Review correct **procedure and precautions** for the following routes of administration:

- Ear drops – position on unaffected side, pull down and back on ear lobe, remain side-lying for at least one minute
- Enteral feeding tube, check placement to prevent aspiration; flush after each medication
- IM site – vastus lateralis
- subcut injections
- Inhaler – shake, use spacer with mask, press down once, allow breaths before second dose
- IV therapy, including IVP and IVPB

Review **monitoring and precautions** related to **medication allergy**, signs of anaphylaxis

Review **monitoring and precautions** related to **blood transfusion reaction**, discontinue blood and keep IV open

Review **indications, action of medications, adverse effects, monitoring, precautions, and patient teaching implications** related to:

**ADHD Medications, such as amphetamine and dextroamphetamine (Adderall®)**, therapeutic effect of greater ability to concentrate

**Analgesics**

- Acetaminophen (Tylenol®), also antipyretic use; risk of liver damage; wait 4 hours between doses
- Ibuprofen (Motrin®)
- Morphine, adverse effects of apnea and hypotension

**Antibiotics, such as**

- Amoxicillin, calculation
- Gentamicin (Garamycin®), timing of peaks and troughs, calculation
- Piperacillin and tazobactam (Zosyn®), anaphylaxis symptoms, dyspnea and urticaria
- Vancomycin (Vancocin®), risk of renal damage; vesicant properties, observe IV site; red man syndrome

**Anticoagulants, such as heparin** – danger of two different strengths available, report

**Anticonvulsants, uses such as**

- Lorazepam (Ativan®) – safety precaution due to respiratory depression
- Phenobarbital, indication for seizures
Bronchodilators, such as albuterol (Proventil®) – indicated in acute asthma; adverse effects of tachycardia, agitation

Cardiovascular Medications, such as digoxin, dysrhythmia early sign toxicity

Diuretics, such as furosemide (Lasix®), especially monitoring serum potassium

Electrolytes such as IV potassium chloride (KCl), vesicant properties, observe IV site; importance of serum potassium level

Emergency medications, such as epinephrine

Fluids, to correct high serum glucose; see calculations

Glucocorticosteroids, such as prednisone, adverse effect of immunosuppression

Insulin preparations, including rapid-acting insulins such as lispro (Humalog®) – rotate injection sites; with rapid-acting, eat immediately after dose; apply sliding scale

Reversal Agents/Antidotes, such as

- Flumazenil (Romazicon®) to reverse benzodiazepines
- Naloxone (Narcan®) to reverse opioids

Review Calculations, including

- IV drip rate, drops per minute
- mL/hr IV rate
- Number of milliliters to obtain ordered dose
- Fluid calculations, given weight and mL/kg; given protocol
- Dosage and fluid 24-hour calculations, mL to obtain ordered dosage
- Use of protocols such as insulin sliding scale and recommended fluid requirements
- Determining whether ordered dose is within recommended dose/kg/day.

Review laboratory tests used to monitor medication therapy, including

- Hematocrit
- Peaks and troughs
- Serum bilirubin
- Serum electrolytes, particularly potassium – significance with furosemide; significance when patient is to receive IV potassium
- Serum glucose