Review **Calculations related to medications and IV drips, Basic Safety and Infection Control, Core Measures, National Patient Safety Goals, Pain Management, and Blood Administration.**

Review **assessment, interventions, monitoring, and care** for conditions commonly encountered in oncology nursing, including:

- Anaphylaxis
- Dehydration
- Blood transfusion reaction
- Breast cancer, bone metastasis
- Colon cancer, Stage III
- Fatigue, managing at end-of-life
- Hypercalcemia, recognizing signs and symptoms
- Lung cancer, small cell; non-small cell
- Mucositis, grade 2, frequent oral care
- Muscle weakness, paresthesia, fall precautions
- Non-Hodgkins lymphoma
- Neutropenia, handwashing to prevent infection
- Pain management, end-of-life; chronic, scheduled long-acting oral dosing
- Pancreatic cancer, end-stage
- Thrombocytopenia, prophylactic stool softeners

Review action, preparation, monitoring, and precautions related to **medications** commonly used in oncology, such as

- Acyclovir (Zovirax®)
- Doxorubicin (Adriamycin®), blood return; chest X-ray when no blood return
- Allopurinol (Zyloprim®)
- Benzodiazepines, fall risk
- Bleomycin (Blenoxane®)
- Capecitabine (Xeloda®), BSA calculation, dose calculation, swallow whole
- Cyclophosphamide, with mesna to prevent bladder toxicity
- Cysplatin
- CMF therapy, which consists of cyclophosphamide (Cytoxan®), methotrexate (Folex®), and flurouracil (5-FU®), fluid intake
- Cytarabine (Ara-C®), dosage calculation for IV infusion
- Etoposide (VP-16®), anaphylaxis
- Flumazenil (Romazicon®)
- Gabapentin (Neurotin®)
- Gemcytabine (Gemzil®)
- Hydroxyurea
- Ifosfamine, with mesna to prevent bladder toxicity
Oncology Nursing Knowledge Assessment Exam: Study Guide

- Insulin sliding scale
- IV drops/minute calculation
- Leucovorin (Wellcovorin®)
- Levetiracetam (Keppra®)
- Lorazepam (Ativan®)
- Mesna (Mesnex®)
- Methotrexate (Amethopterin®)
- Mitomycin via bladder installation, use goggles or face shield
- Morphine, IV drip; extended-release, toxicity
- Naloxone (Narcan®), prevent painful crisis
- Octreotide acetate (Sandostatin®)
- Ondansetron (Zofran®) for relief of nausea
- Oxycodone controlled-release (Oxycontin® controlled-release), tablet calculation
- Paclitaxel (Taxol®) + carboplatin (Paraplatin®)
- Prednisone (Sterapred®)
- Rituximab (Rituxan®), cardiac adverse effects
- Vesicants, precautions
- Vinblastine (Velban®), blood return
- Vincristine

Review Laboratory Results commonly encountered in oncology, such as

- BUN
- Hemoglobin and hematocrit
- Platelet count
- Serum glucose
- Serum electrolytes: sodium, potassium, calcium, phosphorus
- WBC count

Review principles and practices related to safety and infection prevention, including

- Prevent aspiration with vomiting, upright position
- CAUTI-prevention bundle
- Chemotherapy spill
- Fall risk, elderly/benzodiazepines
- Handwashing w/ C. Diff
- Patient identifiers
- Scrub the injection port with an alcohol wipe before accessing
Review principles and practices of **communication with patients and family**, including:

- Patient satisfaction
- Radiation therapy precautions, photosensitivity
- Temperature elevation after 2\textsuperscript{nd} cycle chemotherapy
- Immunizations with multiple myeloma
- Delayed wound healing
- Doxorubicin (Adriamycin\textsuperscript{®}), urine color
- Treatment plan, difference of opinion among patient, family, nurse

Review measures to prevent **CMS Hospital Acquired Conditions**, including:

- Blood transfusion reaction
- CAUTI prevention
- Skin assessment
- Risk for falling

Review **calculations**, including:

- BSA
- Medication protocols
- Sliding scale
- IV drip rate, calculating drops per minute

**To calculate the infusion rate:**

\[
\text{IV drip rate in drops per minute} = \frac{\text{Volume to be infused (mL) over 1 hour}}{\text{Drop factor constant}}
\]

<table>
<thead>
<tr>
<th>Common drop factors</th>
<th>Drop factor constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 gtt/m/L - minidrip set</td>
<td>1</td>
</tr>
<tr>
<td>10 gtt/m/L – regular drip set</td>
<td>6</td>
</tr>
<tr>
<td>15 gtt/mL – regular drip set</td>
<td>4</td>
</tr>
</tbody>
</table>

Common drop factors are also known as the clock method – drop factors are obtained by dividing 60 minutes by the number of gtts per mL that the IV set delivers.