

LABOR Stage II (Expulsion)

Stage II of labor, the stage of expulsion, begins with full cervical dilation (10 cm) and ends with the birth of the newborn. Maternal efforts to bear down occur involuntarily during contractions that are 1.5–2 min apart, lasting 60–90 sec. The average rate of fetal descent is 1 cm/hr for nulliparas, 2 cm or more per hr for multiparas.

CLIENT ASSESSMENT DATA BASE

Activity/Rest

Reports of fatigue
May report inability to self-initiate pushing/relaxation techniques
Lethargic
Dark circles under eyes

Circulation

BP may rise 5–10 mm Hg in between contractions.

Ego Integrity

Emotional responses may range from feelings of fear/irritation to relief/joy.
May feel a loss of control or the reverse as she is now actively involved in bearing down.

Elimination

Involuntary urge to defecate/push with contractions, combining intraabdominal pressure with uterine pressure.
May have fecal discharge while bearing down.
Bladder distension may be present, with urine expressed during pushing efforts.

Pain/Discomfort

May moan/groan during contractions.
Amnesia between contractions may be noted.
Reports of burning/stretching sensation of the perineum.
Legs may tremble during pushing efforts.
Uterine contractions strong, occurring 1.5–2 min apart and lasting 60–90 sec.
May fight contractions, especially if she did not participate in childbirth preparation classes.

Respiratory

Respiratory rate increases.

Safety

Diaphoresis often present
Fetal bradycardia appearing as early decelerations on electric monitor during contractions (head compression) or variables (cord compression)

Sexuality

Cervix fully dilated (10 cm) and 100% effaced.
Increased vaginal bloody show.
Rectal/perineal bulging with fetal descent.
Membranes may rupture at this point if still intact.
Increased expulsion of amniotic fluid during contractions.
Crowning occurs; caput is visible just before birth in vertex presentation.

NURSING PRIORITIES

1. Facilitate normal progression of labor and fetal descent.
2. Promote maternal and fetal well-being.
3. Support client's/couple's wishes regarding delivery experience, maintaining safety as a priority.

NURSING DIAGNOSIS:**May Be Related To:****Possibly Evidenced By:****DESIRED OUTCOMES/EVALUATION****CRITERIA—CLIENT WILL:****Pain [acute]**

Mechanical pressure of presenting part, tissue dilation/stretching, nerve compression, muscle hypoxia, intensified contractile pattern

Verbalizations, distraction behavior (e.g., restlessness), facial mask of pain, narrowed focus, autonomic responses

Verbalize reduction of pain.

Use appropriate techniques to maintain control.

Rest between contractions.

ACTIONS/INTERVENTIONS

RATIONALE**Independent**

Identify degree of discomfort and its sources.

Provide comfort measures, such as mouth care; perineal care/massage; clean, dry linen and underpads; cool environment (68°F–72°F [20°C–22.1°C]), cool, moist cloths to face and neck; or hot compresses to perineum, abdomen, or back, as desired.

Review information with client/couple about type of regional analgesia/anesthesia available at this stage specific to the delivery setting (e.g., local, pudendal block, lumbar epidural reinforcement) or use of transcutaneous electrical nerve stimulation (TENS), acupuncture/acupuncture. Review advantages/disadvantages, as appropriate.

Monitor and record uterine activity with each contraction.

(Refer to CP: Dysfunctional Labor/Dystocia.)

Provide information and support related to progress of labor.

Encourage client/couple to manage efforts to bear down with spontaneous, rather than sustained, pushing during contractions. Stress importance of using abdominal muscles and relaxing pelvic floor.

Observe for perineal and rectal bulging, opening of vaginal introitus, and changes in fetal station.

Clarifies needs; allows for appropriate intervention.

Promotes psychological and physical comfort, allowing client to focus on labor, and may reduce the need for analgesia or anesthesia.

Although client is under the stress of labor and discomfort levels may interfere with normal decision-making skills, she still needs to be in control and make her own informed decisions regarding anesthesia. Note: The option of a nerve root block should be restricted to a hospital setting where emergency equipment is available.

Provides information/legal documentation about continued progress; helps identify abnormal contractile pattern, allowing prompt assessment and intervention.

