# Chapter 31, Lower Respiratory System Drugs

1. The nursing instructor is teaching a session explaining mast cell stabilizers. The instructor determines the session is successful when the students correctly choose which drug as an example?
   A) Beclomethasone
   B) Cromolyn
   C) Albuterol
   D) Montelukast

   Answer: B

   Rationale: Cromolyn is an example of a mast cell stabilizer. Beclomethasone is an inhaled corticosteroid. Albuterol is a short-acting beta$_2$ agonist. Montelukast is an example of a leukotriene modifier.
   Question format: Multiple Choice
   Chapter: 31
   Learning Objective: 1
   Cognitive Level: Remember
   Client Needs: Physiological Integrity: Pharmacological Therapies
   Integrated Process: Teaching/Learning
   Reference: p. 395, Summary Drug Table

2. A nurse has administered albuterol to a client with asthma, who is now reporting dizziness, especially when standing up. When analyzing the client's record for potential sources, which prescribed medications should the nurse question?
   A) Warfarin
   B) Theophylline
   C) Atenolol
   D) Methyldopa

   Answer: D

   Rationale: The nurse should consider methyldopa as a cause for the client's concern of dizziness on standing, suggesting orthostatic hypotension. Methyldopa and albuterol interact, leading to hypotension. Albuterol does not interact with warfarin. The use of theophylline will increase the risk of cardiotoxicity. The use of beta-adrenergic blockers will inhibit cardiac, bronchodilating, and vasodilating effects of the adrenergic medication.
   Question format: Multiple Choice
   Chapter: 31
   Learning Objective: 1
   Cognitive Level: Analyze
   Client Needs: Physiological Integrity: Pharmacological Therapies
   Integrated Process: Clinical Problem-solving Process (Nursing Process)
   Reference: p. 383, Cardiovascular System Reactions

3. A client with chronic asthma is prescribed albuterol. The nurse will **prioritize** which nursing diagnosis for this client?
   A) Anxiety
   B) Risk of impaired oral mucous membranes
   C) Ineffective tissue perfusion
   D) Risk of injury

   Answer: A

   Rationale: The nurse would most likely identify a nursing diagnosis of anxiety related to the adverse reaction of albuterol. A nursing diagnosis of risk of impaired mucous membranes may be seen with the use of corticosteroids, which increase the risk of oral candidiasis. There is no increased risk of injury or ineffective tissue perfusion with the use of albuterol therapy.
   Question format: Multiple Choice
   Chapter: 31
   Learning Objective: 3
   Cognitive Level: Analyze
   Client Needs: Physiological Integrity: Pharmacological Therapies
   Integrated Process: Clinical Problem-solving Process (Nursing Process)
   Reference: p. 392, Anxiety

4. The health care provider has ordered epinephrine for a client admitted emergently with bronchospasms. The nurse will prepare to administer this drug via which route?
   A) Intravenous
   B) Intramuscular
   C) Subcutaneous
   D) Intradermal

   Answer: C

   Rationale: The nurse should use the subcutaneous route to administer epinephrine for acute bronchospasm. The other routes are not appropriate for this situation.
   Question format: Multiple Choice
   Chapter: 31
   Learning Objective: 4
   Cognitive Level: Apply
   Client Needs: Physiological Integrity: Pharmacological Therapies
   Integrated Process: Clinical Problem-solving Process (Nursing Process)
   Reference: p. 390, Quick Relief for Acute Symptom Intervention

5. The nurse is preparing to teach a child with asthma and caregivers about the prescribed corticosteroids. Which factor should the nurse point out will require monitoring?
   A) Blood pressure
   B) Skin turgor

