**Nursing Process for Postoperative Patient**

* **Assessment**

1. The nurse monitors for airway patency and any signs of laryngeal edema. The quality of respirations, including depth, rate, and sound, is assessed regularly. Chest auscultation verifies that breath sounds are normal (or abnormal) bilaterally, and the findings are documented as a baseline for later comparisons.
2. The nurse assesses the patient’s pain level using a verbal or visual analog scale and assesses the characteristics of the pain.
3. The patient’s appearance, pulse, respirations, blood pressure, skin color (adequate or cyanotic), and skin temperature (cold and clammy, warm and moist, or warm and dry) are clues to cardiovascular function.
4. When the patient arrives in the clinical unit, the surgical site is assessed for bleeding, type and integrity of dressings, and drains.
5. The nurse also assesses the patient’s mental status and level of consciousness, speech, and orientation and compares them with the preoperative baseline. Although a change in mental status or postoperative restlessness may be related to anxiety, pain, or medications, it may also be a symptom of oxygen deficit or hemorrhage.
6. The bladder is assessed for distention (usually with a bladder scanner) because urinary retention can also cause restlessness.

* **Nursing diagnosis**

1. Decreased cardiac output related to shock or hemorrhage
2. Acute pain related to surgical incision
3. Impaired skin integrity related to surgical incision and drains
4. Ineffective thermoregulation related to surgical environment and anesthetic agents
5. Risk for imbalanced nutrition, less than body requirements related to decreased intake and increased need for nutrients secondary to surgery
6. Risk for ineffective airway clearance related to depressed respiratory function, pain, and bed rest.
7. Risk for constipation related to effects of medications, surgery, dietary change, and immobility
8. Risk for urinary retention related to anesthetic agents
9. Risk for injury related to surgical procedure

* **Planning and Goals**

The major goals for the patient include optimal respiratory function, relief of pain, optimal cardiovascular function, increased activity tolerance, unimpaired wound healing, maintenance of body temperature, and maintenance of nutritional balance.

* **Nursing Interventions**

**1) Preventing respiratory complication**

* Performs deep-breathing exercises
* Displays clear breath sounds
* Splints incisional site when coughing to reduce pain

**2) Promoting cardiac output**

* Assessing the patency of the IV lines and ensuring that the correct fluids are given at the prescribed rate.
* Intake and output, including emesis and output from wound drainage systems, are recorded separately and totaled to determine fluid balance.
* If the patient has an indwelling urinary catheter, hourly outputs are monitored immediately.
* Electrolyte levels and hemoglobin and hematocrit levels are monitored.
* Leg exercises and frequent position changes are initiated early in the postoperative period to stimulate circulation.

**3) Reliving pain**

**4) Encourage activity**

* Alternates periods of rest and activity
* Progressively increases ambulation
* Resumes normal activities within the prescribed time frame
* Performs activities related to self-care

**5) Resumes oral intake**

* Reports absence of nausea and vomiting
* Eats at least 75% of usual diet
* Is free of abdominal distress and gas pains.
* Exhibits normal bowel sounds

**6) Reports resumption of usual bowel elimination pattern**

**7) Resumes usual voiding pattern**

**8) Wound heals without complication**

Wounds heal by different mechanisms, depending on the condition of the wound. Surgical wound healing may occur in three ways, by first-intention, second-intention, and third-intention.

**Wound-Healing Mechanisms**

**First-Intention:** Healing Wounds made aseptically with a minimum of tissue destruction that are properly closed heal with little tissue reaction by first intention (primary union). When wounds heal by first-intention healing, granulation tissue is not visible and scar formation is minimal

**Second-Intention:** Second-intention healing (granulation) occurs in infected wounds (abscess) or in wounds in which the edges have not been approximated. When an abscess is incised, it collapses partly, but the dead and dying cells forming its walls are still being released into the cavity. For this reason, a drainage tube or gauze packing is inserted into the abscess pocket to allow drainage to escape easily.

**Third-Intention:** Third-intention healing (secondary suture) is used for deep wounds that either have not been sutured early or break down and are resutured later, thus bringing together two opposing granulation surfaces. This results in a deeper and wider scar. These wounds are also packed postoperatively with moist gauze and covered with a dry sterile dressing.

**Caring for Surgical Drains.**

Nursing interventions to promote wound healing also include management of surgical drains. Drains are tubes that exit the peri-incisional area to allow the escape of fluids that could otherwise serve as a culture medium for bacteria. The amount of bloody drainage on the surgical dressing is assessed frequently. Spots of drainage on the dressings are outlined with a pen, and the date and time of the outline are recorded on the dressing so that increased drainage can be easily seen.

**Changing the Dressing.**

Although the first postoperative dressing is usually changed by a member of the surgical team, subsequent dressing changes in the immediate postoperative period are usually performed by the nurse.

**A dressing is applied to a wound for one or more of the following reasons:**

(1) to provide a proper environment for wound healing.

(2) to absorb drainage

(3) to splint or immobilize the wound

(4) to protect the wound and new epithelial tissue from mechanical injury

(5) to protect the wound from bacterial contamination and from soiling by feces, vomitus, and urine

(6) to promote hemostasis, as in a pressure dressing

7) to provide mental and physical comfort for the patient.