Keeps couple informed of proximity of delivery; reinforces that efforts are worthwhile and the “end is in sight.”

Anesthetics may interfere with client’s ability to feel sensations associated with contractions, resulting in ineffective bearing down. Spontaneous, rather than sustained, efforts to bear down avoid negative effects of Valsalva’s maneuver associated with reduced maternal and fetal oxygen levels. Relaxation of the pelvic floor reduces resistance to pushing efforts, maximizing effort to expel the fetus.

Anal eversion and perineal bulging occur as the fetal vertex descends, indicating need to prepare for delivery.

Assist client in assuming optimal position for bearing down; (e.g., squatting or lateral recumbent, semi-Fowler's position (elevated 30–60 degrees). Assess effectiveness of efforts to bear down. (Refer to ND: Skin/Tissue Integrity, risk for impaired.)

Encourage client to relax all muscles and rest between contractions.

Monitor maternal BP and pulse, and FHR. Observe unusual adverse reactions to medication, such as antigen-antibody reactions, respiratory paralysis, or spinal blockage. Note adverse reactions such as nausea/vomiting, urine retention, delayed respiratory depression, and pruritus of face, eyes, or mouth. (Refer to ND: Gas Exchange, risk for impaired fetal.)

Collaborative

Assess bladder fullness. Catheterize between contractions if distension is noted and client is unable to void.

Assist with reinforcement of medication via indwelling lumbar epidural catheter when caput is visible. Monitor vital signs and adverse responses. (Refer to CP: Labor: Stage I—Active Phase; ND: Pain [acute].)

Position client in dorsal lithotomy position and assist as necessary with administration of pudendal anesthetic.

Assist as needed with administration of local anesthetic just before episiotomy, if done.

Lumbar, Epidural, or Low Spinal Anesthesia

Administer IV fluid bolus of 500–1000 ml lactated Ringer's as indicated, before administration of agent.

Position client in sitting or lateral recumbent position for insertion of drug/placement of catheter for continuous infusion. Have client flex head sharply on chest/arch back during intrathecal administration.

Proper positioning with relaxation of perineal tissue optimizes bearing-down efforts, facilitates labor progress, reduces discomfort, and reduces need for forceps application.

Complete relaxation between contractions promotes rest and helps limit muscle strain/fatigue.

Maternal hypotension caused by decreased peripheral resistance as vascular tree dilates is the main adverse reaction to subarachnoid or epidural block. Fetal hypoxia or bradycardia is possible, owing to decreased circulation within the maternal portion of the placenta. Other adverse reactions may occur after administration of spinal or epidural anesthetic especially when morphine is used.

Promotes comfort, facilitates fetal descent, and reduces risk of bladder trauma caused by presenting part of fetus.

Reduces discomfort associated with episiotomy, forceps application, and fetal expulsion. Adverse reactions include maternal hypotension, muscle twitching/convulsions, loss of consciousness, reduced FHR, and beat-to-beat variability.

Anesthetizes lower two-thirds of vagina and perineum during delivery and for episiotomy repair. May interfere with efforts to bear down but has no effect on maternal BP, FHR, or FHR variability.

Anesthetizes perineum tissue for incision/repair purposes.

Increases maternal circulating fluid as a means of preventing adverse reactions of anesthetic such as maternal hypotension, fetal hypoxia, and fetal bradycardia.

Proper alignment of vertebrae maximizes space for needle/catheter placement.

Assist with administration of opiates (e.g., fentanyl [Sublimaze], morphine) into epidural space via indwelling catheter. Have ephedrine, 10 mg, or naloxone (Narcan), 0.4 mg, available as an antidote, depending on agent used.

Turn client side to side periodically during continuous infusions.

Monitor level of block per protocol.

Administer oxygen and increase plain IV fluid. If hypotension occurs, displace uterus to the left and elevate legs.

Administer diphenhydramine (Benadryl), promethazine hydrochloride (Phenergan), or metoclopramide hydrochloride (Reglan) when indicated.

Assist with administration of intrathecal subarachnoid anesthetic. Identify beginning and ending of contractions. Administer anesthetic between contractions when fetal head is on the perineum.

