypertension may only be determined in the postpartal period.

129.

If using fetal pulse oximetry, what is normal oxygen saturation?

30% to 65%

65% to 90%

90% to 100%

Explanation:

If using fetal pulse oximetry, normal oxygen saturation is 30% to 65% because of the fetus's high hemoglobin and hematocrit. A value below 30% may be associated with hypoxia and metabolic acidosis. For fetal pulse oximetry, which may be used to determine whether immediate intervention is needed for non-reassuring fetal heart rate, a special single-use sensor is placed internally along the fetal cheek, temple, or forehead. However, fetal pulse oximetry has not been found to reduce overall rates of Caesarean.

130.

When using the deep tendon reflex rating scale to assess CNS irritability secondary to preeclampsia, a low normal but diminished response is rated as what?

1+

2+

3+

Explanation:

When using the deep tendon reflex rating scale to assess CNS irritability secondary to preeclampsia, a low normal but diminished response is rated as 1+. Assessment for hyperreflexia is done in the brachial, wrist, patellar, or Achilles tendons. Deep tendon reflex rating scale:

- *4+: Abnormal hyperactive, jerky, or clonic response*
- *3+: More brisk than usual response but may be normal*
- *2+: Normal response*
- *1+: Low normal response, diminished*
- *0: Abnormal finding, no response*

131.

Which cardiac abnormality poses the least maternal risk during pregnancy?

Atrial septal defect

Moderate aortic stenosis

Marfan syndrome with aortic root involvement

Explanation:

Atrial septal defects are the most common cardiac abnormality in pregnant women. With previous surgical repair, there is little increased risk to the patient. Without previous surgical

repair, the patient is at increased risk for deep vein thrombosis and may also be at risk for bacterial endocarditis. A pregnant patient >40 years has increased risk of developing atrial flutter or atrial fibrillation. Moderate aortic stenosis poses an intermediate risk to the patient, and Marfan syndrome with aortic root involvement poses a high risk.

132.

What is the treatment of choice for a pregnant patient with Graves' disease?

Methimazole

Radioactive iodine

Propylthiouracil

Explanation:

The treatment of choice for a pregnant patient with Graves' disease is propylthiouracil. The lowest possible dose is administered because the drug may cause hypoparathyroidism in the fetus. Methimazole may also be used, but it is usually avoided because it causes aplasia cutis (scalp disorder) in the fetus. Radioactive iodine is contraindicated during pregnancy because it may result in damage to the fetal thyroid. If surgery is necessary, the thyroid gland can be removed in the second trimester.

133.

Iron deficiency anemia during pregnancy is usually treated with

blood transfusion

ferrous sulfate, 325 mg orally daily

iron dextran, intramuscular

Explanation:

Iron deficiency anemia during pregnancy (which accounts for about 95% of cases of anemia) is usually treated with oral ferrous sulfate, 325 mg orally daily. Higher or more frequent doses may result in GI upset and constipation and decreased absorption. If patients are unable to adequately absorb oral iron, then iron dextran (100 mg every other day for about 3 weeks) may be administered IM. Transfusions are only indicated if severe symptoms (dyspnea, tachycardia, dizziness) are present.

134.

On day one of birth for a term infant, what is a normal blood glucose level?

40 to 60 mg/dL (2.2 to 3.3 mmol/L)

50 to 80 mg/dL (2.8 to 4.4 mmol/L)

60 to 100 mg/dL (3.3 to 5.6 mmol/L)

Explanation:

On day one of birth for a term infant, the normal blood glucose level should be 40 to 60 mg/dL (2.2 to 3.3 mmol/L), increasing to 50 to 80 mg/dL (2.8 to 4.4 mmol/L) by day 2. Because capillary screening is less accurate than blood glucose, a low value should be verified by laboratory analysis. Typically, an infant is fed if values are 40 to 45 mg/dL (2.2 to 2.5 mmol/L) or less, especially with signs of hypoglycemia, and then the value rechecked 30 to 60 minutes after feedings until it remains above 50 mg/dL (2.8 mmol/L) twice.

