

CARE FOLLOWING CESAREAN BIRTH (4 HOURS TO 3 DAYS POSTPARTUM)

CLIENT ASSESSMENT DATA BASE

Review prenatal and intraoperative record, and the indication(s) for cesarean delivery.

Circulation

Blood loss during surgical procedure approximately 600–800 ml

Ego Integrity

May display emotional lability, from excitement, to apprehension, anger, or withdrawal.

Client/couple may have questions or misgivings about role in birth experience.

May express inability to deal with current situation.

Elimination

Indwelling urinary catheter may be in place; urine clear amber.

Bowel sounds absent, faint, or distinct.

Food/Fluid

Abdomen soft with no distension initially.

Mouth may be dry.

Neurosensory

Impaired movement and sensation below level of spinal epidural anesthesia

Pain/Discomfort

May report discomfort from various sources, e.g., surgical trauma/incision, afterpains, bladder/abdominal distension, effects of anesthesia

Respiratory

Lung sounds clear and vesicular

Safety

Abdominal dressing may have scant staining or may be dry and intact.

Parenteral line/saline lock when used, is patent, and site is free of erythema, swelling, and tenderness.

Sexuality

Fundus firmly contracted and located at the umbilicus.

Lochia flow moderate and free of excessive/large clots.

DIAGNOSTIC STUDIES

CBC, Hb/Hct: Assesses changes from preoperative levels and evaluates effect of blood loss in surgery.

Urinalysis (UA); Urine, Blood, Vaginal, and Lochial Cultures: Additional studies are based on individual need.

NURSING PRIORITIES

1. Promote family unity and bonding.
2. Enhance comfort and general well-being.
3. Prevent/minimize postoperative complications.
4. Promote a positive emotional response to birth experience and parenting role.
5. Provide information regarding postpartal needs.

DISCHARGE GOALS

1. Family bonding initiated
2. Pain/discomfort easing
3. Physical/psychological needs being met
4. Complications prevented/resolving
5. Positive self-appraisal regarding birth and parenting roles expressed
6. Postpartal care understood and plan in place to meet needs after discharge

NURSING DIAGNOSIS:

May Be Related To:

Possibly Evidenced By:

**DESIRED OUTCOMES/EVALUATION
CRITERIA—CLIENT WILL:**

PARENT/INFANT ATTACHMENT, altered

Developmental transition/gain of a family member, situational crisis (e.g., surgical intervention, physical complications interfering with initial acquaintance/interaction, negative self-appraisal)

Hesitancy to hold/interact with infant, verbalization of concerns/difficulty coping with situation, not dealing with traumatic experience constructively

Hold infant, as maternal and neonatal conditions permit.

Demonstrate appropriate attachment and bonding behaviors.

Begin to actively engage in newborn care tasks, as appropriate.

ACTIONS/INTERVENTIONS

Independent

Encourage client to hold, touch, and examine the infant, depending on condition of client and the newborn. Assist as needed.

RATIONALE

The first hours after birth offer a unique opportunity for family bonding to occur because both mother and infant are emotionally receptive to cues from each other, which initiate the attachment and acquaintance process. Assistance in first few interactions or until IV line is removed helps client avoid feelings of discouragement or inadequacy. Note: Even if client has chosen to relinquish her child, interacting with the newborn may facilitate the grieving process.

Provide opportunity for father/partner to touch and hold infant and assist with infant care as allowed by situation.

Observe and record family-infant interactions, noting behaviors indicative of bonding and attachment within specific culture.

Discuss need for usual progression and interactive nature of bonding. Reinforce normalcy of variation of response from one time to another and among different children.

Note verbalizations/behaviors suggesting disappointment or lack of interest/attachment.

Allow parents the opportunity to verbalize negative feelings about themselves and the infant.

Note circumstances surrounding cesarean birth, parents' self-appraisal and perception of birth experience, their initial reaction to infant, and their participation in birth experience.

Encourage and assist with breastfeeding, dependent on client's choice and cultural beliefs/practices.

Welcome family and siblings for brief visit as soon as maternal/newborn condition permits. (Refer to CP: The Client at 4 Hours to 2 Days Postpartum; ND: Family Coping: potential for growth.)

Provide information, as desired, about infant's safety and condition. Support couple as needed.

Initiate contact between client/couple and infant as soon as possible. If infant is sent to neonatal intensive care unit, establish line of communication between nursery staff and client/couple. Take pictures of neonate and allow for visits when client's physical status permits. (Refer to CP: The Parents of a Child with Special Needs.)

Helps facilitate bonding/attachment between father and infant. Provides a resource for the mother, validating the reality of the situation and the newborn at a time when procedures and her physical needs may limit her ability to interact.

Eye-to-eye contact, use of en face position, talking in a high-pitched voice, and holding infant closely are associated with attachment in American culture. On first contact with the infant, a mother manifests a progressive pattern of behaviors, whereby she initially uses fingertips to explore the infant's extremities and progresses to using the palm before enfolding the infant with her whole hand and arms.

Helps client/couple understand significance and importance of the process and provides reassurance that differences are to be expected.

The arrival of a new family member, even when wanted and anticipated, creates a transient period of disequilibrium, requiring incorporation of the new child into the existing family.

Unresolved conflicts during the early parent-infant acquaintance process may have long-term negative effects on the future parent-child relationship.

Parents need to work through meaning attributed to stressful events surrounding childbirth and orient themselves to reality before they can focus on infant. Effects of anesthesia, anxiety, and pain can alter the client's perceptual abilities during and following surgical intervention.

Early contact has a positive effect on duration of breastfeedings; skin-to-skin contact and initiation of maternal tasks promotes bonding. Some cultures (e.g., Hispanic, Navajo, Filipino, Vietnamese) may refrain from breastfeeding until the milk flow is established.

Promotes family unity, and helps siblings begin process of positive adaptation to new roles and incorporation of new member into family structure.