Transcutaneous Electrical Nerve Stimulation

Apply two pairs of electrodes on either side of thoracic and sacral vertebrae.

Encourage and assist client/couple with operation of control knobs on battery-operated device.

Complimentary Therapy

Assist with acupressure/acupuncture, moxibustion.

General Anesthesia

Assist with general anesthesia (inhalation or IV administration), as indicated.

Intraspinal narcotic, acting on opiate receptors within the spinal column, blocks pain for as long as 11 hr. Literature reveals mixed results regarding use of morphine via indwelling catheter in stage II labor (may be more effective in the active phase of stage I labor). Note: Because of the potential for life-threatening complications, initial and subsequent bolus dosing should be done by anesthesia service or providers specifically trained and certified.

Promotes even distribution of drug to prevent “one-sided” or unilateral block.

Migration of decreased sensation from belly button (dermatome T-10) to tip of breastbone (approximately T-6) increases risk of profound hypotension. Necessitates evaluation of drug concentration/infusion rate by anesthesia personnel.

Enhances venous return and circulating blood volume, increasing placental perfusion and oxygenation.

May relieve pruritus, a side effect of morphine administration.

Anesthetizes nerves at lumbar spaces L3–L4 and L4–L5. Administration of medication during a contraction may cause the level of the anesthetic to rise too high, anesthetizing the diaphragm.

Electrical stimulation of pain receptors (by TENS units) within the skin may block pain sensations by causing release of endorphins. Has no adverse effect on client or fetus and may reduce need for analgesia/anesthesia.

Ability to turn on mild electrical currents during a contraction promotes a feeling of control for the client.

May be used to stimulate/regulate contractions to restore balance to labor and reduce perception of pain.

Because of maternal and fetal side effects, general anesthesia should only be used in obstetric emergencies, such as hemorrhage, internal version with a second twin, or delivery of the aftercoming head in a breech presentation.

Assist with monitoring BP, pulse, respirations, FHR, and variability. Watch for vomiting reaction.

General anesthesia has a depressant effect on the client and fetus, and poses a risk of maternal aspiration.

NURSING DIAGNOSIS:

Cardiac Output, altered [fluctuation]

May Be Related To:

Fluctuation in venous return, changes in systemic vascular resistance

Possibly Evidenced By:

Variations in blood pressure, changes in pulse rate, decreased urine output, fetal bradycardia

DESIRED OUTCOMES/EVALUATION

Maintain vital signs appropriate for stage of labor.

CRITERIA—CLIENT WILL:

Use appropriate techniques to sustain/enhance vascular return.

Display FHR and variability WNL.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Monitor BP and pulse frequently (every 5–15 min). Note amount and concentration of urine output; test for albuminuria.

Increases in cardiac output of 30%–50% occur in the expulsion stage, peaking at the acme of uterine contractions and slowly returning to a precontractile state as the contraction diminishes or ceases. Intrapartal toxemia due to stress, excess sodium and fluid retention, or oxytocin administration may be manifested by increased BP, decreased urine output, and increased concentration of urine.

Encourage client to inhale/exhale during bearing-down efforts, using an open glottis technique and holding breath no longer than 5 sec at a time. Instruct client to push only when she feels the urge to do so. Avoid forced pushing.

Repeated, prolonged Valsalva's maneuvers (occurring when the client holds her breath while pushing against a closed glottis) eventually interrupt venous return and reduce cardiac output, BP, and pulse pressure. Avoiding Valsalva's maneuver minimizes fall of maternal PO₂ and rise in PCO₂ levels, which would have a negative impact on fetus.

Monitor FHR after every contraction or bearing-down effort.

Detects fetal bradycardia and hypoxia associated with reduction in maternal circulation and reduced placental perfusion caused by anesthesia, Valsalva's maneuver, or incorrect positioning. (Refer to ND: Gas Exchange, risk for impaired fetal.)

Encourage client/couple to select laboring position that optimizes circulation, such as the lateral recumbent position, Fowler's position, or squatting.

Upright and lateral recumbent positions prevent occlusion of the inferior vena cava and obstruction of the aorta, sustaining venous return and preventing hypotension.