135.

During pregnancy, a patient who is receiving hemodialysis for end-stage kidney disease should generally receive hemodialysis how often?

3 days a week

4 days a week

6 days a week

Explanation:

During pregnancy, a patient who is receiving hemodialysis for end-stage-kidney disease should generally receive hemodialysis 6 days a week instead of the 3 days a week that is most common in non-pregnant patients in order to protect the fetus and because waste products from the fetus enter the maternal circulatory system. Only up to 7% of women receiving dialysis are able to conceive and 1 in 5 have spontaneous abortions, so pregnancies are high risk. Preterm birth, usually at about week 32, is common.

136.

Poor control of blood glucose levels during the third trimester in a patient with gestational diabetes increases the risk of

preeclampsia

spontaneous abortion

congenital malformations

Explanation:

Poor control of blood glucose levels during the third trimester in a patient with gestational diabetes increases the risk of preeclampsia as well as fetal macrosomia (which may occur even with normal levels). Poor control of blood glucose levels in the first 10 weeks of pregnancy, when organs are being formed, may result in congenital malformations and spontaneous

abortion. Gestational diabetes type A1 is usually controlled with diet while type A2 requires oral medications or insulin.

137.

At birth, a neonate infected with hepatitis C usually exhibits

generalized edema

jaundice

no symptoms

Explanation:

At birth, a neonate infected with hepatitis C usually exhibits no symptoms. About 10% of infants born to infected mothers develop hepatitis C and most require no treatment to clear the virus or have very slow progression of liver disease. The fetus of a woman with hepatitis C is at risk for being small for gestational age and having a low birth weight as well as preterm birth. Any pregnant woman at high risk, such as those with a history of injection drug use, should be tested during pregnancy for hepatitis C virus.

138.

A pregnant patient with asymptomatic bacteriuria should

receive antibiotics

have repeated monitoring

be advised to increase fluid intake

Explanation:

A pregnant patient with asymptomatic bacteriuria should receive antibiotics as though the patient has acute urinary tract infection because asymptomatic bacteriuria poses a risk to the pregnancy and may evolve to active cystitis or pyelonephritis, further increasing the risk of premature rupture of membranes and preterm birth. Following treatment, a culture should be done to ensure that the bacteria have cleared. If not, prophylactic suppressive treatment is indicated for the duration of the pregnancy.

139.

If a pregnant woman has chlamydia, vaginal delivery of the neonate may result in

skin infection

eye and lung infections

genitourinary infection

Explanation:

If a pregnant woman has chlamydia, vaginal delivery of the neonate may result in eye (ophthalmia neonatorum) and lung infections, such as pneumonia. The antibiotic prophylaxis used to prevent eye infections from gonorrhea is ineffective for chlamydia infections, which are usually treated with systemic erythromycin. If the pregnant woman is untreated, there is increased risk of premature rupture of the membranes, preterm labor, and low birth weight.

140.

A decrease of fetal heart rate of at least 15 bpm for at least 10 minutes is classified as

recurrent deceleration

prolonged deceleration

baseline change

Explanation:

A decrease of fetal heart rate of at least 15 bpm that persists for more than 10 minutes is classified as a change in baseline. If it persists more than 2 minutes but less than 10, it is classified as a prolonged deceleration. Recurrent decelerations are classified as occurring with half or more of uterine contractions in a 20-minute period. Intermittent decelerations occur with fewer than half of uterine contractions in a 20-minute period.

141.

A presumptive diagnosis of vasa previa is usually confirmed with

abdominal CT scan

transabdominal ultrasound

transvaginal ultrasound

Explanation:

A presumptive diagnosis of vasa previa is usually confirmed with transvaginal ultrasound. Vasa previa is generally characterized by painless vaginal bleeding, fetal bradycardia, and rupture of the membranes. With vasa previa, the umbilical vein and arteries are not protected with Wharton's jelly or supportive tissue, so they are at risk of laceration, especially during rupture of the membranes. Treatment varies but often incudes NST twice weekly until about week 30 or 32

when the patient is hospitalized for continuous monitoring. Caesarean may be emergent or scheduled after fetal lung maturity.

