

### N433 Exam 3 Concept Review

Material that is covered on the exam includes assigned readings in the text, ATI, lecture presentations, and your notes. Medication calculation will be on the exam (10%). Reviewing the care plans at the end of each chapter will assist you in identifying appropriate nursing actions in the given scenarios. This concept review is not all-inclusive but will help you focus on information for the exam.

Text	ATI
Ch. 40: Respiratory	Ch. 16: Oxygen and Inhalation Therapy Ch. 17: Acute and Infectious Respiratory Illnesses Ch. 18: Asthma Ch. 19: Cystic Fibrosis pg. 272-273: Respiratory Distress Syndrome
Ch. 41: Cardiac	Ch. 20: Cardiovascular Disorders
Ch. 51: Pediatric Emergencies	Ch. 43: Pediatric Emergencies

#### Respiratory - 70%

1. RSV
  - a. Signs/symptoms
    - i. Tachypnea, Increased work of breathing, Low-grade temperature, decreased intake
    - ii. Course or wheezy breath sounds, Apneic spells
  - b. Isolation implications
    - i. Contact
    - ii. Contagious if any secretions are present and up to 14 days after symptoms start
    - iii. Survive on the skin for 30 minutes and on other surfaces for hours
  - c. At-risk populations
    - i. Infants less than 6 months, Immunocompromised, Sick contacts, Daycare, If under 1 may get asthma later
  - d. Nursing management
    - i. Disinfect with Lysol.
    - ii. Smaller more frequent feedings, Nose Frida, Pedialyte, Elevate head of bed,
    - iii. Tylenol/Advil as needed
2. Streptococcal pharyngitis
  - a. Signs/symptoms

- i. Beefy red pharynx, sore throat, fever, tonsillar exudate, White patches on the roof of the mouth
  - b. Isolation implications
    - i. Contact/droplet
  - c. Nursing management, home management
    - i. Encourage PO intake of cool liquids/soft foods
    - ii. No “sharp” foods
    - iii. Assess for frequent swallowing
    - iv. Avoid trauma to surgical sites
    - v. Discharge coughing, straws, or blowing their nose
    - vi. Trauma to sites can disrupt scabs and cause hemorrhage post-op
    - vii. No oral suctioning
    - viii. Educated that pain may increase 2-3 days post-op
    - ix. If you have hemorrhages, go back to the OR
    - x. Dont give them red or citrus drinks
- 3. Tonsillectomy
  - a. Post-operative management
    - i. Manage pain
      - 1. Pain peaks 2-3 days after surgery
      - 2. Ice collar
    - ii. Encourage oral intake with cool liquids/soft foods
      - 1. No sharp foods
    - iii. Assess for frequent swallowing
      - 1. Post-op bleeding
    - iv. Avoid trauma to the surgical site
      - 1. No coughing, no straws, or blowing nose
        - a. Can disrupt scabs and cause hemorrhage for up to 10 days
  - b. S/S of hemorrhage
    - i. Frequent swallowing, tachycardia, pallor, and restlessness
    - ii. Frequent throat clearing, Emesis of bright red blood
- 4. Epiglottitis
  - a. Signs/symptoms
    - i. Fever, difficulty swallowing, drooling, and tongue protrusion
    - ii. May be in a tripod position; refusal to drink
    - iii. Stridor
  - b. Nursing management
    - i. Dont
      - 1. Attempt to visualize the throat
      - 2. Leave the child unattended
      - 3. Place the child in a supine position
      - 4. Place the child in a supine position
    - ii. Provide 100% oxygen in the least invasive manner

- iii. If complete airway occlusion occurs, tracheostomy may be necessary
    - iv. Ensure emergency equipment is available
    - v. Considered unstable, will be admitted to ICU initially
  - c. Plan of care
    - i. EMERGENCY! Do not attempt to visualize the throat
    - ii. Maintain an upright position
- 5. LTB (Croup)
  - a. Signs/symptoms
    - i. Barky cough
    - ii. Inspiratory stridor
  - b. Nursing management
    - i. Medications
      - 1. Humidified air
      - 2. Nebulized epi neb (racemic epi)
      - 3. Corticosteroids
- 6. Cystic fibrosis
  - a. Assessment findings
    - i. Stagnation of mucus and bacterial colonization results in the destruction of lung tissue
    - ii. Tenacious secretions are difficult to expectorate
    - iii. Decreased O<sub>2</sub>/CO<sub>2</sub> exchange
    - iv. Chronic infection further damages the lungs
    - v. Compression of pulmonary blood vessels and progressive decline of lung function lead to pulmonary HTN
  - b. S/S
    - i. Fatigue, chronic cough, recurrent URIs, thick/sticky mucus
    - ii. Decreased absorption of vitamins and enzymes
    - iii. Abdominal distention, decreased digestive enzymes, rectal prolapse, fatty/stinky stools
  - c. Implications for administering pancreatic enzymes
    - i. Creon; Pancreasze, and Zenpep
    - ii. Administration with all meals and snacks to promote adequate digestion and nutrients
    - iii. Extra enzyme capsules when eating high-fat food
    - iv. For infant sprinkle open cap and sprinkle on cereal or applesauce
    - v. Administer vitamins A, D, E, and K
  - d. Nursing management
    - i. Remove excess mucus secretions
    - ii. Aggressive treatment of pulmonary infections
    - iii. Bronchodilator medication, CPT
    - iv. Forced expiration and postural drainage
  - e. Diagnostic methods

- i. Sweat chloride test
      - 1. It is considered suspicious if the level of chloride in collected sweat is above 50 mEq/L and diagnostic if a level is above 60 mEq/L
    - ii. Pulse oximetry
      - 1. Oxygen saturation might be decreased, particularly during a pulmonary exacerbation
    - iii. Chest radiograph
      - 1. Might reveal hyperinflation, bronchial wall thickening, and atelectasis
    - iv. Pulmonary function tests
      - 1. This might reveal a decrease in forced vital capacity and forced expiratory volume, with an increase in residual volume
- 7. Bacterial pneumonia
  - a. Signs/symptoms
    - i. Viral URI, fever, cough, tachypnea, poor feeding, vomiting, and abdominal pain
  - b. Labs associated with bacterial pneumonia
    - i. Pulse oximetry decreased
    - ii. Chest X-ray
    - iii. Sputum culture
    - iv. White blood cells
    - v. Elevated CBC
  - c. Assessment
    - i. Diminished breath sounds on the affected side (bacterial), crackles
- 8. Asthma
  - a. Signs/symptoms
  - b. Management of medications, including MDI/nebulizers
    - i. Nursing implications for medications
  - c. Identifying common triggers

### **Cardiac - 12%**

1. Know when to administer and when to hold digoxin
2. What does digoxin do?
3. Nursing priorities when caring for a child with Rheumatic Fever
4. Know the heart defects associated with Tetralogy of Fallot
5. Know the differences between acquired and congenital heart disease
6. Know which heart defects have increased pulmonary blood flow
7. Know which heart defects have decreased pulmonary blood flow

### **Pediatric Emergencies – 8%**

1. Know methods to ventilate a child in an emergency

2. Know the principles of 2-rescuer CPR
3. Know proper CPR technique for an infant
4. Know emergency management of ingestion and what NOT to recommend