Monitor BP and pulse immediately after administration of anesthesia, and repeat until client is stable. (Refer to ND: Pain [acute] for information about anesthesia and side effects.)

Hypotension is the most common adverse reaction to lumbar epidural or subarachnoid (low spinal) block as vascular dilation slows venous return and reduces cardiac output.

Collaborative

Regulate IV infusion as indicated; monitor oxytocin administration, and decrease rate if necessary.

IV line (or saline lock access) should be available in case the need to correct hypotension or administer emergency drugs arises. Excess fluid retention (a possible adverse reaction of oxytocin) may contribute to development of intrapartal toxemia.

NURSING DIAGNOSIS:

Risk Factors May Include:

Possibly Evidenced By:

DESIRED OUTCOMES/EVALUATION CRITERIA—FETUS WILL:

CLIENT WILL:

Gas Exchange, risk for impaired fetal

Mechanical compression of head/cord, reduced placental perfusion, prolonged labor, maternal hyperventilation

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

Be free of variable or late decelerations with FHR WNL.

Maintain control of respiratory pattern.

Use positions promoting venous return/placental circulation.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Position client in lateral recumbent or upright position, or turn side to side as indicated.

Increases placental perfusion, prevents supine hypotensive syndrome, and takes pressure from presenting part off cord, enhancing fetal oxygenation and improving FHR patterns.

Avoid placing client in dorsal recumbent position.

Contributes to fetal hypoxia and acidosis; reduces baseline variability and placental circulation.

Determine fetal station, presentation, and position. If fetus is in occiput posterior position, place client on her side.

During stage II labor, the fetus is most vulnerable to bradycardia and hypoxia, which are associated with vagal stimulation during head compression. Malpresentations such as face, mentum (chin), or brow may prolong labor and increase risk of hypoxia and the likelihood of the need for a cesarean birth, whereas posterior position increases duration of stage II labor. Placing client in lateral recumbent position facilitates fetal rotation from occiput posterior (OP) position to occiput anterior (OA) position.

Assess client's breathing pattern. Note reports of tingling sensation of face or hands, dizziness, or carpopedal spasms.

Identifies ineffective (inappropriate) respiratory pattern. Initially, hyperventilation results in respiratory alkalosis and an increase in serum pH; toward the end of labor, the pH falls and acidosis develops owing to lactic acid buildup from myometrial activity.

Have client breathe into cupped hands or small paper bag, as indicated.

Increases carbon dioxide levels and corrects respiratory alkalosis caused by hyperventilation.

Assist partner in helping with verbal coaching of respirations. Remind client to focus on an object/mental picture.

Monitor client for fruity breath odor.

Encourage client/couple to inhale and exhale every 10–20 sec during bearing-down efforts. Monitor response to pushing efforts.

Assess FHR, with fetoscope or fetal monitor, during and after each contraction or pushing effort.

Monitor periodic changes in FHR for severe, moderate, or prolonged decelerations. Note presence of variable or late decelerations.

Note short- and long-term FHR variability.

Collaborative

Perform sterile vaginal examination, feeling for prolapse. If prolapse is present, lift vertex off cord.

Transfer to acute care setting, as indicated, if client is in a free-standing birth center/home setting.

Monitor FHR electronically with internal lead.

If severe bradycardia, late decelerations, or prolonged variable decelerations appear:

- Position client in lateral recumbent position; increase plain IV fluid;
- Administer oxygen to client;

- Assist as needed with intermittent fetal scalp sampling, if done;

- Prepare for surgical intervention if spontaneous vaginal or low forceps delivery is not

Provides opportunity for couple to work together to maintain/regain control of situation and maintain state of relaxation during contractions.

Suggests acidosis associated with hyperventilation. As shifts in acid-base levels occur, fetal status can be compromised with resultant acidosis and hypoxia.

Helps maintain adequate oxygen levels. Exhaling while pushing minimizes physiological effects of Valsalva's maneuver, which can decrease maternal heart rate and PO_2 , and increases PCO_2 , potentially resulting in placental and fetal hypoxia and acidosis.

Early decelerations due to vagal stimulation from head compression should return to baseline patterns between contractions.

