Perioperative Nursing NCLEX Review

I. PREOPERATIVE

A. Obtaining informed consent

1. The surgeon is responsible for explaining the surgical procedure to the client and answering the client's questions. Often, the nurse is responsible for obtaining the client's signature on the consent form for surgery,which indicates the client's agreement to the procedure based on the surgeon's explanation.
2. The nurse may witness the client's signing of the consent form, but the nurse must be sure that the client has understood the surgeon's explanation of the surgery.
3. The nurse needs to document the witnessing of the signing of the consent form after the client acknowledges understanding the procedure.
4. Minors (clients younger than 18 years) may need a parent or legal guardian to sign the consent form.
5. Older clients may need a legal guardian to sign the consent form.
6. Psychiatric clients have a right to refuse treatment until a court has legally determined that they are unable to make decisions for themselves.
7. No sedation should be administered to the client before the client signs the consent form.
8. Obtaining telephone consent from a legal guardian or power of attorney for health care is an acceptable practice if clients are unable to give consent themselves. The nurse must engage another nurse as a witness to the consent given over the telephone.

B. Nutrition

1. Review the surgeon's prescriptions regarding the NPO (nothing by mouth) status before surgery.
2. Withhold solid foods and liquids as prescribed to avoid aspiration, usually for 6 to 8 hours before general anesthesia and for approximately 3 hours before surgery with local anesthesia (as prescribed).
3. Insert an intravenous (IV) line and administer IV fluids, if prescribed; per agency policy, the IV catheter size should be large enough to administer blood products if they are required.

C. Elimination

1. If the client is to have intestinal or abdominal surgery, per surgeon's preference an enema, laxative, or both may be prescribed for the day or night before surgery.
2. The client should void immediately before surgery.
3. Insert an indwelling urinary catheter, if prescribed; urinary catheter collection bags should be emptied immediately before surgery, and the nurse should document the amount and characteristics of the urine.

D. Surgical site

1. Clean the surgical site with a mild antiseptic or antibacterial soap on the night before

surgery, as prescribed.
2. Shave the operative site, as prescribed; shaving may be done in the operative area.

NCLEX!!! Hair on the head or face (including the eyebrows) should be shaved only if prescribed.

E. Preoperative client teaching

1. Inform the client about what to expect postoperatively.
2. Inform the client to notify the nurse if the client experiences any pain postoperatively and that pain medication will be prescribed and given as the client requests. The client should be informed that some degree of pain should be expected and is normal.
3. Inform the client that requesting an opioid after surgery will not make the client a drug addict.
4. Demonstrate the use of a patient-controlled analgesia (PCA) pump if prescribed.
5. Instruct the client how to use noninvasive pain relief techniques such as relaxation, distraction techniques, and guided imagery before the pain occurs and as soon as the pain is noticed.
6. The nurse should instruct the client not to smoke (for at least 24 hours before surgery); discuss smoking cessation treatments and programs.
7. Instruct the client in deep-breathing and coughing techniques, use of incentive spirometry, and the importance of performing the techniques postoperatively to prevent the development of pneumonia and atelectasis.
8. Instruct the client in leg and foot exercises to prevent venous stasis of blood and to facilitate venous blood return.
9. Instruct the client in how to splint an incision, turn, and reposition.
10. Inform the client of any invasive devices that may be needed after surgery, such as a nasogastric tube, drain, urinary catheter, epidural catheter, or IV or subclavian lines.
11. Instruct the client not to pull on any of the invasive devices; they will be removed as soon as possible.

F. Psychosocial preparation

1. Be alert to the client’s level of anxiety.
2. Answer any questions or concerns that the client may have regarding surgery.
3. Allow time for privacy for the client to prepare psychologically for surgery.
4. Provide support and assistance as needed.
5. Take cultural aspects into consideration when providing care.