Helps couple to process and evaluate necessary information, especially if initial acquaintance period has been delayed.

Reduces anxiety that may be associated with handling infant, fear of unknown, and/or assuming the worst regarding infant status.

Answer client's questions regarding protocol of care during early postdelivery period.

Information relieves anxiety that may interfere with bonding or result in self-absorption rather than inattention to newborn.

Collaborative

Notify appropriate healthcare team members (e.g., nursery staff or postpartal nurse) of observations as indicated.

Inadequate bonding behaviors or poor interaction between client/couple and infant necessitates support and further evaluation. Note: In some cultures, e.g., Native American, the father may practice a period of ritual avoidance beginning immediately after the birth. (Refer to CP: The Client at 4 Hours to 2 Days Postpartum; ND: Parenting, risk for altered.)

Prepare for ongoing support/follow-up after discharge, e.g., visiting nurse services, community agencies, and parent support group.

Many couples have unresolved conflicts regarding initial parent-infant acquaintance process that may require resolution after discharge.

NURSING DIAGNOSIS:

May Be Related To:

Possibly Evidenced By:

DESIRED OUTCOMES/EVALUATION CRITERIA—CLIENT WILL:

PAIN [acute]/[DISCOMFORT]

Surgical trauma, effects of anesthesia, hormonal effects, bladder/abdominal distension

Reports of incisional pain, cramping (afterpains), headache, abdominal bloating, breast tenderness; guarding/distraction behaviors, facial mask of pain

Identify and use appropriate interventions to manage pain/discomfort.

Verbalize lessening of level of pain.

Appear relaxed, able to sleep/rest appropriately.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Determine characteristics and location of discomfort. Rate severity on a 0–10 scale. Note verbal and nonverbal cues, such as grimacing, rigidity, and guarding or restricted movement.

Provide information and anticipatory guidance regarding causes of discomfort and appropriate interventions.

Evaluate BP, pulse, and behavior changes (e.g., distinguish between restlessness associated with excessive blood loss from that resulting from pain).

Client may not verbally report pain and discomfort directly. Comparing specific characteristics of pain aids in differentiating postoperative pain from developing complications (e.g., ileus, bladder retention or infection, wound dehiscence).

Promotes problem solving, helps reduce pain associated with anxiety and fear of the unknown, and provides sense of control.

In many clients pain may cause restlessness and an increase in BP and pulse. Administration of analgesics may lower BP.

Note uterine tenderness and presence/ characteristics of afterpains; postoperative infusion of oxytocin.

Reposition client, reduce noxious stimuli, and offer comfort measures, e.g., back rubs. Encourage use of breathing and relaxation techniques and distraction (stimulation of cutaneous tissue) as learned in childbirth preparation classes. Encourage presence and participation of partner as appropriate.

Initiate deep-breathing exercises, incentive spirometry, and coughing using splinting procedures, as appropriate, 30 min after administration of analgesics.

Encourage early ambulation, use of rocking chair or left side-lying position, as appropriate. Recommend avoidance of gas-forming foods or fluids, e.g., beans, cabbage, carbonated beverages, whole milk, very hot or very cold beverages, or use of straws for drinking. (Refer to ND: Constipation.)

Recommend use of left lateral recumbent position.

Inspect perineum for hemorrhoids. Suggest application of ice for 20 min every 4 hr, use of witch hazel compresses, and elevation of pelvis on pillow, as appropriate.

Palpate bladder, noting fullness. Facilitate periodic voiding after removal of indwelling catheter.

Investigate reports of headache, especially following subarachnoid anesthesia. Avoid medicating client before nature and cause of headache are determined. Note character of headache (e.g., deep location behind the eyes, with pain radiating to both temples and occipital area; relieved in supine position but increased in sitting or standing position) to distinguish from headache associated with anxiety or PIH.

Encourage bedrest in flat-lying position, increase fluids, offer caffeinated beverage, assist as needed with client and infant care, and apply abdominal binder when client is upright, in presence of postspinal headache. Notify physician or anesthesiologist, as indicated.

During the first 12 hr postpartum, uterine contractions are strong and regular, and they continue for the next 2–3 days, although their frequency and intensity are reduced. Factors intensifying afterpains include multiparity, uterine overdistension, breastfeeding, and administration of ergot and oxytocin preparations.

Relaxes muscles, and redirects attention away from painful sensations. Promotes comfort, and reduces unpleasant distractions, enhancing sense of well-being.

Deep breathing enhances respiratory effort. Splinting reduces strain and stretching of incisional area and lessens pain and discomfort associated with movement of abdominal muscles. Coughing is indicated when secretions or rhonchi are auscultated.

Decreases gas formation and promotes peristalsis to relieve discomfort of gas accumulation, which often peaks on 3rd day after cesarean birth.

Allows gas to rise from descending to sigmoid colon, facilitating expulsion.

Aids in regression of hemorrhoids and vulvar varicosities by promoting venous return and localized vasoconstriction, reducing associated edema, discomfort, and itching.

Return of normal bladder function may take 4–7 days, and overdistension of bladder may create feelings of urgency and discomfort.

Leakage of CSF through the dura mater into the extradural space reduces volume needed to support brain tissue, causing the brain stem to fall onto the base of the skull when client is in an upright position. PIH may result in cerebral edema, necessitating other interventions. (Refer to CP: The Client at 4 Hours to 2 Days Postpartum; ND: Fluid Volume, risk for excess.)

Reduces severity of headache by increasing fluid available for production of CSF and limiting position shifts of the brain. Severe headache may interfere with client's ability to carry out self/infant care. Ongoing headache may require more aggressive therapy.

Inspect breast and nipple tissue; assess for presence of engorgement and/or cracked nipples.

Encourage wearing of supportive bra.

Provide information to the lactating client about increasing the frequency of feedings, applying heat to breasts before feedings, proper positioning of the infant, and expressing milk manually. (Refer to CP: The Client at 4 Hours to 2 Days Postpartum; ND: Breastfeeding [specify].)