Variable decelerations indicate hypoxia due to possible cord entrapment or to nuchal or short cord. Late decelerations indicate uteroplacental insufficiency, which should not be allowed to persist for more than 30 min. Late decelerations are more likely to occur in clients with pregnancy-induced hypertension, diabetes, and kidney problems; placental aging; or following maternal anesthesia.

Average beat-to-beat changes should range from 6 to 10 bpm, indicating integrity of fetal CNS.

Elevation of vertex helps free umbilical cord, which may be compressed between presenting part and birth canal.

In cases of bradycardia or reduced FHR variability, more invasive monitoring, acute care equipment, or a cesarean birth may be needed.

Electronic monitoring allows continued, accurate assessment. Direct scalp electrodes accurately detect abnormal fetal responses and reduction in beat-to-beat variability.

Increases maternal circulating blood volume and placental perfusion.

Increases circulating oxygen available for fetal uptake. During this stage of labor, enhanced metabolic processes increase oxygen consumption by twice the normal level.

Determines trends in fetal acid-base status, and presence of fetal acidosis. The pH of fetal blood falls rapidly during stage II labor, and prolonged hypoxia may result in anaerobic metabolism with buildup of lactic acid.

The fastest means of delivery must be implemented when the fetus has severe or irreversible hypoxia

immediately possible after approximately 30 min, and fetal pH is 7.20 or less.

or acidosis.

NURSING DIAGNOSIS:**Skin/Tissue Integrity, risk for impaired****Risk Factors May Include:**

Precipitous labor, hypertonic contractile pattern, adolescence, large fetus, forceps application

Possibly Evidenced By:

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

DESIRED OUTCOMES/EVALUATION CRITERIA—CLIENT WILL:

Relax perineal musculature during bearing-down efforts.

Be free of preventable lacerations.

ACTIONS/INTERVENTIONS**RATIONALE**

Independent

Assist client/couple with proper positioning, breathing, and efforts to relax. Ensure that client relaxes the perineal floor while using abdominal muscles in pushing.

Helps promote gradual stretching of perineal and vaginal tissue. If maternal tissue within the birth canal or perineum resists gradual stretching as the presenting part of the fetus descends, trauma or lacerations of the cervix, vagina, perineum, urethra, and clitoris are possible.

Offer use of birthing bed in upright position. Encourage squatting, Fowler's position, or standing while pushing, if these positions are not contraindicated.

Upright positions reduce duration of labor, enhance forces of gravity, reduce need for episiotomy, and maximize uterine contractility.

Place client in left lateral Sims' position for delivery, if desired/comfortable.

Reduces perineal tension, promotes gradual stretching, and reduces need for episiotomy.

Help client as needed in assuming position of choice/transfer to delivery table between contractions. Monitor safety, and support legs, especially if epidural (or caudal) catheter is in place.

Reduces risk of injury, especially if client is unable to assist with transfer.

Lift legs simultaneously, if leg supports/stirrups are used, and place feet and legs properly in low position, supporting feet.

Reduces muscle strain; prevents pressure on calf and popliteal space that could contribute to development of postpartal thrombophlebitis.

Collaborative

Assess for bladder fullness; catheterize prior to delivery, as appropriate. (Refer to CP: Labor: Stage I—Active Phase; ND: Urinary Elimination, risk for altered.)

Reduces bladder trauma from presenting part.

Assist as needed with hand maneuvers; apply pressure to fetal chin through maternal perineum while exerting pressure on the occiput with the other hand (modified Ritgen maneuver).

Assist with midline, or mediolateral episiotomy, if necessary.

Maintain accurate delivery records of location of episiotomy and/or lacerations. Record type and timing of forceps if used.

Allows slow delivery once the fetal head has distended the perineum 5 cm; reduces trauma to maternal tissues.

Although controversial, episiotomy may prevent tearing of perineum in cases of a large infant, rapid labor, and insufficient perineal relaxation. It may shorten stage I of labor, especially when forceps are used. Note: Research suggests use of midline episiotomy is associated with a fourfold increase of major perineal trauma, including extensive tearing, whereas mediolateral episiotomy reduces likelihood of severe perineal lacerations, the surgical repair is more difficult, and problems with healing may occur.