G. Preoperative checklist

1. Ensure that the client is wearing an identification bracelet.
2. Assess for allergies, including an allergy to latex.
3. Review the preoperative checklist to be sure that each item is addressed before the client is transported to surgery.
4. Follow agency policies regarding preoperative procedures, including informed consents, preoperative checklists, prescribed laboratory or radiological tests, and any other preoperative procedure.
5. Ensure that informed consent forms have been signed for the operative procedure, any blood transfusions, disposal of a limb, or surgical sterilization procedures.

6. Ensure that a history and physical examination have been completed and documented in the client's record.
7. Ensure that consultation requests have been completed and documented in the client's record.
8. Ensure that prescribed laboratory results are documented in the client's record.
9. Ensure that electrocardiogram and chest radiography reports are documented in the client's record.
10. Ensure that a blood type, screen, and crossmatch are performed and documented in the client's record within the established time frame per agency policy.
11. Remove jewelry, makeup, dentures, hairpins, nail polish (depending on agency procedures), glasses, and prostheses.
12. Document that valuables have been given to the client's family members or locked in the hospital safe.
13. Document the last time that the client ate or drank.
14. Document that the client voided before surgery.
15. Document that the prescribed preoperative medications were given.
16. Monitor and document the client's vital signs.

H. Preoperative medications

1. Prepare to administer preoperative medications as prescribed before surgery.
2. Instruct the client about the desired effects of the preoperative medication.

NCLEX!!! After administering the preoperative medications, keep the client in bed with the siderails up (per agency policy). Place the call bell next to the client; instruct the client not to get out of bed and to call for assistance if needed.

I. Arrival in the operating room

1. Guidelines to prevent wrong site and wrong procedure surgery

a. The surgeon meets with the client in the preoperative area and uses indelible ink to mark the operative site.

b. In the operating room, the nurse and surgeon ensure and reconfirm that the operative site has been appropriately marked.

c. Just before starting the surgical procedure, a time-out is conducted with all members of the operative team present to identify the correct client and appropriate surgical site again.

2. When the client arrives in the operating room, the operating room nurse will verify the identification bracelet with the client's verbal response and will review the client's chart.

3. The client's record will be checked for completeness and reviewed for informed consent forms, history and physical examination, and allergic reaction information.

4. The surgeon's prescriptions will be verified and implemented.

5. The IV line may be initiated at this time (or in the preoperative area), if prescribed.

6. The anesthesia team will administer the prescribed anesthesia.

NCLEX!!! Verification of the client and the surgical operative site is critical.

II. POSTOPERATIVE CARE

A. Description

1. Postoperative care is the management of a client after surgery and includes care given during the immediate postoperative period as well as during the days following surgery.
2. The goal of postoperative care is to prevent complications, to promote healing of the surgical incision, and to return the client to a healthy state.

B. Respiratory system

NCLEX!!! Assess breath sounds; stridor, wheezing, or a crowing sound can indicate partial obstruction, bronchospasm, or laryngospasm, while crackles or rhonchi may indicate pulmonary edema.

1. Monitor vital signs.
2. Monitor airway patency and ensure adequate ventilation (prolonged mechanical ventilation during anesthesia may affect postoperative lung function).
3. Remember that extubated clients who are lethargic may not be able to maintain an airway.
4. Monitor for secretions; if the client is unable to clear the airway by coughing, suction the secretions from the client's airway.
5. Observe chest movement for symmetry and the use of accessory muscles.
6. Monitor oxygen administration if prescribed.
7. Monitor pulse oximetry and end title carbon dioxide (CO2) as prescribed.
8. Encourage deep-breathing and coughing exercises as soon as possible after surgery.
9. Note the rate, depth, and quality of respirations; the respiratory rate should be greater than 10 and less than 30 breaths/minute.
10. Monitor for signs of respiratory distress, atelectasis, or other respiratory complications.