Suggest that client initiate feedings on nontender nipple for several feedings in succession if only one nipple is sore or cracked.

Apply ice to axillary area of breasts if the client is not planning to breastfeed. Recommend use of well-fitting supportive bra, and avoidance of excess exposure of breasts to heat, or stimulation of breasts by infant, sexual partner, or client until suppression process is completed (approximately 1 wk).

Collaborative

Assist with bolus dose of morphine sulfate (Duramorph) via epidural prior to removal of epidural catheter.

Administer analgesics every 3–4 hr, progressing from IV/IM (e.g., meperidine [Demerol], butorphanol [Stadol], nalbuphine [Nubain]) to oral route (e.g., oxycodone-acetaminophen [Percocet], oxycodone-aspirin [Percodan]). Medicate lactating client 45–60 min before breastfeeding.

Review/monitor use of patient-controlled analgesia (PCAs) as indicated.

Administer antifatulent, e.g., Mylicon. Provide rectal/nasogastric (NG) tube as indicated.

Assist as needed with saline injection or administration of “blood patch” over site of dural puncture. Keep client in horizontal position following the procedure.

At 24 hr postpartum, breasts should be soft and nontender, with nipples free of cracks or reddened areas. Breast engorgement, nipple tenderness, or presence of cracks on nipple (if client is lactating) may occur 2–3 days postpartum and require prompt intervention to facilitate continuation of breastfeeding and prevent more serious complications.

Lifts breasts inward and upward, resulting in a more comfortable position and decreasing muscle fatigue.

These measures can help the lactating client stimulate the flow of milk and relieve stasis and engorgement. Use of “football hold” directs infant’s feet away from abdomen. Pillow helps support infant and protects incision in sitting or side-lying position.

Initial suckling response is strong and may be painful. Starting feeding with unaffected breast and then proceeding to involved breast may be less painful and enhance healing.

Use of supportive bra and ice suppresses lactation by mechanical means and are the preferred method for cessation of lactation. Discomfort lasts approximately 48–72 hr but eases or ceases with avoidance of nipple stimulation.

Provides approximately 24-hr period of pain control, at the end of which oral medications are usually appropriate.

Promotes comfort, which improves psychological status and enhances mobility. Use of medication with limited ability to cross into milk allows lactating mother to enjoy feeding without adverse effects on infant.

PCA using meperidine or morphine may be used to provide rapid pain relief without excessive side effects/oversedation. Enhances sense of control, general well-being, and independence.

Occasionally necessary to relieve gas buildup.

Effective for relief of severe spinal headache. The blood patch procedure, which has a 90%–100% success rate, creates a blood clot, which produces pressure and seals the leak.

NURSING DIAGNOSIS:**May Be Related To:****Possibly Evidenced By:****DESIRED OUTCOMES/EVALUATION
CRITERIA—CLIENT/COUPLE WILL:****SELF ESTEEM, situational low**

Perceived failure at a life event, maturational transition, perceived loss of control in current situation

Verbalization of negative feelings about self in situation (e.g., helplessness, shame/guilt), evaluates self as unable to handle situation, difficulty making decisions

Discuss concerns related to her/his role in and perception of the birth experience.

Verbalize understanding of individual factors that precipitated current situation.

Express positive self-appraisal.

ACTIONS/INTERVENTIONS

RATIONALE**Independent**

Determine client's/couple's emotional response to cesarean birth.

Both members of the couple may have a negative emotional reaction to the surgical intervention. An unplanned cesarean birth may have a negative effect on the client's self-esteem, leaving her feeling that she is inadequate and has failed as a woman. The father or partner, especially if he was unable/unwilling to be present at the cesarean delivery, may feel that he abandoned his partner and did not fulfill his anticipated role as emotional supporter during the childbirth process. Even though a healthy baby may be the outcome, parents often grieve and feel a sense of loss at missing out on the anticipated vaginal birth.

Determine client's level of anxiety and source of concern. Encourage client/couple to verbalize unmet needs and expectations. Provide information regarding the normalcy of such feelings.

Cesarean birth may be viewed by the client/couple as a failure at a life event, and this may have a negative impact on the bonding/parenting process. Note: Emergency cesarean birth may create problems for care of siblings because of unexpected prolonged hospital stay. Father may encounter conflicts in spending time with client/infant and meeting needs of siblings.

Review client's/couple's participation and role in birth experience. Identify positive behaviors during prenatal and antepartal process.

Refocuses client's/couple's attention to help them view pregnancy in its totality and to see that their actions have contributed to an optimal outcome. May help to avoid guilt/placing of blame. Note: Grief response may be lessened if both mother and father were able to share in experience of delivery.

Encourage presence/participation of partner in all that is going on.

Provides emotional support; may encourage verbalization of concerns.

Emphasize similarities between vaginal and cesarean birth. Convey positive attitude, and manage postpartal care as close as possible to care provided to clients following vaginal birth.

Assist client/couple in identifying usual coping mechanisms and developing new coping strategies if needed. (Refer to CP: The Client at 4 Hours to 2 Days Postpartum; ND: Coping, Individual, risk for ineffective.)

Provide accurate information about client/infant status.

Collaborative

Refer client/couple for professional counseling if reactions are maladaptive.

Client may alter her perception of cesarean birth experience as well as her perception of her own wellness or illness based on the professional's attitudes. Similar care conveys the message that cesarean birth is a necessary alternative to vaginal delivery, focusing on the optimal outcome rather than on the birth process.

Helps facilitate positive adaptation to new role; reduces feelings of inadequacy.

Fantasies caused by lack of information or misunderstanding may increase sense of helplessness/loss of control.

Client who is unable to resolve grief or negative feelings may need further professional help.