142.

An amniotic fluid index (AFI) of 28 cm

indicates hydramnios (polyhydramnios)

indicates oligohydramnios

is a normal AFI

Explanation:

An amniotic fluid index (AFI) of 28 indicates hydramnios (AKA polyhydramnios). Normal values range from 5 to 25 cm with a value <5 cm indicating oligohydramnios. While some pregnant patients with hydramnios may complain of difficulty breathing, most are asymptomatic and the condition identified on ultrasound. Hydramnios may occur with multiple gestations, maternal diabetes, and fetal abnormalities. Hydramnios increases the risk of preterm labor and birth, premature rupture of the membranes, uterine atony, abruptio placentae, prolapse of umbilical cord, and death of the fetus.

143.

The primary sign or symptom of oligohydramnios is often

lower abdominal pain

increased Braxton-Hicks contractions

decreased fetal movements

Explanation:

The primary sign or symptom of oligohydramnios is often decreased fetal movements with no other maternal symptoms although in some cases the uterus may seem smaller than expected. Numerous causes include some medications (NSAIDS and ACEIs), uteroplacental insufficiency, fetal abnormalities, and premature rupture of the membranes. If the oligohydramnios occurs in the early part of the pregnancy, the fetus may develop contractures of the limbs, because of restricted movement, and impaired maturation of the lungs.

144.

With a first episode of mild bleeding before 36 weeks associated with placenta previa, what is the usual treatment?

Hospitalization until bleeding stops and modified bedrest

Hospitalization on bedrest until delivery of the child

Caesarean section

Explanation:

With a first episode of mild bleeding before term associated with placenta previa less than 36 weeks, the treatment is usually hospitalization until bleeding stops and modified bedrest with the patient spending most of the time in bed and avoiding strain and sexual intercourse, which may trigger contractions and bleeding. With a second episode of bleeding, the patient is usually hospitalized until delivery of the child. Corticosteroids may be administered to help mature fetal lungs if delivery is necessary less than 34 weeks. If severe bleeding occurs, Caesarean is indicated.

145.

For a preterm fetus at 31 weeks' gestation, what is considered an acceleration?

Increase of at least 5 bpm for at least 5 seconds

Increase of at least 10 bpm for at least 10 seconds

Increase of at least 15 bpm for at least 15 seconds

Explanation:

Acceleration is a temporary increased fetal heart rate. Acceleration in a preterm fetus less than 32 weeks' gestation is at least 10 bmp for at least 10 seconds. If the fetus is under 28 weeks, there is usually very little variability because the autonomic nervous system is still immature. If accelerations persist for more than 2 minutes, they are classified as prolonged. If the accelerations persist for more than 10 minutes, they are considered a change in the baseline rate.

146.

The most common cause of uterine inversion is

multiple gestations

excessive cord traction

abruptio placentae

Explanation:

The most common cause of uterine inversion is excessive cord traction during expulsion of the placenta. The inversion may be partial or complete. The inverted uterus may be obvious if it protrudes from the cervical os or vaginal orifice, but other indications may be inability to palpate the fundus, maternal hypotension, and excessive vaginal bleeding. Initial treatment includes

stopping oxytocic medications and reinserting the uterus manually (Johnson maneuver) after administration of a medication, such as magnesium sulfate, to relax the uterine muscle.

147.

The primary complications related to multiple gestations are

preterm birth and uterine inversion

preterm birth and uterine rupture

preterm birth and intrauterine growth restriction

Explanation:

The primary complications related to multiple gestations are preterm birth and intrauterine growth restriction (IUGR). On average, twins are delivered at about 37 weeks' gestation and triplets at 33 weeks, so they almost always have low birth weight, increasing risk of postnatal complications. Multiple fetuses tend to be smaller than singletons because the rate of growth slows earlier than with singletons: at 30 to 32 for twins and 27 to 28 weeks for triplets.

