Chapter 36 Emergency Room and Urgent Care Nursing

Emergency Care and Urgent Care
- Place of primary care for many uninsured individuals [corresponds to Box 36-1]
- Terms: emergency care, high acuity, urgent care, phlebotomy, stat
- Roles of the graduate LPN/LVN in emergent/urgent care
  - Check the rules and regulations of the Board of Nurse Examiners of the state under whose rules and regulations you are practicing.
  - Data collection
  - Administering nursing interventions
  - Providing discharge planning
  - Advanced roles of LPN/LVN:
    - IV cannulation
    - Phlebotomy
    - IV medication administration
    - Applying dressings
- Safety issues
  - Standard safety precautions in the ER/UC:
    - Gloves, gowns, masks
    - Protective eyewear
    - Face shields
    - Careful hand washing
  - Safe practice in ER/UC
    - Safety: the primary concern at all times
    - CDC mandates clinical guidelines for safe practice.
  - Following standard precautions decreases risk of infections among staff.
    - Special attention to safety precautions with:
      - Confused clients
      - Combative clients

Initial Contact
- Triage - method of determining which person has the most emergent problem; required when:
  - Numbers of clients increase
  - Clients present with high acuity levels
- Clients are usually prioritized by:
  - Airway
  - Breathing
  - Circulation
  - Deformity
  - Also prioritized from serious to stable
- Disaster plan or critical incident plan
  - Training of staff on how to react important
  - Plan allows staff to:
    - Prepare
    - Assist more clients
- Urgent care:
Clients usually treated on first come, first served basis. Clients must be monitored continuously for acute changes.

**Forms:**
- Consent for treatment
  - Signed by client if possible
  - If client cannot sign, legally responsible party may sign.
  - Consent for minors usually by parent or guardian
  - When verbal consent provided by telephone, TWO nurses must document in chart.

**HIPAA**
- Protocols for privacy must be followed.

**Collecting data**
- Height & weight (important for administering meds), VS and pain
- History
  - Careful record of allergies, prescription and OTC medications and herbal supplements is crucial.
  - Brief history of events and reason for admission
- Charge nurse does triage and informs clients of procedures and protocols.

**Initial Protocols**
- Follow treatment protocols and standing orders. Nurse may initiate treatment in waiting room before examination by physician (hot/cold packs, bandage).
- ALWAYS follow Standard Precautions.

**Collaborative Care**
- Laboratory test such as peak flow meter, electrocardiography, imaging techniques or blood count may be ordered.
- Many departments involved: radiography, laboratory, pharmacy
- Tests determined by presenting signs and symptoms

**Airway Management**
- General airway management in EC/CU
  - Nurse must:
    - Conduct initial assessment of ABCs. [corresponds to Box 36-2]
    - Assess breathing pattern continuously.
    - Monitor O₂ saturation frequently.
    - Maintain airway for:
      - ↑ Patency
      - ↑ Airflow
      - Adequate ventilation.
- Airway management in trauma cases
  - Term: titration
  - Cervical spine alignment (C spine)
    - Soft collar device may be needed.
    - Chin lift maneuver or modified jaw thrust for CPR.
    - Assess mouth for bleeding, loose teeth, dentures, foreign body objects, and emesis.
To keep an airway open may require:
- Apparatus placed into nasopharyngeal or oral cavity
- Endotracheal intubation
- Cricothyroidectomy (incision into trachea) performed by a physician or licensed professional.

Breathing must be evaluated for rate, rhythm, and quality.

May require oxygen adjunct devices that deliver:
- High flow O₂ (e.g., non-rebreather, bag valve mask, endotracheal tube via intubation)
- Low flow devices (e.g., nasal cannula, Venturi mask, face masks)

The nurse must check carotid pulse for quality, rate, and presence.

Cardiopulmonary resuscitation [corresponds to Box 36-2 and Figure 36-4]

If no pulse, cardiopulmonary resuscitation is always performed immediately.

CPR offers a small percentage of core circulation to vital organs to sustain life.

CPR can be performed on people of all ages.

Technique varies in compression depth and ratio in adult, child, and infant.

Specific CPR training and certification provided by:
- American Heart Association or
- Red Cross

Two person CPR is generally performed in EC with:
- Compression rate 5:1 compressions to ventilation in adults
- High flow O₂ given with bag valve mask while compressions performed.

IV started with big bore needle to have line open for medications
Defibrillator may be used for life threatening dysrhythmias.

Heimlich maneuver

For airway obstruction caused by foreign body

Abdominal thrusts at level of midepigastric region below xiphoid process [corresponds to Figure 36-7]

With client standing
With client supine

Stat tests

EC setting requires certification in:
- Advanced Cardiac Life Support (ACLS)
- Pediatric Advanced Life Support (PALS)
- Basic Life Support (BLS)

All licensed health care professionals must maintain proficiency.

Clients with Shock

Condition of inadequate tissue perfusion

Manifestations: multisystem effects of shock [corresponds to Figure 36-8]

Hypovolemic shock
- Occurs when the body has sustained severe amount of fluid deficit or loss.
Causes include: burns, bleeding, fluid and electrolyte imbalance and sepsis
May have changes in level of consciousness
Manifestations of hypovolemic shock include:
  • Pallor
  • Diaphoresis- cool, clammy skin
  • Hypotension
  • Tachycardia
  • Tachypnea
  • Oliguria
Symptoms may get worse as fluid loss is greater.
Pneumatic antishock garment or MAST may help maintain BP.
[corresponds to Figure 36-9]

Cardiogenic shock
Occurs when heart sustains injury or trauma leading to pump failure
Known causes = acute MI, CHF, dysrhythmias, blunt and penetrating chest trauma
Manifestations similar to hypovolemic shock
Clients also may have pulmonary edema and distended neck veins.