NURSING DIAGNOSIS:

Risk Factors May Include:

Possibly Evidenced By:

DESIRED OUTCOMES/EVALUATION CRITERIA—CLIENT WILL:

INJURY, risk for

Biochemical or regulatory functions (e.g., orthostatic hypotension, development of PIH or eclampsia), effects of anesthesia, thromboembolism, abnormal blood profile (anemia/excessive blood loss, rubella sensitivity, Rh incompatibility), tissue trauma

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

Demonstrate behaviors to reduce risk factors and/or protect self.

Be free of avoidable complications.

ACTIONS/INTERVENTIONS

Independent

Review prenatal and intrapartal record for factors that predispose client to complications. Note Hb level and operative blood loss.

RATIONALE

Presence of risk factors, such as myometrial fatigue, uterine overdistension, prolonged oxytocin stimulation, general anesthesia, anemia/excessive blood loss, or prenatal thrombophlebitis renders the client more susceptible to postoperative complications.

Monitor BP, pulse, and temperature. Note cool, clammy skin; weak, thready pulse; behavior changes; delayed capillary refill; or cyanosis. (Refer to CP: Postpartal Hemorrhage.)

Encourage early ambulation and exercise, except in client who received subarachnoid anesthesia who may remain flat for 6–8 hr without use of pillow or raising head, as indicated by protocol and return of sensation/muscle control. (Refer to ND: Pain [acute]/[Discomfort].)

Assist client with initial ambulation. Provide adequate supervision in shower or sitz bath. Leave call bell within client's reach.

Have client sit on floor or chair with head between legs, or have her lie down in a flat position, if she feels faint. Use ammonia capsule ("smelling salts").

Assess for hyperreflexia, RUQ/epigastric pain, headache, or visual disturbances. Maintain seizure precautions, and provide quiet environment as indicated. (Refer to CP: The Client at 4 Hours to 2 Days Postpartum; ND: Fluid Volume, risk for excess; CP: Pregnancy-Induced Hypertension; ND: Injury, risk for.)

Note effects of MgSO₄, if administered. Assess patellar response and monitor respiratory rate.

Inspect incision regularly; note signs of delayed or altered healing (e.g., lack of approximation).

Inspect lower extremities for signs of thrombophlebitis (e.g., redness, warmth, pain/tenderness). Note presence or absence of Homans' sign. (Refer to CP: Postpartal Thrombophlebitis.)

Encourage leg/ankle exercises and early ambulation.

Evaluate client's rubella status on prenatal chart (>1:10 titer indicates susceptibility). Assess client for allergies to eggs or feathers; if present, vaccine is contraindicated. Provide written and oral information, and obtain informed consent for vaccination after reviewing side effects, risks, and the necessity to prevent conception for 2–3 mo following the vaccination.

Elevated BP may indicate developing or continuing hypertension, necessitating MgSO₄ or other antihypertensive treatment. Hypotension and tachycardia may reflect dehydration and hypovolemia. Pyrexia may indicate infection.

Enhances circulation and venous return of lower extremities, reducing risk of thrombus formation, which is associated with stasis. Although recumbent position after subarachnoid anesthesia is debatable (no research to date supports effectiveness), it may aid in prevention of CSF leakage and resultant headache.

Orthostatic hypotension may occur when changing from supine to upright position on initial ambulation, or it may result from vasodilation caused by the heat of the shower or sitz bath.

Helps maintain or enhance circulation and delivery of oxygen to brain.

Danger of eclampsia due to PIH exists for up to 72 hr postpartum, although literature suggests the convulsive state has occurred as late as the 5th day postpartum.

Absence of patellar reflex and respiratory rate below 12/min indicates toxicity and a need to reduce or discontinue drug therapy.

Excessive strain on the incision or delayed healing may render client prone to tissue separation and possible hemorrhage.

Elevated fibrin split products (possibly released from placental site), reduced mobility, trauma, sepsis, and extensive activation of blood clotting following delivery predispose the client to the development of thromboembolism. Homans' sign may be present with deep venous thrombus, but may be absent with superficial phlebitis. In addition, plasma losses, elevated platelet counts, and relaxation of blood vessels from anesthesia increase risk for thrombophlebitis.

Promotes venous return; prevents stasis/pooling in lower extremities, reducing risk of phlebitis.

Vaccination helps prevent teratogenic effects in subsequent pregnancies. Administration of vaccine in the immediate postpartal period may cause side effects of transient arthralgia, rash, and cold symptoms during incubation period of 14–21 days. Allergic anaphylactic or hypersensitivity response may occur, necessitating administration of epinephrine.

Collaborative

Administer MgSO₄ by infusion pump, as indicated.

Apply support hose or elastic wrap to legs when risk or symptoms of phlebitis are present.

Administer anticoagulant; evaluate coagulation factors, and note signs of failure to clot. (Refer to CP: Postpartal Thrombophlebitis.)

Administer RhIgG IM within 72 hr postpartum, as indicated for Rh-negative mother who has not been previously sensitized and who delivers an Rh-positive infant with negative result on direct Coombs' test on cord blood. Obtain Betke-Kleihauer smear if significant fetal-maternal transfusion is suspected at delivery.

Helps reduce cerebral irritability in presence of PIH or eclampsia. (Refer to CP: The Client at 4 Hours to 2 Days Postpartum; ND: Fluid Volume, risk for excess.)

Reduces venous stasis, enhancing venous return and reducing risk of thrombus formation.

Although usually not required, may help prevent further development of thrombus.

Dose of 300 mg is usually sufficient to promote lysis of fetal Rh-positive RBCs that may have entered maternal circulation during delivery and that may potentially cause sensitization and problems of Rh incompatibility in subsequent pregnancies. Presence of 20 ml or more of Rh-positive fetal blood in maternal circulation necessitates higher dose of RhIgG. Note: If drug is not administered within 72 hr of delivery, a window of opportunity exists for up to 2 wk, although the degree of effectiveness may be reduced.