C. Cardiovascular system

1. Monitor circulatory status, such as skin color, peripheral pulses, and capillary refill, and for the absence of edema, numbness, and tingling.
2. Monitor for bleeding.
3. Assess the pulse for rate and rhythm (abounding pulse may indicate hypertension, fluid overload, or client anxiety).
4. Monitor for signs of hypertension and hypotension.
5. Monitor for cardiac dysrhythmias.
6. Monitor for signs of thrombophlebitis, particularly in clients who were in the lithotomy position during surgery.
7. Encourage the use of antiembolism stockings or sequential compression devices (Fig. 18-3), if prescribed,to promote venous return,strengthen muscletone, and prevent pooling of blood in the extremities.

D. Musculoskeletal system

1. Assess the client for movement of the extremities.
2. Review the surgeon’s prescriptions regarding client positioning or restrictions.
3. Encourage ambulation if prescribed; before ambulation, instruct the client to sit at the edge of the bed with his or her feet supported to assume balance.
4. Unless contraindicated, place the client in a low Fowler’s position after surgery to increase the size of the thorax for lung expansion.
5. Avoid positioning the postoperative client in a supine position until pharyngeal reflexes have returned; if the client is comatose or semicomatose, position on the side (in addition, an oral airway may be needed).
6. If the client is unable to get out of bed, turn the client every 1 to 2 hours.

E. Neurological system

1. Assess level of consciousness.
2. Make frequent periodic attempts to awaken the client until the client awakens.
3. Orient the client to the environment.
4. Speak in a soft tone; filter out extraneous noises in the environment.
5. Maintain the client’s body temperature and prevent heat loss by providing the client with warm blankets and raising the room temperature as necessary.

F. Temperature control

1. Monitor temperature.
2. Monitor for signs of hypothermia that may result from anesthesia, a cool operating room, or exposure of the skin and internal organs during surgery.
3. Apply warm blankets, continue oxygen, and administer medication as prescribed if the client experiences postoperative shivering.

G. Integumentary system

1. Assess the surgical site, drains, and wound dressings (serous drainage may occur from an incision, but notify the surgeon if excessive bleeding occurs from the site).
2. Assess the skin for redness, abrasions, or breakdown that may have resulted from surgical positioning.
3. Monitor body temperature and wound for signs of infection.
4. Maintain a dry, intact dressing.
5. Change dressings as prescribed, noting the amount of bleeding or drainage, odor, and intactness of sutures or staples; commonly used dressings include 4Â4 inch gauze, nonadherent pads, abdominal pads, gauze rolls, and split gauze that are commonly referred to as drain sponges.
6. Wound drains should be patent; prepare to assist with the removal of drains (as prescribed by the surgeon) when the drainage amount becomes insignificant.
7. An abdominal binder may be prescribed for obese and debilitated individuals to prevent dehiscence of the incision.

H. Fluid and electrolyte balance

1. Monitor IV fluid administration as prescribed.
2. Record intake and output.
3. Monitor for signs of fluid or electrolyte imbalances.

I. Gastrointestinal system

1. Monitor intake and output and for nausea and vomiting.
2. Maintain patency of the nasogastric tube if present and monitor placement and drainage per agency procedure.
3. Monitor for abdominal distention.
4. Monitor for passage of flatus and return of bowel sounds.
5. Administer frequent oral care, at least every 2 hours.
6. Maintain the NPO status until the gag reflex and peristalsis return.
7. When oral fluids are permitted, start with ice chips and water.
8. Ensure that the client advances to clear liquids and then to a regular diet, as prescribed and as the client can tolerate.

NCLEX!!! To prevent aspiration, turn the client to a side-lying position if vomiting occurs; have suctioning equipment available and ready to use.

J. Renal system

1. Assess the bladder for distention.
2. Monitor urine output (urinary output should be at least 30 mL/hour).
3. If the client does not have a urinary catheter, the client is expected to void within 6 to 8 hours postoperatively depending on the type of anesthesia administered; ensure that the amount is at least 200 mL.

