Chapter 22
Care of Patients with Alterations in Health

Standard Steps in Selected Skills

- All nursing skills must include basic steps for the safety and well-being of the patient and the nurse
  - Before the skill
  - During the skill
  - Completion of procedure

Skills for Sensory Disorders

- Irrigations
  - Eye irrigations
    - Relieve local inflammation, apply antiseptic solution, or flush out exudate or caustic solutions
    - Warm saline and small syringe or eye dropper are usually used
    - Irrigation should always be done from the inner canthus to the outer canthus
    - A copious irrigation of the eye may be accomplished with the use of intravenous tubing and bag connected to a Morgan Therapeutic Lens
Skills for Sensory Disorders (Cont.)

- Irrigations
  - Ear Irrigations
    - Using a small syringe and solution at body temperature
    - Slow, gentle irrigation works best
    - Contraindicated when a vegetable foreign body obstructs the auditory canal
    - Contraindicated if the patient has a cold, a high temperature, an ear infection, or an injured or ruptured tympanic membrane

Skills for Gastrointestinal Disorders

- Nasal irrigation
  - Soothes inflamed mucous membranes and washes away dried mucus, secretions, and possible foreign matter
  - May be accomplished with the use of a specially designed electronic device or a bulb syringe
  - Can benefit acute or chronic nasal conditions and patients who inhale allergens and toxins
  - Contraindicated with advanced destruction of the sinuses, foreign bodies, and frequent nosebleeds

Skills for Heat and Cold Therapy

- The nurse should
  - Understand the normal responses to local temperature variations
  - Assess the integrity of the body part
  - Determine patient’s ability to sense temperature variations
  - Ensure proper operation of equipment
Skills for Heat and Cold Therapy (Cont.)

- Local effect of heat and cold
  - Effects of heat application
  - Effects of cold application

Skills for Heat and Cold Therapy (Cont.)

- Assessment
  - Assess patient’s physical condition for signs of potential intolerance to heat and cold
  - Observe the area to be treated for impairment of skin integrity
  - Identify conditions that contraindicate heat or cold therapy
    - Warm applications are contraindicated when the patient has an acute localized inflammation, cardiovascular problems, or active bleeding
    - Cold applications are contraindicated if the site of injury is edematous or the patient has impaired circulation or is shivering

Skills for Heat and Cold Therapy (Cont.)

- Patient safety
  - Before heat or cold treatment is applied, the patient should understand its purpose, the symptoms of temperature exposure, and precautions taken to prevent injury
- Health care provider’s order
  - A prerequisite to heat or cold application is a health care provider’s order, which should include body site and the type, frequency, and duration of application
Skills for Heat and Cold Therapy (Cont.)

- Moist or dry applications
  - Hot, moist compresses
  - Warm soaks
  - Paraffin baths
  - Aquathermia (water-flow) pads
  - Commercial hot packs
  - Electric heating pads
  - Cold moist and dry compresses
  - Ice bags or collars

Skills for Administering Parenteral Fluids

- Overall goal of fluid IV administration is to correct or prevent fluid and electrolyte imbalances
- Indications for IV therapy
  - Poor tissue absorption
  - Inadequate GI tract function
  - Need to maintain medications at optimum levels

Skills for Administering Parenteral Fluids (Cont.)

- The nurse should observe the following guidelines
  - Monitor the solution drop rate at the ordered infusion rate
  - Infuse the amount of prescribed solution
  - Maintain the patency of the IV catheter
  - Monitor site every 1-2 hours; IV line should be assessed every 4 hours
  - During parenteral therapy, the patient’s I&O should be recorded
Skills for Administering Parenteral Fluids (Cont.)

- Intravenous therapy/venipuncture

- Intravenous monitoring
- Changing the tubing
- Discontinuing intravenous therapy

- Intravascular infusion

- Infiltration
- Phlebitis
- Septicemia
Skills for Administering Parenteral Fluids (Cont.)

- Blood transfusion therapy
  - Autologous blood transfusion
  - Initiating a blood transfusion
  - Blood transfusion reactions

Skills for Respiratory Disorders

- Oxygen therapy
  - Goal is to prevent or relieve hypoxia
  - For patients with impaired tissue oxygenation
  - Not a substitute for other treatments and should be used only when indicated
  - Oxygen should be treated as a drug
  - Oxygen is expensive and can have dangerous side effects
  - Dosage or concentration should be ordered and continuously monitored

Skills for Respiratory Disorders (Cont.)