148.

If retained placental fragments are suspected, the best method to confirm the diagnosis is

manual exploration

ultrasound

hysteroscopy

Explanation:

If retained placental fragments are suspected, the best method to confirm the diagnosis is ultrasound. In some cases, manual exploration may identify fragments, which can be loosened manually and removed. After expulsion of the placenta, it should be carefully examined for missing cotyledons to ensure it is intact. Retained fragments may occur if the placenta is forcefully separated during fundal massage prior to spontaneous separation. Retained fragments can prevent the uterus from contracting and compressing vessels, resulting in hemorrhage.

149.

What antimicrobial agent is contraindicated for treatment of bacterial infections during pregnancy?

Fluoroquinolones

Macrolides

Penicillins

Explanation:

The antimicrobial agent that is contraindicated for treatment of bacterial infections during pregnancy is fluoroquinolones as they may affect the musculoskeletal system of the fetus. Nitrofurantoin should be avoided in late stages of pregnancy as it may cause hemolytic anemia in the newborn. Tetracycline impairs development of fetal bones and teeth so it should only be used during the first trimester. Macrolides and penicillins are generally considered safe for pregnant women.

150.

The most common cause of fever greater than 38°C/100.4°F in the postpartal period is

urinary tract infection

respiratory infection

genital tract infection

Explanation:

The most common cause of fever greater than 38°C/100.4°F in the post-partal period is genital tract infection, usually of the uterine cavity and adjacent tissues (endometritis, metritis with pelvic cellulitis). Fever usually develops on the first or second day after delivery and persists. Manual removal of the placenta, membrane rupture, prolonged labor, internal fetal monitoring, and Caesarean increase risk of infection. Multiple digital vaginal examinations are also a risk factor. Mortality rates are especially high for both mother (90%) and fetus (50%) with infection caused by group A-hemolytic streptococcus.

151.

The placental and umbilical cord variation that is associated with increased incidence of late abortion, intrauterine growth restriction (IUGR), prematurity, and fetal death is

succenturiate placenta

circumvallate placenta

battledore placenta

Explanation:

The placental and umbilical cord variation that is associated with increased incidence of late abortion, IUGR, prematurity, and fetal death is circumvallate placenta, in which a double fold of chorion and amnion form a ring that surrounds the umbilical cord on the fetal side of the placenta. The mother is also at increased risk of antepartal hemorrhage and preterm labor. With succenturiate placenta, one or more accessory lobes of villi implant and develop on the placenta. With battledore placenta, the umbilical cord is inserted at/near the placental margin.

152.

An infant born to a mother who is positive for hepatitis B surface antigen should receive

hepatitis B vaccine and hepatitis B immune globulin within 12 hours of birth

hepatitis B immune globulin within 12 hours of birth only

hepatitis B vaccine within 12 hours of birth only

Explanation:

An infant born to a mother who is positive for hepatitis B surface antigen should receive hepatitis B vaccine and hepatitis B immune globulin within 12 hours of birth. The hepatitis B immune globulin will provide protection against the infection while the vaccine takes effect. All infants should receive 3 doses of hepatitis B vaccine. If the mother's status is unknown, the initial vaccine should be given within 12 hours of birth, but if the mother's status is negative, the initial vaccine may be given within the first 2 months.

153.

When auscultating the fetal heartbeat in the third trimester, the fetoscope should be positioned

above the symphysis pubis

below the umbilicus

against the fetus's back

Explanation:

The placement of the fetoscope on the maternal abdomen will vary depending on the fetus's size and position. When auscultating the fetal heartbeat in the third trimester, the fetoscope

should be positioned against the fetus's back below the shoulder after carefully palpating to determine the fetal position as heart tones are most easily heard in this position. In early pregnancy, the heartbeat is best auscultated above the symphysis pubis. The heartbeat can usually be auscultated at about 20 weeks but can be detected earlier with Doppler.

154.