NURSING DIAGNOSIS:

Risk Factors May Include:

Possibly Evidenced By:

DESIRED OUTCOMES/EVALUATION CRITERIA—CLIENT WILL:

INFECTION, risk for

Tissue trauma/broken skin, decreased Hb, invasive procedures and/or increased environmental exposure, prolonged rupture of amniotic membranes, malnutrition

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

Demonstrate techniques to reduce risks and/or promote healing.

Display wound free of purulent drainage with initial signs of healing (i.e., approximation of wound edges), uterus soft/nontender, with normal lochial flow and character.

Be free of infection, be afebrile, have no adventitious breath sounds, and void clear amber urine.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Encourage and use careful hand washing technique and appropriate disposal of soiled underpads, perineal pads, and contaminated linen. Discuss with client the importance of continuing these measures after discharge.

Helps prevent or retard spread of infection.

Review prenatal Hb/Hct; note presence of conditions/risk factors that predispose client to postoperative infection.

Assess client's nutritional status. Note appearance of hair, fingernails, skin, and so forth. Determine prepregnancy weight and prenatal weight gain.

Encourage oral fluids and diet high in protein, vitamin C, and iron.

Inspect abdominal dressing for exudate or oozing. Remove dressing, as indicated.

Note operative record for use of drain and nature of incision. Clean wound and change dressing when wet.

Inspect incision, evaluate healing process, noting localized redness, edema, pain, exudate, or loss of approximation of wound edges.

Assist as needed with removal of skin sutures or clips.

Encourage client to take warm showers daily.

Assess temperature, pulse, and WBC count.

Assess location and contractility of uterus; note involutinal changes or presence of extreme uterine tenderness.

Anemia, obesity, diabetes, prolonged labor (especially with membranes ruptured) prior to cesarean delivery, corticosteroid therapy, malnutrition, smoking, and chronic lung disease increase the risk of infection and delayed healing.

Client who is 20% below normal weight, or who is anemic or malnourished, is more susceptible to postpartal infection and may have special dietary needs.

Prevents dehydration; maximizes circulation and urine flow. Protein and vitamin C are needed for collagen formation; iron is needed for Hb synthesis.

A sterile dressing covering the wound in the first 24 hr following cesarean birth helps protect it from injury or contamination. Oozing may indicate hematoma, loss of suture approximation, or wound dehiscence, requiring further intervention. Removing the dressing allows incision to dry and promotes healing.

Moist environment is an excellent medium for bacterial growth; bacteria can travel by capillary action through the wet dressing to the wound. Note: Incision into the lower uterine segment heals more rapidly than classic incision and is less likely to rupture in subsequent pregnancies.

These signs indicate wound infection, usually caused by streptococci, staphylococci, or *Pseudomonas* species. Note: Wound infections are usually clinically apparent 3–8 days after the procedure.

Incision is usually sufficiently healed to remove sutures on the 4th or 5th day following surgical procedure.

Showers, usually allowed after the 2nd postoperative day, promote hygiene and may stimulate circulation and healing of wound. Note: In some cultures, showers/tub baths are avoided until lochial flow ceases or longer, as dictated.

Fever after the 3rd postoperative day, leukocytosis, and tachycardia suggest infection. Elevation of temperature to 101°F (38.3°C) within the first 24 hr is highly indicative of infection; an elevation to 100.4°F (38.0°C) on any 2 of the 1st 10 days postpartum is significant.

Following cesarean birth, the fundus remains at the level of the umbilicus for up to 5 days, when involution begins, accompanied by an increase in lochial flow. Delayed involution increases the risk of endometritis. Development of extreme tenderness signals possible retained placental tissue or infection.

Note amount and odor of lochial discharge or change in normal progression from rubra to serosa.

Maintain sterile, closed injury drainage system with drainage bag in dependent position.

Provide perineal and catheter care, per protocol.

Note frequency/amount and characteristics of urine.

Promote rest and encourage use of semi-Fowler's position once anesthesia precautions are completed.

Inspect IV site for signs of erythema or tenderness.

Evaluate condition of nipples, noting presence of cracks, redness, or tenderness. Recommend routine examination of breasts. Review proper care and infant feeding techniques. (Refer to ND: Pain [acute]/[Discomfort].)

Assess lung sounds and respiratory ease or effort. Note crackles/rhonchi, dyspnea, chest pain, fever, or mucopurulent sputum.

Institute turning, coughing, and deep-breathing routines with splinting of incision every 2–4 hr while awake. Note productive cough.

Collaborative

Administer oxytocin or ergot preparation. (Note: Oxytocin infusion is often ordered routinely for 4 hr following surgery.)

Monitor laboratory test results, such as BUN and 24-hr urine, for total protein, creatinine clearance, and uric acid, as indicated.

Lochia normally has a fleshy odor; however, in endometritis, the discharge may be purulent and foul-smelling, and may fail to demonstrate normal progression from rubra to serosa to alba.

Prevents introduction of bacteria when indwelling catheter is used and avoids urinary reflux, reducing risk of infection.

Helps eliminate medium of bacterial growth; promotes hygiene.

Urinary stasis increases the risk of infection. Cloudy or malodorous urine indicates presence of bacteria.

Rest reduces metabolic process, allowing oxygen and nutrients to be used for healing. Semi-Fowler's position promotes flow of lochia and reduces pooling in uterus, and maximizes respiratory function.

Indicates local infection, requiring removal of catheter and possibly restarting the IV line in another site.

The development of nipple fissures/cracks potentiates risk of mastitis.

Rhonchi indicative of retained secretions should not be present, yet breath sounds may be diminished for the first 24 hr after surgery. Absence of lung sounds indicates consolidation or lack of air exchange, suggesting atelectasis or possibly pneumonia. Note: Atelectasis usually occurs in the first 72 hr after the procedure, whereas pneumonia typically develops after 72 hr.

Improves depth of respirations and alveolar expansion; clears secretions that could block bronchioles.

Productive cough indicates client is clearing bronchial secretions effectively. Splinting prevents excessive strain on incision, reducing discomfort and enhancing client's participation in activity.

