Postoperative nursing management

Postoperative phase:

- extend from the time pt leaves OR until the last follow-up of the surgeon.

The post-anesthetic care unit (PACU)/Recovery Room

is located adjacent to OR.

Ch.Ch of PACU:

Quite, clean, Soft color painting, well ventilated, well prepared of necessary equipment.

Phases of post-anesthesia care :

1- Phase(1) PACU: immediate recovery phase, intensive nursing care

2- Phase (2) PACU: patients who require less frequent observation and less nursing care.

Admitting the patient to the PACU :

circulating nurse & anesthesiologist will give a thorough report to the PACU nurse include the following:

1. Type of surgery performed and any intraoperative complications
2. Type of anesthesia
3. Drains and type of dressings
4. Presence of endotracheal (ETT) tube or type of oxygen to be administered (eg, nasal cannula, T-piece)

Admitting the patient to the PACU :

5. Types of lines and locations (eg, peripheral IV, arterial line)
6. Catheters or tubes such as Foley
7. Administration of blood, fluid and electrolyte balance
8. Drug allergies
9. Preexisting medical conditions
10. patients profile (age) , general condition, airway patency, and vital signs.

Nursing Management in the PACU

1- Assessing the patient:

- blood oxygenation, vital signs (Q 15 minutes) , LOC, surgical site, drainage system.

2- Maintaining a patient airway :

- prevent hypoxemia and hypercapnia,
- assess respiratory status (R.R . depth. ABGs.)
- oxygen administration PRN.
- Allow the airway to remain in place until the patient begins to waken and is trying to eject the airway.

Nursing Management in the PACU …Cont

- The airway keeps the passage open and prevents the tongue from falling backward and obstructing the air passages.
- Leaving the airway in after the pharyngeal reflex has returned may cause the patient to gag and vomit.

3- Maintain Cardiovascular stability (circulation) :

- Assess mental status, vital signs, cardiac rhythm, skin temperature, color, moisture, urine output, and CVP.

Continue : nursing management

Determining readiness for discharge from PACU:

stable for vital signs

orientation to place, time, and person

uncompromised lung function

pulse oximetry indicates adequate blood oxygen saturation.

urine output at least 30 ml/ hr

absent N+V

Minimal pain

Cardiovascular Complications post operative

1- hypotension and shock :results from blood loss, position changes, or side effects of medication and anesthesia.

2- hemorrhage

3- hypertension and dysrhythmias: *pain, hypoxia, bladder distention,*

- dysthymia related to electrolytes imbalance

Nursing intervention for cardiovascular complications

- Take vital signs frequently, until the patient is well stabilized. Then Q 4 hours .

a.Know the patient's preoperative BP to make significant comparisons.

b.Report immediately a falling pressure and an increasing heart rate.

c.Report arrhythmias, and respirations Q30 min.

d.Evaluate pulse pressure to determine status of perfusion.

Continue : nursing management

4- Relieving pain and anxiety : Opioid analgesia

5- Controlling nausea and vomiting

Causes

1. Inhalation (volatile) anesthetics, which may irritate the stomach lining and stimulate the vomiting center in the brain.
2. accumulation of fluid or food in the stomach before peristalsis returns.
3. as a result of abdominal distention.
4. if the patient believes preoperatively that vomiting will occur (psychological induction).
5. a side effect of narcotics.

Preventive Measures

1. Insert nasogastric tube preoperatively for operations on GIT to prevent abdominal distention, which triggers vomiting.
2. Determine whether patient is sensitive to narcotic
3. Be alert for any significant comment such as, “I just know I will vomit under anesthesia.” prescribe an antiemetic drug and also talk to the patient before the operation.

Continue…Postoperative complications :

Thirst

Causes

1. Inhibition of secretions by preoperative medication with atropine.
2. Fluid lost via perspiration, blood loss, or due to preoperative fluid restriction.

Preventive Measures

- often unavoidable due to anesthesia.

Nursing Interventions

1. Administer fluids by vein or by mouth if tolerated and permitted.
2. Offer sips of hot tea with lemon juice if diet orders allow.
3. Apply a moistened gauze square over lips occasionally.
4. Allow the patient to rinse mouth with mouth wash.
5. Obtain hard candies or chewing gum, if allowed.

Continue…Postoperative complications :

Constipation and Gas Cramps / Causes

1. Trauma and manipulation of the bowel during surgery, as well as narcotic use
2. Local inflammation
3. Long-standing bowel problem; this may lead to fecal impaction.