Ensures proper documentation of events occurring during delivery process; identifies specific problems affecting postpartal recovery; e.g., maternal tissue trauma is increased with forceps application, which may result in possible lacerations or extension of episiotomy, increased level of postpartal discomfort.

NURSING DIAGNOSIS:**Risk Factors May Include:****Possibly Evidenced By:****DESIRED OUTCOMES/EVALUATION
CRITERIA—CLIENT WILL:****Fluid Volume risk for deficit**

Active loss, reduced intake, fluid shifts

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

Maintain vital signs WNL, adequate urine output, moist mucous membranes.

Be free of thirst.

ACTIONS/INTERVENTIONS

RATIONALE**Independent**

Measure intake/output and urine-specific gravity.
Assess skin turgor and production of mucus.
Note albuminuria.

Monitor temperature, as indicated.

Assess FHR and baseline; note periodic changes and variability (if internal scalp electrode is used).

In presence of dehydration, urine output decreases, specific gravity increases, and skin turgor and mucus production decrease. Proteinuria may be caused by dehydration or exhaustion, or may indicate preeclampsia.

Elevated temperature and pulse may indicate dehydration or, on occasion, infection.

Initially, FHR may become tachycardic with maternal dehydration and fluid losses. Prolonged maternal acidosis may result in fetal acidosis and hypoxia. (Refer to ND: Gas Exchange, risk for impaired fetal.)

Reduce excess clothing, cool body with wet cloths, and maintain cool environment. Protect from chilling.

Cools the body through evaporation; may reduce diaphoretic losses. Muscle tremors associated with chilling increase body temperature and general discomfort. Note: Diaphoresis, blood loss at delivery, hyperventilation, reduced oral intake, and vomiting all contribute to possible alterations in maternal fluid-electrolyte balances.

Place client in upright or lateral recumbent position.

Optimizes placental perfusion.

Collaborative

Administer fluids orally (sips of juices/broth or ice chips), as allowed, or parenterally.

Replaces fluid losses. Solutions such as lactated Ringer's administered intravenously help correct or prevent electrolyte imbalances.

NURSING DIAGNOSIS:

Infection, risk for maternal

Risk Factors May Include:

Repeated invasive procedures, traumatized tissues, exposure to pathogens, prolonged labor, or rupture of membranes

Possibly Evidenced By:

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

DESIRED OUTCOMES/EVALUATION CRITERIA—CLIENT WILL:

Be free of infection.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Perform perineal care per protocol, using medical asepsis. Remove fecal contaminants expelled during pushing; change linens/underpad as needed.

Helps promote cleanliness; prevents development of an ascending uterine infection and possible sepsis.

Note date and time of rupture of membranes. (Refer to CP: Prenatal Infection.)

Within 4 hr after rupture of membranes, the client and fetus are at increased risk for ascending tract infections and possible sepsis.

Perform vaginal examination only when absolutely necessary, using aseptic technique.

Repeated vaginal examination increases the risk of endometrial infections.

Monitor temperature, pulse, and WBC count, as indicated.

Increased temperature or pulse greater than 100 bpm may indicate infection. Normal protective leukocytosis with WBC count as high as 25,000/mm³ must be differentiated from elevated WBC count caused by infection.

Use surgical asepsis in preparing equipment. Clean perineum with sterile water and soap or surgical disinfectant just prior to delivery.

Reduces risk of contamination.

Assist partner with dressing in scrub apparel (if indicated), washing hands, and so forth, as required by setting. Reduce number of persons present at delivery, depending on client's/care provider's wishes.

Reduces risk of infection resulting from cross-contamination.

Collaborative

Administer antibiotics, as indicated.

Used only occasionally; prophylactic antibiotics are controversial and must be used with caution because they may stimulate overgrowth of resistant organisms.

Provide aseptic conditions for delivery.

Helps prevent postpartal infection and endometritis.

NURSING DIAGNOSIS:

Injury, risk for fetal

Risk Factors May Include:

Malpresentations/positions, precipitous delivery, or cephalopelvic disproportion (CPD)

Possibly Evidenced By:

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

DESIRED OUTCOMES/EVALUATION

Be free of preventable trauma or other

CRITERIA—FETUS WILL:

complications.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Assess fetal position, station, and presentation.