K. Pain management

1. Assess the type of anesthetic used and preoperative medication that the client received, and note whether the client received any pain medications in the post anesthesia period.
2. Assess for pain and inquire about the type and location of pain; ask the client to rate the degree of pain on a scale of 1 to 10, with 10 being the most severe.
3. If the client is unable to rate the pain using a numerical pain scale, use a descriptor scale that lists words that describe different levels of pain intensity, such as no pain, mild pain, moderate pain, and severe pain, or other available pain rating scales.
4. Monitor for objective data related to pain, such as facial expressions, body gestures, increased pulse rate, increased blood pressure, and increased respirations.
5. Inquire about the effectiveness of the last pain medication.
6. Administer pain medication as prescribed.
7. Ensure that the client with a PCA pump understands how to use it.
8. If an opioid has been prescribed, after administration assess the client every 30 minutes for respiratory rate and pain relief.
9. Use noninvasive measures to relieve postoperative pain, including provision of distraction, relaxation techniques, guided imagery, comfort measures, positioning, backrubs, and a quiet and restful environment.
10. Document effectiveness of the pain medication and noninvasive pain-relief measures.

NCLEX!!! Consider cultural practices and beliefs when planning pain management.

III. PNEUMONIA and ATELECTASIS

A. Description

1. Pneumonia: An inflammation of the alveoli caused by an infectious process that may develop 3 to 5 days postoperatively as a result of infection, aspiration, or immobilit

1. Atelectasis: A collapsed or airless state of the lung that may be the result of airway obstruction caused by accumulated secretions or failure of the client to deep-breathe or ambulate after surgery; a postoperative complication that usually occurs 1 to 2 days after surgery.

B. Assessment

1. Dyspnea and increased respiratory rate
2. Crackles over involved lung area
3. Elevated temperature
4. Productive cough and chest pain

C. Interventions

1. Assess lung sounds.
2. Reposition the client every 1 to 2 hours.
3. Encourage the client to deep-breathe, cough, and use the incentive spirometer as prescribed.
4. Provide chest physiotherapy and postural drainage, as prescribed.
5. Encourage fluid intake and early ambulation.
6. Use suction to clear secretions if the client is unable to cough.

IV. HYPOXEMIA

A. Description: An inadequate concentration of oxygen in arterial blood; in the postoperative client, hypoxemia can be due to shallow breathing from the effects of anesthesia or medications.

B. Assessment

1. Restlessness
2. Dyspnea
3. Diaphoresis
4. Tachycardia
5. Hypertension
6. Cyanosis
7. Low pulse oximetry readings

C. Interventions

1. Monitor for signs of hypoxemia.
2. Notify the surgeon.
3. Monitor lung sounds and pulse oximetry.
4. Administer oxygen as prescribed.
5. Encourage deep breathing and coughing and use of the incentive spirometer.
6. Turn and reposition the client frequently; encourage ambulation.

V. PULMONARY EMBOLISM

A. Description: An embolus blocking the pulmonary artery and disrupting blood flow to 1 or more lobes of the lung

B. Assessment

1. Sudden dyspnea
2. Sudden sharp chest or upper abdominal pain
3. Cyanosis
4. Tachycardia
5. A drop in blood pressure

C. Interventions

1. Notify the surgeon immediately because pulmonary embolism may be life-threatening and requires emergency action.
2. Monitor vital signs.
3. Administer oxygen and medications as prescribed.

VI. HEMORRHAGE

A. Description: The loss of a large amount of blood externally or internally in a short time period

B. Assessment

1. Restlessness
2. Weak and rapid pulse
3. Hypotension
4. Tachypnea
5. Cool, clammy skin
6. Reduced urine output

C. Interventions

1. Provide pressure to the site of bleeding.
2. Notify the surgeon.
3. Administer oxygen, as prescribed.
4. Administer IV fluids and blood, as prescribed.
5. Prepare the client for a surgical procedure, if necessary.