C) Urine output
D) Rate of growth

Answer: D

Rationale: The nurse should monitor the rate of growth of the child. Children are at risk for a reduction in growth when oral corticosteroids or higher doses of the inhalant form are used. Blood pressure, skin turgor, and urine output are not altered with corticosteroid therapy.
Question format: Multiple Choice
Chapter: 31
Learning Objective: 4
Cognitive Level: Apply
Client Needs: Physiological Integrity: Pharmacological Therapies
Integrated Process: Teaching/Learning
Reference: p. 391, Long-Term Control of Symptoms

6. A nurse is monitoring a client who is receiving theophylline 400 mg IV for severe bronchospasms, shortness of breath, and $SaO_2$ of 85%. Which assessment finding should the nurse **prioritize**?
   A) Constipation
   B) Abdominal cramps
   C) Bradycardia
   D) Mental depression

   Answer: B

   Rationale: It is important for the nurse to closely monitor the client for signs of theophylline toxicity. The nurse should notify the primary health care provider immediately if any of the following signs of theophylline toxicity develop: anorexia, nausea, vomiting, diarrhea (not constipation), confusion (not mental depression), abdominal cramping, headache, restlessness, insomnia, tachycardia (not bradycardia), arrhythmias, or seizures.
   Question format: Multiple Choice
   Chapter: 31
   Learning Objective: 3
   Cognitive Level: Analyze
   Client Needs: Physiological Integrity: Pharmacological Therapies
   Integrated Process: Clinical Problem-solving Process (Nursing Process)
   Reference: p. 391, Table 31.2 Theophyllinization Process

7. A client receiving aminophylline reports heartburn on assessment to the nurse. What is the **best** response by the nurse?
   A) Eat small, frequent meals.
   B) Raise the head of the bed.
   C) Limit fluid intake with meals.
   D) Use strict oral hygiene.

Answer: B

Rationale: When a client receiving aminophylline reports heartburn, the nurse should instruct the client to remain upright with the head end of the bed raised. Eating small, frequent meals and limiting fluid intake with meals help alleviate the symptoms of nausea, and not of heartburn. Using strict oral hygiene helps prevent infection with *Candida albicans* seen with corticosteroid therapy.
Question format: Multiple Choice
Chapter: 31
Learning Objective: 4
Cognitive Level: Apply
Client Needs: Physiological Integrity: Pharmacological Therapies
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 393, Malnutrition Risk: Less Than Body Requirements

8. A nurse is teaching a client about albuterol which has been prescribed. The nurse determines the session is successful when the client correctly chooses which adverse reaction to report immediately to the health care provider?
   A) Nausea and vomiting
   B) Increased respirations
   C) Alopecia
   D) Insomnia

Answer: D

Rationale: The nurse should instruct the client to contact the health care provider if insomnia, tachycardia, palpitations, cardiac arrhythmias, hypertension, nervousness, and anxiety occur when using albuterol. Nausea and vomiting, increased respirations, and alopecia are potential adverse reactions to xanthine derivatives.
Question format: Multiple Choice
Chapter: 31
Learning Objective: 4
Cognitive Level: Apply
Client Needs: Physiological Integrity: Reduction of Risk Potential
Integrated Process: Teaching/Learning
Reference: p. 394, Using a Peak Flow Meter

9. A nurse is preparing to teach a client the correct method to take cromolyn orally. Which instruction will the nurse point out as being the appropriate method to follow?
   A) Do not take the drug at bedtime.
   B) Swallow the drug without chewing.
   C) Take the drug with food or milk.
   D) Take the drug at least 30 minutes before meals.