Maintains myometrial contractility, thereby retarding bacterial spread through walls of uterus; aids in expulsion of clots/membranes.

In the client who has had PIH, kidney or vascular involvement may persist, or it may appear for the first time during the postpartal period. As steroid levels decrease following delivery, renal function, evidenced by BUN and creatinine clearance, begins to return to normal within 1 wk; anatomic changes (e.g., dilation of ureters and renal pelvis) may take up to 1 mo to return to normal.

Administer prophylactic antibiotic infusion, with first dose usually administered immediately after cord clamping and two more doses 6 hr apart.

Demonstrate/encourage use of incentive spirometer.

Obtain sputum specimen as indicated by changes in color or odor of sputum, presence of congestion, and temperature elevation.

Review chest x-rays, as indicated.

Obtain blood, vaginal, and urine cultures, if infection is suspected.

Administer specific antibiotic for identified infectious process.

Decreases likelihood of postpartal endometritis as well as complications such as incisional abscesses or pelvic thrombophlebitis.

Promotes sustained maximal respiration, inflates alveoli, and prevents atelectasis.

Identifies specific pathogens and appropriate therapy.

Confirms presence of infiltrate(s) or atelectasis.

Bacteremia is more frequent in client whose membranes were ruptured for 6 hr or longer than in client whose membranes remained intact prior to cesarean birth.

Necessary to effectively eradicate organism.

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

Period of restricted oral intake, presence of nausea/vomiting, excessive blood loss during surgery

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

Maintain fluid volume at a functional level as evidenced by individually adequate urinary output, stable vital signs, moist mucous membranes, and Hb/Hct within normal limits.

ACTIONS/INTERVENTIONS**RATIONALE**

Independent

Review prenatal and intrapartal/surgical records for Hb level, operative blood loss, fluid replacement, presence of edema.

Monitor BP, pulse, status of mucous membranes, capillary refill; note presence of cyanosis.

Inspect dressing for excessive bleeding. Outline, date drainage on dressings (if not changed). Notify physician of continued oozing.

Data helpful in evaluating current fluid status and potential for diuresis.

Hypotension, tachycardia, and dry mouth may reflect dehydration and hypovolemia but may not occur until circulating blood volume has decreased by 30%–50%, at which time signs of peripheral vasoconstriction may be noted.

Surgical wounds with a drain may saturate a dressing; however, oozing is usually not expected and may suggest developing complications.

Note character and amount of lochial flow and consistency of fundus. Gently massage fundus as indicated.

Monitor fluid intake and urine output. Note appearance, color, concentration, and specific gravity of urine.

Encourage adequate oral fluids (e.g., 6–8 glasses/day).

Collaborative

Replace fluid losses intravenously, as indicated.

Monitor postoperative Hb/Hct; compare with preoperative levels.

Increase oxytocin infusion if uterus is relaxed and/or lochia is heavy.

Lochial flow should not be heavy or contain clots; fundus should remain firmly contracted at the umbilicus. A boggy uterus results in increased flow and blood loss. Note: As a rule, lochial flow is usually decreased by second postoperative day, thus “normal” amount of flow expected after vaginal delivery would be suspect for this client.

Kidney function is a key index to circulating blood volume. As output decreases, specific gravity increases, and vice versa. Bloody urine or urine containing clots signifies possible bladder trauma associated with surgical intervention.

Preferred route for replacement once nausea is resolved/peristalsis returns. Adequate intake allows for timely removal of IV.

Average blood loss is usually 600–800 ml, but prenatal physiological edema, which mobilizes postpartum, alleviates need for large fluid volume replacement. A total of 3 L of fluid infused intravenously in the intraoperative and early postoperative (24-hr) period is recommended. Note: If epidural anesthesia is used, more fluids are usually required.

Client with Hct of 33% or greater and increased plasma associated with pregnancy can usually tolerate actual blood loss of up to 1500 ml without difficulty. A significant change in volume may necessitate replacement with blood products, although iron replacement may be preferred.

Stimulates myometrial contractility and reduces blood loss. Oxytocin is usually added to infusion intraoperatively after delivery of the infant’s shoulders and is maintained into the early postoperative period.

NURSING DIAGNOSIS:

May Be Related To:

Possibly Evidenced By:

**DESIRED OUTCOMES/EVALUATION
CRITERIA—CLIENT WILL:**

CONSTIPATION

Decreased muscle tone (diastasis recti, excess analgesia or anesthesia), effects of progesterone, dehydration, prelabor diarrhea, lack of intake, perineal/rectal pain

Reported abdominal/rectal fullness or pressure, nausea, less than usual amount of stool, straining at stool, decreased bowel sounds

Demonstrate return of intestinal motility, as evidenced by active bowel sounds and the passing of flatus.

Resume usual/optimal elimination pattern within 4 days postpartum.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Auscultate for presence of bowel sounds in all four quadrants every 4 hr following cesarean birth.

Determines readiness for oral feedings, and possible developing complication, e.g., ileus. Usually, bowel sounds are not heard on the 1st day after surgical procedure, are faint on the 2nd day, and are active by the 3rd day.

Palpate abdomen, noting distension or discomfort.

Indicates gas formation and accumulation or possible paralytic ileus.

Note passing of flatus or belching.

Indicates return of motility.

Encourage adequate oral fluids (e.g., 6–8 glasses/day) once oral intake resumes. Recommend increased dietary roughage and fruits and vegetables.

Roughage (e.g., fruits and vegetables, especially with seeds and skins) and increased fluids provide bulk, stimulate elimination, and prevent constipated stool. Note: Food or fluid offered before return of peristalsis may contribute to paralytic ileus.

Encourage leg exercises and abdominal tightening; promote early ambulation.

Leg exercises tighten abdominal muscles and improve abdominal motility. Progressive ambulation after 24 hr promotes peristalsis and gas expulsion, and alleviates or prevents gas pains.

