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

- Ear drops, instruct patient to lie on side (opposite of affected ear) for 5 minutes after insertion
- Enteral feeding tube, check tube placement to avoid aspiration, flush tube after each medication
- Eye drops, avoid touching tip of dropper
- IM, subcut injections, angle of insertion
- Long-acting (SR, XR) medications, obtain alternate form if patient cannot swallow
- Medications that cause gastrointestinal irritation such as oral potassium chloride and prednisone, give with milk or water
- Rectal suppository, distance to insert: 1 inch (2.5 cm)
- Rotate insulin injection sites
- Transdermal Patch, place over dry, nonedematous skin, deltoid, back, abdomen, gluteal area, thigh area

Review **monitoring and precautions** related to:

- Medication Allergy
- Drug/Disease Interactions
- Drug/Food Interactions

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

- **Analgesics, such as**
  - Acetaminophen (Tylenol®), report when pain not adequately relieved
  - Morphine, agent to reverse naloxone (Narcan®); importance of bowel program to prevent constipation; signs of overdose such as change in level of consciousness and decreased respiratory rate

- **Antibiotics, such as**
  - Amoxicillin, mL calculation to obtain ordered dose
  - Levofloxacin (Levaquin®), symptoms of anaphylactic reaction: difficulty breathing and itching
  - Symptoms of ineffective antibiotic such as continued productive cough with greenish sputum
  - Adverse effects such as diarrhea

- **Anticoagulants, such as**
  - Heparin, injection technique: press for a few seconds after injection, do not massage
• **Warfarin** (Coumadin®), risk of injury with falling

• **Anticonvulsants**, such as divalproex sodium (Depakote®)

• **Bronchodilators**, such as albuterol (Proventil®), adverse effects of tachycardia and anxiety

• **Cardiovascular Medications**, such as
  
  o Atorvastatin (Lipitor®), periodic liver function tests
  o Beta blocker metoprolol (Lopressor®), for markedly decreased BP, hold medication and report
  o Clonidine (Catapres®), tablet calculation
  o Digoxin (Lanoxin®), take apical pulse for full minute before administering
  o Diltiazem-SR (Cardizem®-SR), toxicity symptoms: hypotension and bradycardia
  o ACE inhibitor enalapril (Vasotec®), report dizziness with changes in position after first dose

• **Diabetic Medications**, such as
  
  o Insulin, rotate injection sites; with low blood glucose, hold and report
  o Lispro (Humalog®), importance of eating immediately after receiving
  o Metformin (Glucophage®), hold when patient NPO

• **Diuretics**, such as furosemide (Lasix®), may cause decreased potassium level and dehydration. Symptoms of dehydration, such as confusion, sunken features

• **Glucocorticosteroids**, such as prednisone, give with food or milk

• **Reversal Agents/Antidotes**, such as naloxone (Narcan®) to reverse opioids such as morphine

• **Sedatives/Anxiolytics**, such as
  
  o Long-acting benzodiazepines such as lorazepam (Ativan®), fall risk; can cause respiratory depression and CO₂ retention in patient who has COPD

• **Thyroid medications**, such as levothyroxine (Synthroid®), tablet calculation

Review **IV Therapy monitoring**, such as recognizing infiltration, then elevating the extremity and reporting

Review **Calculations, including**

• Number of tablets, or number of milliliters to obtain ordered dose
• Number of mg received during a 12-hour shift