VII. SHOCK

A. Description: Loss of circulatory fluid volume, which usually is caused by hemorrhage

B. Assessment: Similar to assessment findings in hemorrhage

C. Interventions

1. If shock develops, elevate the legs.
2. Notify the surgeon.
3. Determine and treat the cause of shock.
4. Administer oxygen, as prescribed.
5. Monitor level of consciousness.
6. Monitor vital signs for increased pulse or decreased blood pressure.
7. Monitor intake and output.
8. Assess color, temperature, turgor, and moisture of the skin and mucous membranes.
9. Administer IV fluids, blood, and colloid solutions, as prescribed.

NCLEX!!! If the client had spinal anesthesia, do not elevate the legs any higher than placing them on the pillow; otherwise, the diaphragm muscles needed for effective breathing could be impaired.

VIII. THROMBOPHLEBITIS

A. Description

1. Thrombophlebitis is an inflammation of a vein, often accompanied by clot formation.
2. Veins in the legs are affected most commonly.

B. Assessment

1. Vein inflammation
2. Aching or cramping pain
3. Vein feels hard and cordlike and is tender to touch.
4. Elevated temperature

C. Interventions

1. Monitor legs for swelling, inflammation, pain, tenderness, venous distention, and cyanosis; notify the surgeon if any of these signs are present.
2. Elevate the extremity 30 degrees without allowing any pressure on the popliteal area.
3. Encourage the use of antiembolism stockings as prescribed; remove stockings twice a day to wash and inspect the legs.

4. Use a sequential compression device as prescribed.
5. Perform passive range-of-motion exercises every 2 hours if the client is confined to bed rest.
6. Encourage early ambulation, as prescribed.
7. Do not allow the client to dangle the legs. 8. Instruct the client not to sit in 1 position for an extended period of time.
8. Administer anticoagulants such as heparin sodium or enoxaparin, as prescribed.

IX. URINARY RETENTION

A. Description

1. Urinary retention is an involuntary accumulation of urine in the bladder as a result of loss of muscle tone.
2. It is caused by the effects of anesthetics or opioid analgesics and appears 6 to 8 hours after surgery.

B. Assessment

1. Inability to void
2. Restlessness and diaphoresis
3. Lower abdominal pain
4. Distended bladder
5. Hypertension
6. On percussion, bladder sounds like a drum.

C. Interventions

1. Monitor for voiding.
2. Assess for a distended bladder by palpation and bladder scanning if indicated.
3. Encourage ambulation when prescribed.
4. Encourage fluid intake unless contraindicated.
5. Assist the client to void by helping the client to stand.
6. Provide privacy.
7. Pour warm water over the perineum or allow the client to hear running water to promote voiding.
8. Contact the surgeon and catheterize the client as prescribed after all noninvasive techniques have been attempted.

X. CONSTIPATION

A. Description

1. Constipation is an abnormal infrequent passage of stool.
2. When the client resumes a solid diet postoperatively, failure to pass stool within 48 hours may indicate constipation.

B. Assessment

1. Absence of bowel movements
2. Abdominal distention
3. Anorexia, headache, and nausea

C. Interventions

1. Assess bowel sounds.
2. Encourage fluid intake up to 3000 mL/day unless contraindicated.
3. Encourage early ambulation.
4. Encourage consumption of fiber foods unless contraindicated.
5. Provide privacy and adequate time for bowel elimination.
6. Administer stool softeners and laxatives, as prescribed.

XI. PARALYTIC ILEUS

A. Description

1. Paralytic ileus is failure of appropriate forward movement of bowel contents.
2. The condition may occur as a result of anesthetic medications or of manipulation of the bowel during the surgical procedure.