Answer: D

Rationale: When administered orally, cromolyn is given 30 minutes before meals and at bedtime. The oral form of the drug comes in an ampule. The ampule is opened and the contents are poured into a glass of water. The nurse stirs the mixture thoroughly. The client must drink all of the mixture. The drug may not be mixed with any other substance (e.g., fruit juice, milk, or foods).
Question format: Multiple Choice
Chapter: 31
Learning Objective: 4
Cognitive Level: Apply
Client Needs: Physiological Integrity: Pharmacological Therapies
Integrated Process: Teaching/Learning
Reference: p. 395, Summary Drug Table

10. The health care provider has prescribed a monoclonal antibody for a client with asthma. The nurse will prepare a teaching plan for which medication?
    A) Zafirlukast
    B) Zileuton
    C) Omalizumab
    D) Salmeterol

Answer: C

Rationale: Omalizumab is a monoclonal antibody used in the treatment of asthma. Leukotriene receptor antagonists include montelukast and zafirlukast. Zileuton is classified as a leukotriene formation inhibitor. Salmeterol is a long-term $beta_2$ agonist.
Question format: Multiple Choice
Chapter: 31
Learning Objective: 1
Cognitive Level: Apply
Client Needs: Physiological Integrity: Pharmacological Therapies
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 387, Leukotriene Modifiers and Immunomodulators

11. A client with asthma has received two doses of theophylline. After analyzing the daily serum theophylline level, the nurse determines the client has achieved a therapeutic level with which result?
    A) 5 mcg/L
    B) 8 mcg/L
    C) 13 mcg/L
    D) 20 mcg/L

Answer: C

Rationale: Therapeutic theophylline levels range from 10 to 20 mcg/L. The possibility of toxicity increases with levels over 15 mcg/L, with toxicity indicated with levels over 20 mcg/L.
Question format: Multiple Choice
Chapter: 31

Learning Objective: 1
Cognitive Level: Analyze
Client Needs: Physiological Integrity: Reduction of Risk Potential
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 391, Table 31.2 Theophyllinization Process

12. The nursing instructor is teaching a session explaining the various drugs used to treat chronic obstructive pulmonary disease (COPD). The instructor determines the session is successful when the students correctly choose which condition(s) as being considered part of the COPD spectrum? Select all that apply.
    A) Asthma
    B) Pulmonary embolism
    C) Pulmonary hypertension
    D) Chronic bronchitis
    E) Pneumonia

    Answer: A, D

    Rationale: COPD encompasses asthma, chronic bronchitis, chronic obstructive bronchitis, emphysema, or a combination of the conditions. Pulmonary embolism is a blood clot that is found in the lungs. Pulmonary hypertension is related to increased blood pressure in the arteries leading from the heart to the lungs. Pneumonia is an infection of the lungs.
    Question format: Multiple Select
    Chapter: 31
    Learning Objective: 1
    Cognitive Level: Apply
    Client Needs: Physiological Integrity: Physiological Adaptation
    Integrated Process: Teaching/Learning
    Reference: p. 2, Introduction

13. The nurse is teaching a client with asthma how to administer the necessary medications in a time of crisis. The nurse determines the session is successful when the client correctly chooses which medication(s) to be used as a rescue inhaler? Select all that apply.
    A) Salmeterol
    B) Metaproterenol
    C) Tiotropium
    D) Albuterol
    E) Formoterol

    Answer: B, D

    Rationale: Short-acting beta agonists (SABAs) such as metaproterenol and albuterol are used as rescue treatment for asthma. Salmeterol and formoterol are long-acting beta agonists (LABAs). Tiotropium is a cholinergic blocking drug used to treat bronchospasm associated with COPD.
    Question format: Multiple Select
    Chapter: 31

Learning Objective: 1
Cognitive Level: Understand
Client Needs: Physiological Integrity: Pharmacological Therapies
Integrated Process: Teaching/Learning
Reference: p. 395, Summary Drug Table

17. A nurse is assessing a client's serum theophylline level and notes it is 7 mcg/L. After assessing the client's medical record, which drug(s) should the nurse question? Select all that apply.
    A) Nicotine
    B) Allopurinol
    C) Verapamil
    D) Phenytoin
    E) Ketoconazole