If a primigravida has experienced frequent erratic painful contractions but has remained at 2 to 3 cm dilation for a prolonged period, this suggests

hypertonic labor pattern

hypotonic labor pattern

maternal anxiety

Explanation:

If a primigravida has experienced frequent erratic painful contractions but has remained at 2 to 3 cm dilatation for a prolonged period, this suggests hypertonic labor pattern, which is characterized by ineffectual contraction in the latent phase of labor with increased myometrial tone. The contractions are painful because of anoxia of myometrium but inadequate to produce effective effacement and dilatation. The patient may become very fatigued and anxious, and fetal distress may occur as well as excessive molding and cephalohematoma.

155.

Neonatal thrombocytopenia is defined as a platelet count of

less than 250,000/mm^3

less than 150,000/mm^3

less than 100,000/mm^3

Explanation:

While platelet counts tend to be higher in neonates and children up to 5 years of age (217,000/mm^3 to 497,000/mm^3) than in older children and adults (150,000/mm^3 to 450,000/mm^3), and similar to adults in healthy preterm infants, neonatal thrombocytopenia is defined as a platelet count less than 150,000/mm^3. Most cases (75%) of neonatal thrombocytopenia result from impaired production of platelets, while remaining cases result from increased destruction. Incidence of thrombocytopenia is low in well newborns, but may affect over a third of infants in the NICU and up to three-quarters of infants who have extremely low birth weight.

156.

The most common source of *Escherichia coli* infection in the neonate is

hands of caregivers

contaminated equipment

maternal gastrointestinal tract

Explanation:

The most common source of Escherichia coli infection in the neonate is the maternal gastrointestinal tract, with the infection usually obtained during vaginal delivery. E. coli infections in the neonate may be severe and can include urinary tract infections, bacteremia, sepsis, and meningitis. Preterm infants or those with impaired immune systems are especially at risk during or after delivery. Symptoms may vary widely depending on the extent of the infection but often include diarrhea, irritability, fever, and poor feeding.

157.

The probable gestational age of an infant born with dry, wrinkled, peeling skin; no vernix; and loss of subcutaneous fat is

24 to 26 weeks

35 to 40 weeks

42 to 44 weeks

Explanation:

42 to 44 weeks

Gestational Age Skin Appearance

24 to 26 weeks Translucent; red; many visible blood vessels; and scant vernix

35 to 40 weeks Deep cracks; no visible blood vessels; and thick vernix

42 to 44 weeks Dry, wrinkled, peeling skin; no vernix; and loss of subcutaneous fat

Production of vernix begins by weeks 20. The top layer of the epidermis develops during weeks 20 to 24 and thickens to form a water barrier by week 32. Near term, the vernix washes away and the skin becomes increasingly wrinkled and peeling.

158.

If the results of one study are replicated with additional studies, the initial study is said to have

reliability

validity

usability

Explanation:

If the results of one study are replicated with additional studies, especially using different methods or tools and different populations, the initial study is said to have reliability. Validity means that the study was successful in measuring that which was intended. External validity means that the study results are generalizable to other populations. Usability refers to the tools used in a study and the degree to which researchers are able to understand and use them properly.

159.

A pregnant woman with cervical funneling is at risk for

hemorrhage

miscarriage/preterm delivery

prolonged labor

Explanation:

A pregnant woman with cervical funneling is at risk for cervical incompetence, which means that the muscles of the cervix are weak and the pressure of the growing fetus may produce early effacement and dilatation before contractions begin, resulting in miscarriage or preterm delivery during the second or third trimester. A normal cervix is 30 mm long; cervical incompetence means the cervix is less than 25 mm long at 24 weeks or less of gestation. The shorter the cervix, the greater the risk of preterm birth.

160.