B. Assessment

1. Vomiting postoperatively
2. Abdominal distention
3. Absence of bowel sounds, bowel movement, or flatus

C. Interventions

1. Monitor intake and output.
2. Maintain NPO status until bowel sounds return.
3. Maintain patency of a nasogastric tube if in place; assess patency and drainage per agency procedure.
4. Encourage ambulation
5. Administer IV fluids or parenteral nutrition, as prescribed.
6. Administer medications as prescribed to increase gastrointestinal motility and secretions.
7. If ileus occurs, it is treated first non surgically with bowel decompression by insertion of a nasogastric tube attached to intermittent or constant suction.

NCLEX!!! Vomiting postoperatively, abdominal distention, and absence of bowel sounds may be signs of paralytic ileus.

XII. WOUND INFECTION

A. Description

1. Wound infection may be caused by poor aseptic technique or a contaminated wound before surgical exploration; existing client conditions such as diabetes mellitus or immunocompromise may place the client at risk.
2. Infection usually occurs 3 to 6 days after surgery.
3. Purulent material may exit from the drains or separated wound edges.

B. Assessment

1. Fever and chills
2. Warm, tender, painful, and inflamed incision site
3. Edematous skin at the incision and tight skin sutures
4. Elevated white blood cell count

C. Interventions

1. Monitor temperature.
2. Monitor incision site for approximation of suture line, edema, or bleeding, and signs of infection (REEDA: redness, erythema, ecchymosis, drainage, approximation of the wound edges); notify the surgeon if signs of wound infection are present.
3. Maintain patency of drains, and assess drainage amount, color, and consistency.
4. Maintain asepsis, change the dressing, and perform wound irrigation, if prescribed.
5. Administer antibiotics, as prescribed.

XII. WOUND EVISCERATION and DEHISCENCE

A. Description

1. Wound dehiscence is separation of the wound edges at the suture line; it usually occurs 6 to 8 days after surgery.
2. Wound evisceration is protrusion of the internal organs through an incision; it usually occurs 6 to 8 days after surgery.
3. Evisceration is most common among obese clients, clients who have had abdominal surgery, or those who have poor wound-healing ability.
4. Wound evisceration is an emergency.

B. Assessment: Dehiscence

1. Increased drainage
2. Opened wound edges
3. Appearance of underlying tissues through the wound

C. Assessment: Evisceration

1. Discharge of serosanguineous fluid from a previously dry wound
2. The appearance of loops of bowel or other abdominal contents through the wound
3. Client reports feeling a popping sensation after coughing or turning.

NCLEX PRIORITIZATION!!!

Wound evisceration:

1. Call for help; ask that the surgeon be notified and that needed supplies be brought to the client's room.
2. Stay with the client.
3. While waiting for supplies to arrive, place the client in a low Fowler's position with the knees bent.
4. Cover the wound with a sterile normal saline dressing and keep the dressing moist.
5. Take vital signs and monitor the client closely for signs of shock.
6. Prepare the client for surgery as necessary.
7. Document the occurrence, actions taken, and the client's response.

XV. AMBULATORY CARE or ONE-DAY STAY SURGICAL UNITS

A. General criteria for client discharge

1. Is alert and oriented.
2. Has voided.
3. Has no respiratory distress.
4. Is able to ambulate, swallow, and cough.
5. Has minimal pain.
6. Is not vomiting.
7. Has minimal, if any, bleeding from the incision site.
8. Has a responsible adult available to drive the client home.
9. The surgeon has signed a release form.

B. Discharge teaching

1. Discharge teaching should be performed before the date of the scheduled procedure.
2. Provide written instructions to the client and family regarding the specifics of care.
3. Instruct the client and family about postoperative complications that can occur.
4. Provide appropriate resources for home care support.
5. Instruct the client not to drive, make important decisions, or sign any legal documents for 24 hours after receiving general anesthesia.
6. Instruct the client to call the surgeon, ambulatory center, or emergency department if postoperative problems occur.
7. Instruct the client to keep follow-up appointments with the surgeon.