Answer: A, D, E

Rationale: The normal serum range of theophylline is 10–20 mcg/L. Clients with a level of 15–20 mcg/L should be monitored for potential toxicity. Levels above 20 mcg/L are considered toxic. Nicotine, phenytoin (a hydantoin), and ketoconazole can decrease theophylline levels. Verapamil (a calcium channel blocker) and allopurinol can increase theophylline levels.
Question format: Multiple Select
Chapter: 31
Learning Objective: 1
Cognitive Level: Apply
Client Needs: Physiological Integrity: Pharmacological Therapies
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 384, Cardiac and Respiratory System Reactions

15. The nurse is preparing to administer formoterol to a client. The nurse determines cautious administration is warranted after noting which condition(s) in the client's history? Select all that apply.
    A) Cerebral arteriosclerosis
    B) Hypertension
    C) Glaucoma
    D) Hyperthyroidism
    E) Diabetes

Answer: B, C, D, E

Rationale: Long-acting $beta_2$ agonists should be used cautiously in clients with hypertension, cardiac dysfunction, hyperthyroidism, glaucoma, diabetes, prostatic hypertrophy, and history of seizures. Cerebral arteriosclerosis is a contraindication for formoterol.
Question format: Multiple Select
Chapter: 31
Learning Objective: 1
Cognitive Level: Apply

Client Needs: Physiological Integrity: Pharmacological Therapies
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 383, Cardiovascular System Reactions

16. A client with recently diagnosed exercise-induced bronchospasms is to be prescribed an inhalant. The nurse anticipates the client will be prescribed which medication(s)? Select all that apply.
    A) Beclomethasone
    B) Levalbuterol
    C) Theophylline
    D) Mometasone
    E) Terbutaline

    Answer: B, E

    Rationale: Beta$_2$ agonists, such as levalbuterol and terbutaline, are used to treat exercise-induced bronchospasm. Beclomethasone and mometasone are inhaled corticosteroids. Theophylline is a xanthine derivative.
    Question format: Multiple Select
    Chapter: 31
    Learning Objective: 1
    Cognitive Level: Apply
    Client Needs: Physiological Integrity: Pharmacological Therapies
    Integrated Process: Clinical Problem-solving Process (Nursing Process)
    Reference: p. 383, Adrenergic Bronchodilators

17. A client is prescribed an inhaled corticosteroid. The nurse would instruct the client about which as a possible adverse reaction(s)? Select all that apply.
    A) Fungal infection
    B) Pharyngeal irritation
    C) Unpleasant taste sensation
    D) Cough
    E) Headache

    Answer: A, B

    Rationale: Adverse reactions of inhaled corticosteroids include oral, laryngeal, and pharyngeal irritation and fungal infection. An unpleasant taste sensation and cough are potential adverse effects of mast cell stabilizers. A headache is a potential adverse reaction to leukotriene modifiers.
    Question format: Multiple Select
    Chapter: 31
    Learning Objective: 1
    Cognitive Level: Understand
    Client Needs: Physiological Integrity: Reduction of Risk Potential
    Integrated Process: Teaching/Learning
    Reference: p. 386, Respiratory System Reactions

18. After teaching a group of nursing students about xanthine derivatives, the instructor determines that the teaching was successful when the students correctly state which result(s) of using these medications? Select all that apply.
    A) Cause flushing
    B) Leads to bradycardia
    C) Cause a reduction in airway inflammation
    D) Cause hypoglycemia
    E) Stimulate the CNS to promote bronchodilation

    Answer: A, E

    Rationale: Xanthine derivatives can cause flushing, tachycardia, and hyperglycemia. Xanthine derivatives elicit their effects by stimulating the CNS to promote bronchodilation.
    Question format: Multiple Select
    Chapter: 31
    Learning Objective: 1
    Cognitive Level: Understand
    Client Needs: Physiological Integrity: Pharmacological Therapies
    Integrated Process: Teaching/Learning
    Reference: p. 384, Cardiac and Respiratory System Reactions

19. A nurse is preparing a teaching plan for a client and caregiver on the proper use of a dry powder inhaler. Which instruction(s) will the nurse include in this teaching? Select all that apply.
    A) Place device in water to clean.
    B) Swallow capsules provided.
    C) Hold inhaler 1–2 inches from mouth.
    D) Hold breath for 10 seconds.
    E) Inhale quickly.