At 4 weeks' gestation, two beta hCG values taken 48 hours apart show decreasing values. This suggests

normal pregnancy

miscarriage/ectopic pregnancy

inaccurate calculation of inception

Explanation:

If at 4 weeks' gestation two beta hCG values taken 48 hours apart show decreasing values, this suggests miscarriage or ectopic pregnancy. Beta hCG is produced by the trophoblast or placenta and accurately indicates the presence of pregnancy. For the first 10 days of pregnancy, the levels double every 2 days and then continue to increase until peaking at 60 to 90 days after conception, so a stable or falling level indicates that the pregnancy is not progressing.

161.

A neonate's umbilical cord blood values were pH 7.16, PO_2 18 mm Hg, and PCO_2 55 mm Hg, with base excess of 11 mEq/L, indicating

normal values

respiratory acidosis

metabolic acidosis

Explanation:

A neonate's umbilical cord blood values of pH 7.16, pO_2 18 mm Hg, and PCO_2 55 mm Hg, with base excess of 11 mEq/L, indicate metabolic acidosis.

Normal cord blood values	*Abnormal cord blood values*

	Venous	*Arterial*	*Respiratory Acidosis*	*Metabolic acidosis*
pH	*7.25 to 7.35*	*7.28*	*<7.25*	*<7.25*
pO_2	*28 to 32 mmHg*	*16 to 20 mmHg*	*Varies*	*<20 mm Hg*
PCO_2	*40 to 50 mmHg*	*40 to 50 mmHg*	*>50 mmHg.*	*44 to 55 mmHg*
Base excess	*0 to 5 mEq/L*	*0 to 10 mEq/L*	*<10 mEq/L*	*>10mEq/L*

162.

If fetal scalp blood sampling is done because of an unusual fetal heart rate pattern, a pH of 7.2 indicates

the need for immediate delivery

a normal value

the need for repeat sampling in 20 minutes

Explanation:

If fetal scalp blood sampling is done because of an unusual fetal heart rate pattern, a pH of 7.2 indicates the need for immediate delivery, usually either with forceps delivery if criteria are met or with cesarean. A normal fetal pH is 7.25 or greater. If the level is 7.21 to 7.24, repeat fetal scalp blood sampling may be done every 20 minutes until there is a change in the FHR pattern for better or worse (indicating the need for delivery).

163.

A pregnant woman who is addicted to heroin and beginning treatment with buprenorphine should first be stabilized with

morphine

naloxone

methadone

Explanation:

A pregnant woman who is addicted to heroin and beginning treatment with buprenorphine should first be stabilized with morphine because addicts rarely have a steady supply of heroin, so blood levels of the drug vacillate. Once the blood level is stabilized, then buprenorphine can be initiated under close supervision. Because buprenorphine crosses the placental barrier, the fetus develops opioid dependence and will undergo withdrawal after delivery, requiring treatment of the neonate with decreasing doses of morphine.

164.

Repeated variable decelerations of fetal heart rate during labor suggest

normal variations

umbilical cord occlusion

uteroplacental insufficiency

Explanation:

Repeated variable decelerations of fetal heart rate during labor suggest umbilical cord occlusion. The fetus may roll on the cord or the cord may be around the neck, resulting in occlusion during uterine contractions. Repeated variable decelerations may also indicate a

short cord or occult prolapse of the cord. If the variable decelerations occur occasionally without pattern, they are usually not of concern, but if they are repeated and worsen as labor progresses, the fetus is at risk. If the variable decelerations are in response to rupturing of the membranes, changing the mother's position may alleviate the decelerations.

165.

The latent phase of the first stage of labor for a nullipara usually lasts about

10 hours

8.5 hours

5.3 hours

Explanation:

The latent phase of the first stage of labor usually lasts about 8.5 hours for a nullipara (5.3 for a multipara) and the cervix dilates up to 3 cm. The frequency of contractions varies from every 3 to every 30 minutes with contractions lasting 20 to 40 seconds. Contractions usually range from mild to moderate. Most patients can manage the discomfort during this phase but they may feel increasing anxiety, especially nulliparas.

166.

During the second stage of labor, the patient feels a strong urge to bear down because of

pressure on the sacral and obturator nerves

pressure on the femoral nerves