Preventive Measures

1. Encourage early ambulation
2. Provide adequate fluid intake
3. Advocate a proper diet.
4. Encourage early use of non-narcotic analgesia

Nursing Interventions:

1. Insert gloved finger and break up the fecal impaction manually, if necessary.
2. Administer an oil retention enema or a rectal tube to decrease painful flatulence.
5. Administer laxatives, suppositories, and stool softeners.

Continue…Postoperative complications :

Deep Vein Thrombosis

- (DVT) occurs in pelvic veins or in deep veins of the lower extremities in postoperative patients.
- most common after hip surgery, and general thoracic or abdominal surgery.
- major source of PE.

Pulmonary Complications

Causes and Clinical Manifestations

1. **Atelectasis**

a. Incomplete expansion of lung or portion of it occurring within 48 hours of surgery

b. Attributed to absence of periodic deep breaths

c. A mucous plug closes a bronchiole, causing alveoli distal to plug to collapse.

d. Symptoms : mild to severe tachypnea, tachycardia, cough, fever, hypotension, and decreased breath sounds and chest expansion of affected side.

2- Aspiration

a. Caused by inhalation of food, gastric contents, water, or blood into the tracheobronchial system.

b. Anesthetic agents and narcotics depress the CNS, causing inhibition of gag or cough reflexes.

c. NGT insertion made both upper and lower esophageal sphincters partially incompetent.

3.Pneumonia

a. an inflammatory response in which cellular material replaces alveolar gas.

b. Predisposing factors include atelectasis, URTI, secretions, aspiration, prolonged intubation, smoking, obesity

d. Symptoms include dyspnea, tachypnea, pleuritic chest pain, fever, hemoptysis, cough.

Preventive Measures

1. Suction if patient is unable to clear own airway.
2. Prevent regurgitation and aspiration through proper patient positioning.

Pulmonary Complications:

Nursing Interventions and Management

1. Monitor vital signs and symptoms of respiratory difficulties such as restlessness or a decreased level of consciousness or chest pain, dyspnea or cough
2. Promote full expansion of the lungs.

a. Turn the patient frequently.

b. Encourage the patient to take 10 deep breaths hourly, holding each breath to a count of 5 and exhaling.

c. Use a spirometer

d. Assist the patient in coughing .

e. ambulate as early as ordered.

f. Provide cool mist or heated nebulizer

g. Encourage to take fluids

h. Elevate the head of bed

Urinary Retention

Causes

1. Occurs after operations of the rectum, anus, vagina, or lower abdomen.
2. Caused by spasm of bladder sphincter.
3. More common in male.

Clinical Manifestations

1. Inability to void
2. Voiding small amounts at frequent intervals
3. Palpable bladder
4. Lower abdominal discomfort

Nursing Interventions and Management

1. Assist patient to sit or stand (if permissible)
2. Provide privacy.
3. Run the tap water—frequently the sound or sight of running water relaxes spasm of the bladder sphincter.
4. Use warmth to relax sphincters (ie, sitz bath).
5. Administer bethanechol chloride (Urecholine) intramuscularly, if prescribed.
6. Catheterize only when all other measures are unsuccessful.

Wound Infection

Causes

- Drying tissues by a long exposure, contaminated structures, obesity, old age, hypoxemia, and malnutrition .
- Staphylococcus aureus, Escherichia coli, Klebsiella, Enterobacter, and Proteus.

Factors affecting the extent of infection include:

a. Kind, virulence, and quantity of contaminating microorganisms

b. Presence of foreign bodies

c. Location of the wound

d. Amount of dead space or presence of hematoma

e. Immune response of the patient

f. adequate blood supply to wound

g. Presurgical condition of the patient (eg, elderly, alcoholism, diabetes, malnutrition)

Continue… wound infection

Clinical Manifestations

1. Redness, excessive swelling, tenderness, warmth
2. Red streaks in the skin near the wound
3. Pus or other discharge from the wound
4. Tender, enlarged lymph nodes in axillary region or groin closest to wound
5. Foul smell from wound
6. Generalized body chills or fever
7. Elevated pulse

Continue… wound infection

Wound Classification

1. Incised wounds—made by a clean cut of a sharp instrument, such as a surgical incision with a scalpel.
2. Contused wounds—made by blunt force does not break the skin but causes tissue damage with bruising.
3. Lacerated wounds—made by an object that tears tissues include glass, wire
4. Puncture wounds—made by a pointed instrument, such as bullet, and nail.

Puncture wound

LACERATED WOUND-IRRIGULAR EDGE

INCISED WOUND

Contused wound

Types of dressing

- assigment