Identify those activities that client can use at home to stimulate bowel action.

Helps in re-establishing normal evacuation pattern and promotes independence.

Collaborative

Administer analgesics 30 min before ambulation.

Facilitates ability to ambulate; however, narcotics, if used, may reduce bowel activity.

Provide stool softener or mild cathartic.

Softens stool, stimulates peristalsis, and helps re-establish bowel function.

Administer hypertonic or small soap suds enema.

Promotes bowel evacuation and relieves gaseous distension.

Insert or maintain NG tube as indicated.

May be necessary to decompress the stomach and relieve distension associated with paralytic ileus.

NURSING DIAGNOSIS:

KNOWLEDGE deficit [LEARNING NEED], regarding physiological changes, recovery period, self care, and infant care needs

May Be Related To:

Lack of exposure/recall, misinterpretation, unfamiliarity with resources

Possibly Evidenced By:

Verbalized concerns/misconceptions, hesitancy in or inadequate performance of activities, inappropriate behaviors (e.g., apathy)

DESIRED OUTCOMES/EVALUATION CRITERIA—CLIENT WILL:

Verbalize understanding of physiological changes, individual needs, expected outcomes.

Perform necessary activities/procedures correctly and explain reasons for the actions.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Assess client's readiness and motivation for learning. Assist client/couple in identifying needs.

The postpartal period can be a positive experience if opportune teaching is provided to foster maternal growth, maturation, and competence. However, the client needs time to move from a "taking in" to a "taking hold" phase, in which her receptiveness and readiness is heightened and she is emotionally and physically ready for learning new information to facilitate mastery of her new role. Although basic information may be provided/reviewed the 1st day, the client is usually receptive to learning more in-depth material by the 2nd or 3rd day postpartum.

Initiate written teaching plan using standardized format, checklist, or clinical pathway. Document information given and client's response.

Helps assure completeness of information parents receive from staff members and reduces client confusion caused by dissemination of conflicting advice or information.

Assess client's physical status. Plan group or individual sessions following administration of medication or when client is comfortable and rested.

Discomfort associated with incision or afterpains, or bowel/bladder discomfort, is usually less severe by the 2nd or 3rd postoperative day, allowing the client to concentrate more fully and be more receptive to learning.

Note psychological state and response to cesarean birth and mothering role. (Refer to ND: Self Esteem, situational low.)

Anxiety related to ability to care for herself and her child, possible disappointment over the birth experience, or concerns regarding her separation from the infant may have a negative impact on client's learning abilities and readiness.

Provide information related to normal physiological and psychological changes associated with cesarean birth and needs associated with the postpartal period.

Helps client to recognize normal changes from abnormal responses that may require treatment. Client's emotional state may be somewhat labile at this time and often is influenced by physical well-being. Anticipating such changes may reduce the stress associated with this transition period that necessitates learning new roles and taking on new responsibilities. Note: Client has had a major abdominal surgical procedure requiring at least 6–8 wk for physiological recovery, but client may not feel fully recovered for up to 6 mo.

Stress importance of adequate rest, fluid/dietary intake, and necessity for specific activity limitations (e.g., avoidance of lifting and driving).

Promotes healing, facilitates recovery, protects incision—reducing risk of dehiscence.

Review self-care needs (e.g., perineal care, incisional care, hygiene, voiding). Encourage participation in self-care, as client is able. Demonstrate method of getting out of a flat bed without the use of siderails.

Discuss prescribed exercise program.

Identify signs/symptoms requiring notification of healthcare provider (e.g., fever, dysuria, increase in amount of lochial flow or return to bright red lochial exudate, or separation of suture line).

Demonstrate techniques of infant care. Observe return demonstration by client/couple. (Refer to CP: The Neonate at 2 Hours to 2 Days of Age; ND: Knowledge deficit [Learning Need].)

Review information regarding appropriate choice for infant feeding (e.g., physiology of breastfeeding, diet, positioning, breast and nipple care, and removal of infant from breast; formula types/preparation, infant position during bottle feeding, burping techniques).

Discuss plans for home management: assistance with housework, physical layout of house, infant sleeping arrangements.

Determine availability of support system(s), plans after discharge.

Provide numbers for appropriate telephone contacts. Identify available community resources; e.g., visiting nurse/home care services, Public Health Service, WIC program, La Leche League, Mothers of Twins.

Discuss resumption of sexual intercourse and plans for contraception. Provide information about available methods, including advantages and disadvantages. (Refer to CP: 1 Week Following Discharge; ND: Knowledge deficit [Learning Need].)

Facilitates autonomy, helps prevent infection, and promotes healing. By turning on her side, using her arms to lift herself to a sitting position, and pushing with her hands to lift buttocks off the bed to a standing position, client can continue to ease stress on incision after discharge.

A progressive exercise program can usually be started once abdominal discomfort has eased (by approximately 3–4 wk postpartum). Helps tone musculature, increases circulation, produces a trimmer figure, and enhances feelings of general well-being. Client should be advised not to lift objects heavier than the infant for approximately 2 wk, and to bend at knees when lifting baby.

Prompt evaluation and intervention may prevent/limit development of complications (e.g., hemorrhage, infection, delayed healing).

Assists parents in mastery of new tasks.

Promotes independence and optimal feeding experience. When bottle feeding, it is important to feed the infant alternately on the right and left side to promote eye development. Slight dehydration or physical or emotional trauma may delay onset of lactation for the client who has undergone a cesarean birth.

Client who has undergone cesarean birth may need more assistance when first home than the client who has given birth vaginally. Stairs and the use of low cradles or bassinets may cause difficulties for the postoperative client.

Helps to identify individual needs, necessity of home visitation, and provides opportunity to correct misconceptions/unrealistic expectations. Promotes problem solving.

Provides ready resources to answer questions. Promotes independence and provides support for adaptation to multiple changes.