Malpresentations such as face, mentum (chin), or brow may prolong labor and increase the likelihood that cesarean delivery will be necessary, because lack of neck flexion increases the diameter of the fetal head as it passes through the pelvic outlet. Breech presentation usually necessitates surgical intervention, owing to the high risk of spinal cord injuries resulting from hyperextension of the fetal head during vaginal delivery.

Monitor labor progress and rate of fetal descent.

Precipitous labor increases the risk of fetal head trauma because skull bones do not have adequate time to adjust to dimensions of the birth canal.

Assess amount of amniotic fluid expelled at the time membranes rupture and then during contractions.

Hydramnios is associated with fetal disorders such as anencephaly, disorders of the gastrointestinal tract, kidney dysfunction, and maternal diabetes. Oligohydramnios is associated with postmaturity and intrauterine growth retardation secondary to placental insufficiency.

Note color of amniotic fluid.

Transfer to delivery room, as appropriate, when vertex is visible at introitus in nullipara, or when multipara is 8 cm dilated.

Remain with client and monitor pushing efforts as head emerges. Instruct client to pant during process.

Obtain emergency delivery kit if delivery not usually done in labor room. (Refer to CP: Precipitous Labor/Delivery or Unplanned Out-of-Hospital Delivery.) Verify proper functioning of equipment and availability of appropriate supplies.

Maintain record of events.

Collaborative

Assist with vaginal delivery when fetus is in posterior position.

Assist with vertex rotation from OP to OA (Scanzoni maneuver).

Prepare for surgical intervention, if indicated. (Refer to CP: Cesarean Birth.)

Meconium-stained amniotic fluid, greenish in color, may indicate fetal distress caused by hypoxia in a vertex presentation or to compression of fetal intestinal tract in breech presentation.

If delivery is to occur in area separate from the labor setting, transfer at this time ensures that infant is born where emergency medications and equipment are available, if needed.

Ensures that trained personnel are present and reduces possibility of trauma to fetal vertex; allows gradual accommodation of skull bones to birth canal and overriding of sutures.

Assures the availability of needed equipment and supplies in the event that labor progresses too rapidly for a planned delivery. When precipitous delivery is imminent, transfer to the delivery room is postponed until the neonate is delivered and the cord is clamped and cut.

Accurate documentation provides information about neonate/client status and postpartal needs.

Posterior position increases possibility of fetal trauma caused by neck injuries.

Manual or vacuum rotation from OP to OA is possible (if no CPD exists). Double application of forceps to vertex may increase risk of fetal injury, yet OA position is preferred position for delivery.

May be necessary in cases of CPD, persistent OP position, or deep transverse arrest of the head with prolonged stage II labor or fetal distress, or with breech or shoulder presentation. Fetus with anencephaly may not dilate maternal tissues effectively and may therefore require surgical intervention.

NURSING DIAGNOSIS:

Risk Factors May Include:

Possibly Evidenced By:

DESIRED OUTCOMES/EVALUATION

CRITERIA—CLIENT WILL:

Fatigue, risk for

Decreased metabolic energy production, increased energy requirements, overwhelming psychological/emotional demands, presence of pain

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

Effectively participate in bearing-down activities.

Relax/rest between efforts.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Assess fatigue level, and note activities/rest immediately before onset of labor.

The amount of fatigue is cumulative, so that the client who has experienced a longer-than-average stage I labor, and/or one who was not rested at the onset of labor, may experience greater feelings of exhaustion.

Encourage rest/relaxation between contractions. Provide environment conducive to rest. (Refer to ND: Pain [acute].)

Conserves energy needed for pushing efforts and delivery. Stage II can be extremely exhausting because of the muscular effort involved in bearing down, the intensity of the emotional response to the birth experience, inadequate rest, and/or length of labor.

Keep client/couple informed of progress.

Helps provide needed psychological energy. Spontaneous efforts to bear down tend to lengthen stage II labor, but do not negatively affect the fetus.

