

Post-Anesthesia Care Unit (PACU) - 2024

Postoperative Period - PACU

- Begins immediately after surgery.
- PACU is located adjacent to OR
 - Minimizes transport
 - Provides immediate access to anesthesia and OR personnel
- Nursing care focus
 - Protecting the patient.
 - **Preventing complications post-surgical procedure**

PACU

- Initial recovery period
 - Constant vigilance is required
 - Most prone to complications
 - More intense monitoring required
 - Goal is to prepare the patient for home or inpatient nursing unit.

PACU

Continuous Monitoring

Airway

- Patency
- Artificial airway

Breathing

- RR and quality
- Breath sounds
- Supplemental oxygen
- Continuous pulse oximetry

Circulation

- Heart rate/rhythm
- BP
- Peripheral pulses
- Capillary refill
- Skin color and temperature

Neurologic

- LOC/ Glasgow Coma Scale
- Orientation
- Sensory and motor status
- Pupil size and reaction

Intake & Output

- IV fluids = intake
- Urine, NG, drains, Estimated blood loss (EBL), etc. = output

Gastrointestinal

- Bowel sounds
- Nasogastric tubes (NG Tubes)—Verify placement to suction or clamped

- Nausea and/or vomiting

Surgical site

- Dressing

Pain

- Incisional
- Other

Laboratory and diagnostic test results

- H and H's (Hemoglobin and Hematocrit) are common to be ordered pre- and post-op

Postoperative Complications

Respiratory

- Airway obstruction
 - Swelling or spasms of the larynx or trachea
 - Mucous in airway
 - Tongue blocks airway.
 - Breathing can be **noisy when something obstructing** airway.
- Hypoxia
 - Decrease in oxygen saturation
 - SpO₂ < 90-92%
 - Often due to hypoventilation
 - Decreased RR or effort secondary to
 - Drugs (anesthesia, analgesia)
 - Pain

Nursing Interventions

- What interventions can you perform to prevent respiratory complications?
 - Proper patient positioning
 - Lateral "**Recovery**" **position**
 - Once conscious – Supine position
 - Oxygen therapy
 - Cough and deep breathing -encourage patient to take deep breaths.
 - Encourage cough and deep breathing **as soon as they have awakened** and can follow commands
 - Change patient position every 1-2 hours
 - Pain management
 - Splinting with pillow or blanket

Postoperative Complications

Cardiovascular

- Hypotension
 - Decreased perfusion to vital organs
 - Most common cause:
 - Fluid and blood loss (unreplaced)
 - Most common losses = 100-500mL
- Hypertension
 - Results from SNS stimulation

- Pain, anxiety, hypothermia, resp problems
- Dysrhythmias
 - Hypoxemia (low oxygen levels)
 - Electrolyte imbalance
 - **K+ especially**
 - Heart disease
 - Pain

Nursing Interventions

- What interventions can you perform to prevent cardiovascular complications?
 - Frequent VS monitoring
 - Notify healthcare provider if
 - Systolic BP < 90 mmHg or >160 mmHg
 - Pulse <60 bpm or >120 bpm
 - Gradual decrease in BP over several readings
 - Change in cardiac rhythm
- Hypotension
 - Slight hypotension with normal HR, and dry, pink skin =residual effects of anesthesia- **normal-just monitor!!**
 - **Otherwise, treat first with O2 therapy**
 - Adequate fluid replacement
 - Assess surgical site for bleeding
- Hypertension
 - Correct whatever is stimulating SNS
 - Pain meds
 - BP meds
 - Correct respiratory problems—give oxygen
- Dysrhythmias
 - Correct underlying cause

Postoperative Complications

Neurologic/Psychological

- Emergence delirium-or the patient “waking up wild” – is neurologic alteration that causes the most concern.
Manifested by behaviors such as restlessness, agitation, disorientation, thrashing, and shouting. First, suspect **Hypoxia!**
- Delayed emergence-may result from prolonged drug action of opioids, sedatives and inhalation agents.
- Anxiety-from waking up in an unfamiliar location or be experiencing pain.

Nursing Interventions

- What interventions can you perform to prevent neuropsychological complications?
 - Emergence delirium/Anxiety
 - Monitor oxygen levels with pulse oximetry (give O2 if needed)
 - Pain management
 - Repositioning

- Emotional support
- Maintain patient safety
- Delayed emergence
 - Reversal agents

Postoperative Complications

Pain and Discomfort (Separate Handout)

- Assessment
 - Physiologic factors
 - Psychological factors

Nursing Interventions

- What interventions can you perform to prevent pain and discomfort complications?
 - Anesthesiologist writes specific pain orders
 - IV narcotics
 - Epidural/PCEA
 - Patient-controlled analgesia (PCA)
 - Position of comfort

Postoperative Complications

Alterations in Temperature

- Hypothermia
 - Core temp < 96.8 degrees F
 - Present first few hours after surgery
 - Result of
 - Skin Exposure during surgery
 - Cold irrigants
 - Effects of anesthesia

Nursing Interventions to Prevent Hypothermia

- Passive warming
 - Warm blankets, socks, limiting skin exposure
- Active warming
 - Bair hugger, warm IV fluids

Postoperative Complications

Gastrointestinal

- Nausea/vomiting
 - Most common post-op complication

Nursing Interventions

- What interventions can you perform to prevent GI complications?
 - Nausea/vomiting
 - Antiemetics
 - Place in lateral recovery position to prevent aspiration
 - Keep NPO until gag reflex returns
 - NG tube to suction

Modified Aldrete Scoring System

- Used to assess readiness for discharge from PACU
 - A score of 8-10 indicates recovery from anesthesia and readiness for transfer or discharge
 - See separate handout for scoring system

PACU

Discharge Criteria

- Achieve 8 or greater on Modified Aldrete Score
- Stable vital signs
- No excessive bleeding or drainage
- Return of reflexes (gag, cough, swallow)
- Pain controlled
- Minimal n/v
- Urine output at least 30 mL/hour
- Report given to receiving unit

Ambulatory Surgery

- Also called same-day surgery (SDS)
- Patient has procedure and then goes home the same day
- Discharge criteria
 - Same as regular PACU discharge criteria, plus...
 - Must be ambulatory with assist
 - Cannot drive (responsible adult present)
 - Pain controlled w/out meds or with PO analgesics
 - Written discharge instructions given & understanding verbalized
 - Follow-up call w/in 24 hours