Intercourse may be resumed as soon as it is comfortable for the client and healing has progressed, generally 4–6 wk postpartum. Couple may need clarification regarding available contraceptive methods and the fact that pregnancy could occur even prior to the 4–6-wk visit.

Provide or reinforce information related to follow-up postpartal examination.

Postpartum evaluations for the client who has undergone cesarean delivery may be scheduled at 3 wk rather than 6 wk because of increased risk of infection and delayed healing.

NURSING DIAGNOSIS:**URINARY ELIMINATION, altered****May Be Related To:**

Mechanical trauma/diversion, hormonal effects (fluid shifts and/or increased renal plasma flow), effects of anesthesia

Possibly Evidenced By:

Increased bladder filling/distension, changes in amount/frequency of voiding

DESIRED OUTCOMES/EVALUATION CRITERIA—CLIENT WILL:

Resume usual/optimal voiding patterns following catheter removal.

Empty bladder with each void.

ACTIONS/INTERVENTIONS**RATIONALE**

Independent

Note and record amount, color, and concentration of urinary drainage.

Oliguria (output less than 30 ml/hr) may be caused by excess fluid loss, inadequate fluid replacement, or antidiuretic effects of infused oxytocin.

Test urine for albumin and acetone. Distinguish between proteinuria associated with PIH and that associated with normal processes (Refer to CP: The Client at 4 Hours to 2 Days Postpartum; ND: Fluid Volume, risk for excess.)

Catalytic process associated with uterine involution may result in normal proteinuria (1+) for the first 2 days postpartum. Acetone may indicate dehydration associated with prolonged labor and/or delivery.

Provide oral fluid, e.g., 6–8 glasses per day, as appropriate.

Fluids promote hydration and renal function, and help prevent bladder stasis.

Palpate bladder. Monitor fundal height and location and amount of lochial flow.

Renal plasma flow, which increases by 25%–50% during the prenatal period, remains elevated in the 1st wk postpartum, resulting in increased bladder filling. Bladder distension can be assessed by degree of uterine displacement; causes increased uterine relaxation and lochial flow.

Note signs and symptoms of UTI (e.g., cloudy color, foul odor, burning sensation, or frequency) following catheter removal.

Presence of indwelling catheter predisposes client to introduction of bacteria and UTI. (Refer to ND: Infection, risk for.)

Use methods to facilitate voiding after catheter removal (e.g., run water in sink, pour warm water over perineum).

Client should void within 6–8 hr following catheter removal, yet may have difficulty emptying bladder completely.

Instruct client to perform Kegel exercise daily after effects of anesthesia have subsided.

Performing Kegel exercise 100 times/day increases circulation to perineum, aids in healing and recovery of tone of pubococcygeal muscle, and prevents or reduces stress incontinence.

Collaborative

Maintain IV infusion for 24 hr following surgery, as indicated. Increase infusion rate if output is 30 ml/hr or less.

Usually, 3 L of fluid, including lactated Ringer's solution, is adequate to replace losses and maintain renal flow/urine output.

Remove catheter per protocol/as indicated.

Generally, catheter may be safely removed between 6–12 hr postpartum; but for convenience it may remain in client until the morning after surgery.

Monitor laboratory test results, such as BUN and 24-hr urine for total protein, creatinine clearance, and uric acid, as indicated.

In the client who has had PIH, kidney or vascular involvement may persist, or it may appear for the first time during the postpartal period. As steroid levels decrease following delivery, renal function, evidenced by BUN and creatinine clearance, begins to return to normal within 1 wk; anatomic changes (e.g., dilation of ureters and renal pelvis) may take up to 1 mo to return to normal.

NURSING DIAGNOSIS:**SELF CARE deficit [specify type/level]****May Be Related To:**

Effects of anesthesia, decreased strength and endurance, physical discomfort

Possibly Evidenced By:

Verbalization of inability to participate at level desired

DESIRED OUTCOMES/EVALUATION

Demonstrate techniques to meet self-care needs.

CRITERIA—CLIENT WILL:

Identify/use available resources.

ACTIONS/INTERVENTIONS**RATIONALE**

Independent

Ascertain severity/duration of discomfort.
Note presence of postspinal headache.

Intense pain affects emotional and behavioral responses, so that the client may be unable to focus on self-care activities until her physical needs for comfort are met. Intense headache associated with upright position requires modification of activities and additional assistance to meet individual needs.

Assess client's psychological status.

Physical pain experience may be compounded by mental pain that interferes with client's desire and motivation to assume autonomy.

Note cultural expectations/practices.

Some cultures, (e.g., Mexican/Arab-American, Haitian, Russian) require the new mother to observe a specified period of bed rest/activity restrictions during which other female members of her family may provide care.

Determine type of anesthesia, and associated orders or protocol regarding positioning/ambulation.

Epidural anesthesia (especially following bolus dose of duramorph) may cause generalized weakness, creating safety concerns, and requires careful assessment before sitting upright/getting out of bed. Clients who have undergone spinal anesthesia may be directed to lie flat and without pillow for several hours following administration of anesthesia.

Reposition client every 1–2 hr; assist with pulmonary exercises, ambulation, and leg exercises.

Helps prevent surgical complications such as phlebitis or pneumonia, which may occur when discomfort levels interfere with client's normal repositioning/activity.

Offer assistance as needed with hygiene (e.g., mouth care, bathing, back rubs, and perineal care).

Improves self-esteem; increases feelings of well-being.

Offer choices when possible (e.g., selection of juices, scheduling of bath, destination during ambulation).

Allows some autonomy, even though client depends on professional assistance. Note: Some cultures restrict bathing/showers for a predetermined length of time after delivery or until cessation of lochial flow.

Collaborative

Administer analgesic agent every 3–4 hr, as needed.

Reduces discomfort, which could interfere with ability to engage in self-care.

Convert IV line to saline lock, as appropriate.

Permits unrestricted movement of extremities, thereby allowing client to function more independently, regardless of ongoing intermittent IV therapy (e.g., antibiotics).