Anaphylactic shock
Occurs in clients with hypersensitivity reactions to antigens.
Examples include medications, bee stings, blood products, and ingested food.
Manifestations: compromised respiratory system; other manifestations similar to hypovolemic shock
Client often has dyspnea, laryngeal spasm, edema and bronchospasm.
Client will become anxious and require immediate airway management.
Nurses need to have a client remain in EC for 20-30 minutes after injection to ensure safety of treatment.
Charting the client's condition at discharge and the time of discharge is crucial.

Septic shock
Occurs from systemic reaction and infection in the body
Common causes are pathogens e.g. gram-negative bacteria or viruses.
Body overwhelmed with endotoxins causing blood vessels to dilate
Has two phases:
  • Phase with normal BP, pulse and urine output
  • Phase with more obvious latent signs of shock: hypotension, bradycardia, oliguria, cold clammy extremities, and normal temperature.

Neurogenic shock
Occurs when there is trauma or malfunction to the nervous system.
Also called spinal shock, is related to gross injury to the spinal column.
Primary reasons for neurogenic shock are motor vehicle accident, household injuries, or falls.
Manifestations: warm dry skin and bradycardia, paralysis or limited extremity movement below the area of injury; other symptoms may be similar to hypovolemic shock

Nursing Care
- Common interventions for clients in shock:
  - Monitor VS every 15 minutes or more often if condition is changing rapidly.
  - Monitor changes in level of consciousness and report changes to team leader or charge nurse.
  - Place client in modified Trendelenburg position (except client with cardiogenic shock)
    - Head of bed elevated 10 degrees
    - Foot raised 20 degrees to maintain blood flow to vital organs
  - Administer oxygen as ordered and monitor breathing. Maintain open airway, especially if client loses consciousness.
  - Assist with administration of IV fluids. Monitor IV fluids, reporting changes in vital signs.
  - Monitor intake and output, especially urine decrease.
  - Treat symptoms appropriately and promptly. Communicate actions.

Trauma in the Emergency Center
- Types of penetrating trauma [corresponds to Figure 36-11]
- Head trauma [corresponds to Figure 36-12]
  - Mechanism of injury is important to determine severity of injury.
  - Careful continuous monitoring of LOC essential
  - Glasgow Trauma Scale is used to evaluate LOC (see Table 12-2)
    - Rating from 0 to 15; score below 13 is cause for concern.
    - May indicate increased ICP and potentially life threatening situation
- Chest trauma
  - Respiratory assessment critical to successful outcome
  - Interventions include
    - High flow O₂
    - IV administration/lifeline
    - Frequent vital signs
    - O₂ saturation readings
- Abdominal trauma
  - Careful assessment of vital organs critical to successful outcome
  - Identify and monitor for manifestations of shock that may indicate bleeding.
  - Report any sign of ecchymosis and distention to physician.
- Nursing care:
  - Focus on controlling external bleeding and monitoring for internal bleeding.
  - Establish airway; monitor breathing and circulation following ABCs.
  - Check VS q 15-30 minutes.
  - Monitor for signs of shock and changes in LOC.
Give emotional support to client and family. Provide private place for family and keep them informed.

Emergencies of Eyes, Ears, or Nose
- Obtain eye kit for flushing foreign object or chemical.
  - Perform visual acuity exam as ordered. Document best corrected vision.
  - Be ready to perform ear lavage.
  - Have tweezers or small forceps ready for removal of foreign object from ear or nose.

Burns
- May be thermal, chemical, or electrical
  - Classified according to thickness [corresponds to Figure 36-14]
    - Superficial burns injure only epidermis, usually heal in 3-6 days.
    - Partial thickness (second-degree) burns may be superficial or deep but involve the epidermal layer.
      - Deep partial thickness burns involve both the epidermis and dermis.
      - Blistered areas may lack sensation.
      - Surrounding tissues may have nerve endings causing pain.
    - Full thickness (third-degree) burns do not cause pain (nerves damaged); skin may not recover from damage; may require skin grafting.
    - Rule of nines for measuring % of body burned [corresponds to Figure 36-15]
  - Burn centers provide specialized care to support healing wounds.
    - Debridement
    - Skin grafting

Priorities in nursing care for clients with burns:
- Provide assistance in treatment of minor burns.
- Aseptic technique for wound care, and protective isolation
- Monitor respiratory status and circulatory status.
- Monitor oxygen administration and saturation whenever neck and face are burned.
  - Term: eupneic
- Take VS q 15-30 minutes.
- Watch for signs of shock.
- Administer pain medications as ordered and monitor effectiveness.
- Provide sterile blankets or gowns if % of burns is high and if heat loss occurs.
- Maintain infection precautions.

Nursing Process Care Plan: A Burn Client

Poisoning
- Rapid assessment and medical intervention are needed.
- Identify type of poison and method of exposure.
- Ingested poisons need rapid removal of the poison by:
  - Syrup of Ipecac given by mouth for poison that will not erode the GI track and are not petroleum-based
Activated charcoal for medication overdoses and poisons that can cause esophageal damage if regurgitated.
Gastric lavage: a secondary method for treatment of ingested poison to flush the GI tract
- Inhaled poisons
  - Get client away from the toxin.
  - Treat with oxygen therapy and airway management.
- Injected poisons and snake bites
  - Snake bites
    - Require rapid intervention: airway stabilization and IV line
    - Source of snakebite needs to be determined if possible.
    - If snake is poisonous, treatment must focus on airway management and circulatory stabilization.
    - Tourniquets must not cut off body circulation.

Critical Thinking Care Map: Caring for the Client with Hypovolemia