Encourage use of relaxation techniques. Review them with client/partner, as necessary.

Tense muscles increase feelings of exhaustion and resistance to fetal descent and may prolong labor.

Monitor fetal descent, presentation, and position. (Refer to ND: Injury, risk for fetal.)

Malposition and malpresentation may prolong labor and cause/increase fatigue.

Collaborative

Supply fluids with glucose orally as appropriate or parenterally, if ordered. Test urine for ketones, as indicated.

Replenishes reserves that may have been depleted in labor and possibly resulted in hypoglycemia or ketonuria.

Assist with anesthesia or use of forceps if client's efforts do not rotate fetal vertex and promote fetal descent.

Low forceps delivery may be necessary in the event of extreme maternal feelings and/or when maternal efforts to deliver are unsuccessful. Midforceps delivery with rotation (Scanzoni maneuver) helps rotate fetus from OP to OA position. (Refer to ND: Injury, risk for fetal.)

Prepare for cesarean birth if vaginal delivery is not possible.

Maternal fatigue and lack of progress may result from CPD or fetal malposition.

NURSING DIAGNOSIS:

Coping, Individual, risk for ineffective

Risk Factors May Include:

Situational crisis, personal vulnerability, inadequate support system, unrealistic perceptions/expectations

Possibly Evidenced By:

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

DESIRED OUTCOMES/EVALUATION

Verbalize feelings congruent with behavior.

CRITERIA—CLIENT WILL:

Demonstrate effective coping skills by the use of self-directed techniques for bearing-down efforts.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Determine client's/couple's perception of behavioral response to labor. Encourage verbalization of feelings. Note cultural influences.

Helps nurse gain insight into couple's feelings and identify needs. Depending on ethnic background and childbirth preparation, involvement in the birth process can be ego-enhancing for the father or support person who desires active participation. Conversely, negative feelings or disappointment about performance arise if active involvement is not allowed or supported.

Discuss normal emotional and physical changes as well as variation in emotional responses.

Understanding helps client cope with situation and cooperate with pushing efforts. Emotional responses in this stage of labor vary from excitement at being able to participate more actively/control the forces of labor through pushing efforts, to embarrassment, irritability, or fear resulting from loss of control. This may be manifested by a lack of cooperation or ineffective pushing during contractions.

Monitor response to contraction. Provide gentle but firm instructions for efforts to bear down when the urge to push arises.

Active involvement provides positive means of coping and assists in descent of the fetus. Negative coping can result in prolonged labor and increases the likelihood that anesthesia and/or forceps or vacuum may be needed for the delivery.

Discuss options for pain control/reduction. (Refer to ND: Pain [acute].)

Client may require anesthesia or analgesia to promote relaxation and facilitate coping.

Support client/couple in their decision to use analgesia or anesthesia.

The client's perception of her performance may be influenced by her own goals for coping with pain. If she has planned an unmedicated birth, she may feel a sense of failure if she resorts to anesthesia as fatigue and pain become intense. The client may be concerned about the support person's sense of failure as a coach if she resorts to medication. The nurse can reduce these feelings of "failure" by accepting the decision in a nonjudgmental manner.

Point out tense or furrowed brow, clenched fists, and so forth, and suggest that partner touch tense areas.

Helps client focus on tension reduction, and allows couple to work together to regain control of situation.

Provide comfort measures (e.g., applying cool cloths to face, neck, and extremities; eliminating excess clothing; positioning properly; providing perineal care; and providing a quiet, nonstimulating environment).

Reduction of discomforts and distractions allows couple to focus on labor efforts.

Encourage client to rest between contractions with eyes closed.

Conserves strength needed for pushing, thereby facilitating the coping process.

Facilitate partner's participation in meeting client's needs regarding comfort, pushing, and emotional support.

Active participation fosters positive sense of self and may actually strengthen and enhance couple's future relationship and their relationship to the child.

Provide positive reinforcement; inform couple of labor progress, appearance of fetal vertex, and that their efforts are helpful. Provide mirror for visualization of emerging infant or have client reach down and touch baby's head as she pushes.

Helps couple to feel positive about their participation and rewarded for their cooperation. Encourages continuation of efforts.