- Oxygen therapy
  - Oxygen is a colorless, odorless, and tasteless gas that will not burn or explode
  - Frequently initiated by a respiratory therapist
  - Signs and symptoms manifested by patients who might require oxygen will vary according to the degree of oxygen deficiency
Skills for Respiratory Disorders (Cont.)

- Oxygen therapy
  - Transtracheal oxygen delivery
    - A newer method, the transtracheal catheter, is inserted directly into the trachea between the second and third tracheal cartilages
    - Delivery does not interfere with drinking, eating, or talking
    - Oxygen is delivered throughout the respiratory cycle
    - For patients with heart failure or COPD
    - Transtracheal opening should be inspected and cleaned regularly

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Question 1

Which of these is incorrect regarding heat and cold therapy?

1. Maintain proper temperature of heat or cold applications.
2. The application can be left for any length of time.
3. Check patient’s skin for excessive redness and pain during application and to report any such adverse reactions to the nurse.
4. Report to the nurse when the treatment is complete so the nurse has the opportunity to evaluate the patient’s response.

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Question 2

The direct IV insertion approach should be used for what type of veins?

1. Small veins
2. Fragile veins
3. Large, easily seen veins
4. Deeper veins
Skills for Respiratory Disorders (Cont.)

- Oxygen therapy
  - Care of the tracheostomy
    - Performed to provide the patient with a patent airway
    - The provider inserts a tracheostomy tube and secures it in place with cotton tape around the patient’s neck
    - Sterile gauze is placed around the opening under the flange of the outer tube for skin protection

Skills for Respiratory Disorders (Cont.)

- Oxygen therapy
  - Care of the tracheostomy
    - It is essential that nursing interventions be consistently implemented that
      - Minimize infection risk
      - Minimize sensory deprivation

Skills for Respiratory Disorders (Cont.)

- Oxygen therapy
  - Care of the patient with a tracheostomy collar and T-piece/tube
    - Requires constant humidification of the airway
    - The T-piece/tube is a T-shaped device with a 15-mm connection with large-lumen tubing
    - A tracheostomy collar is a curved device with an adjustable strap that fits around the patient’s neck
Skills for Urinary or Reproductive Tract Disorders

- Urinary elimination
  - Catheter

Skills for Urinary or Reproductive Tract Disorders (Cont.)

- Urinary elimination (Cont.)
  - Maintaining adequate urinary drainage

Skills for Urinary or Reproductive Tract Disorders (Cont.)

- Types of catheters
  - Coudé catheter
    - Selected for ease of insertion when enlargement of the prostate gland is suspected
  - Foley catheter
    - Designed with a balloon near the tip to be inflated after insertion, holding the catheter in the urinary bladder for continuous drainage
Skills for Urinary or Reproductive Tract Disorders (Cont.)

● Types of catheters
  ➢ Malecot, Pezzer, and mushroom catheters
    • Used to drain urine from the renal pelvis of the kidney
  ➢ Robinson catheter
    • Has multiple openings in its tip to facilitate intermittent drainage
  ➢ Ureteral catheter
    • Long and slender to pass into the ureter

Skills for Urinary or Reproductive Tract Disorders (Cont.)

● Types of catheters
  ➢ Whistle-tip catheter
    • Has a slanted, larger orifice at its tip to be used if there is blood in the urine
  ➢ Cystostomy, vesicostomy, or suprapubic catheters
    • Introduced through the abdominal wall above the symphysis pubis
    • Used to divert urine flow from the urethra to treat injury to the bony pelvis, urinary tract, or surrounding organs; strictures; or obstructions
    • Inserted via a surgical incision or puncture of the abdomen and bladder walls with a trocar

Skills for Urinary or Reproductive Tract Disorders (Cont.)

● Types of catheters
  ➢ Condom catheters
    • Not a catheter but a drainage system connected to the external male genitalia
    • It is used for the incontinent male to minimize skin irritation from urine
Skills for Urinary or Reproductive Tract Disorders (Cont.)

- Self-catheterization
  - Used for the patient who experienced spinal cord injury or other neurologic disorders that interfere with urinary elimination
  - Intermittent self-catheterization promotes independent function for the patient

Skills for Urinary or Reproductive Tract Disorders (Cont.)

- Routine catheter care
  - Provide perineal care and clean the first 2 inches of the catheter every 8 hours
  - The use of powders or lotions on the perineum is contraindicated
  - Assess the urethral meatus and surrounding tissues
  - Change urinary tubing and collection bag only if there are signs of leakage, odor, or sediment buildup
  - Assess the drainage tubing and bag to ensure safety

Skills for Urinary or Reproductive Tract Disorders (Cont.)

- Bladder training
- Managing incontinence
- Discontinuing an indwelling catheter
Question 3

Which of these measures does not promote adequate care of a patient with a tracheostomy tube?
1. Provide constant airway humidification.
2. Provide frequent mouth care.
3. If a patient prefers to eat by mouth, allow that as an option.
4. Turn and reposition the patient every 2 hours.

Question 4

Older adults should be encouraged to take ______mL of fluids orally in order to prevent the need for excessive catheterization.
1. 1000
2. 500
3. 3000
4. 2000

Skills for Gastrointestinal Disorders

- Inserting and maintaining nasogastric tubes
  - Pliable tube that is inserted through the patient’s nasopharynx into the stomach
  - Allows for removal of gastric contents and introduction of liquids into the stomach
  - Primary purpose is decompression or removal of flatus and fluids from the stomach
  - Nursing challenges: patient comfort and maintaining patency of the tube
Skills for Gastrointestinal Disorders (Cont.)

- Bowel elimination
  - Basic human need and is essential for normal body function
  - Normal bowel elimination depends on several factors
  - Normal stool (feces) is described for documentation as moderate in amount, brown, and soft in consistency and is expelled every 1-3 days

Skills for Gastrointestinal Disorders (Cont.)

- Care of the patient with hemorrhoids
  - Pain when hemorrhoidal tissues are directly irritated from the passage of hard stool
  - Primary goal for the patient with hemorrhoids is soft, formed stools
  - Proper diet, fluids, and regular exercise improve the likelihood of soft stools
  - Local heat provides temporary relief to swollen hemorrhoids

Skills for Gastrointestinal Disorders (Cont.)

- Flatulence
  - This is the presence of air or gas in the intestinal tract
  - May occur when a person consumes gas-producing liquids and foods, swallows excessive amounts of air, or has constipation
  - In hospitalized patients, flatulence is often caused by decreased peristalsis, abdominal surgery, some narcotic medications, and decreased physical activity
Skills for Gastrointestinal Disorders (Cont.)

- Flatulence
  - May cause distention of the stomach and abdomen and mild to moderate abdominal cramping and pain
  - One of the most effective measures to promote peristalsis and passage of flatus is walking
  - Rectal tube may be used

Skills for Gastrointestinal Disorders (Cont.)

- Administering an enema
  - Instillation of a solution into the rectum and sigmoid colon
  - Primary reason is promotion of defecation
  - Volume and type of fluid instilled can lubricate or break up the fecal mass, stretch the rectal wall, and initiate the defecation reflex
  - Should not rely on enemas to maintain bowel regularity
  - Frequent enemas disrupt normal defecation reflexes, resulting in dependency

Skills for Gastrointestinal Disorders (Cont.)

- Fecal incontinence
  - The first step is to assess whether fecal impaction is the cause
  - Impaction—a fecal mass too large or hard to be passed voluntarily
  - Either constipation or diarrhea can suggest the presence of an impaction
  - An oil retention enema lubricates the rectum and colon, softens the feces, and facilitates defecation
  - It can be used alone or with manual removal of a fecal impaction
Skills for Gastrointestinal Disorders (Cont.)

- Ostomies
  - Colostomy
    - Surgical artificial anus on the abdominal wall formed by incising the colon and bringing it out to form a stoma on the abdominal surface
    - Performed for patients with cancer of the colon, intestinal obstructions, intestinal trauma, or inflammatory diseases of the colon
    - May be permanent or temporary until intestinal healing occurs

- Ileostomy
  - Surgical opening of the ileum onto the surface of the abdomen through which fecal matter is emptied
  - Performed for patients with inflammatory bowel conditions and cancer of the large intestine
  - Stoma looks like a colostomy, but it is smaller and located lower on the abdomen
  - Patient wears a pouch to collect the semiliquid fecal matter

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Question 5

The suggested maximum enema volume of 250-500 mL would be for what age group?

1. Infants
2. Toddlers
3. Adolescents
4. Adults