    Answer: D, E

    Rationale: To properly use a dry powder inhaler, the client should do the following: prepare the medication for inhalation, place the mouthpiece close to the lips, inhale quickly, hold breath for 10 seconds, not swallow capsules provided, and not place the inhaler in water.
    Question format: Multiple Select
    Chapter: 31
    Learning Objective: 4
    Cognitive Level: Apply
    Client Needs: Physiological Integrity: Pharmacological Therapies
    Integrated Process: Teaching/Learning
    Reference: p. 392, Box 31.2 Using a Metered-Dose Inhaler

20. The nurse is teaching a client how to properly use a peak flow meter. The nurse determines the session is successful when the client correctly explains which step(s)? Select all that apply.
    A) Inhales as forcibly as possible

B) Stands upright to allow the best inhalation possible
C) Makes sure indicator is at lowest level on scale
D) Makes sure lips are sealed tightly around the mouthpiece
E) Measures peak flow rate at different times each day

Answer: B, C, D

Rationale: When teaching a client to use a peak flow meter, instruct the client to make sure the indicator is at the lowest level, stand upright, make sure the lips form a tight seal around the mouthpiece, exhale as forcibly and as quickly as possible, and test peak flow at the same time each day.
Question format: Multiple Select
Chapter: 31
Learning Objective: 4
Cognitive Level: Analyze
Client Needs: Physiological Integrity: Reduction of Risk Potential
Integrated Process: Teaching/Learning
Reference: p. 394, Client Teaching for Improved Outcomes

21. Before administering a prescribed bronchodilator to a client experiencing acute breathing distress, which assessment(s) should the nurse complete? Select all that apply.
A) Blood pressure
B) Blood glucose
C) Pulse
D) Lung sounds
E) Respiratory rate

Answer: A, C, D, E

Rationale: Prior to initiation of a bronchodilator during acute breathing distress, the nurse needs to assess vital signs, including blood pressure, pulse, and respiratory rate and lung sounds. Blood glucose would only be necessary if the client had diabetes.
Question format: Multiple Select
Chapter: 31
Learning Objective: 2
Cognitive Level: Apply
Client Needs: Physiological Integrity: Reduction of Risk Potential
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 388, Preadministration Assessment

22. The nurse is developing an asthma plan for a young client and caregiver. The nurse determines they understand the plan when they correctly choose which action(s) to implement? Select all that apply.
A) Call health care provider is in yellow zone for more than 24 hours.
B) Waking up at night with wheezing.
C) Peak flow is 55% of personal best.
D) Quick-relief medications are not working.

E) Can do some but not all usual activities.

Answer: A, D

Rationale: The asthma care plan utilizes the stop light approach with red, yellow, and green activities to guide the client in helping to maintain their control of asthma. Factors such as staying in the yellow zone for more than 24 hours and quick-relief medications not working are found in the red zone and necessitate an immediate call to the health care provider to advert a crisis. Waking up at night with wheezing, peak flow of 55% of personal best, and being able to only do some but not all usual activities are found in the yellow zone and should alert the client to take appropriate action to prevent the asthma from worsening.
Question format: Multiple Select
Chapter: 31
Learning Objective: 2
Cognitive Level: Apply
Client Needs: Physiological Integrity: Reduction of Risk Potential
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 389, Figure 31.3 Example of Asthma Action Plan from the NHLBI, publication No. 20-HL-5251

23. A client is administered a bronchodilator during an acute asthma attack. As the client's condition improves, the nurse will **prioritize** which assessment(s)? Select all that apply.
A) Intake
B) Blood pressure
C) Output
D) Lung sounds
E) Accessory muscle use

Answer: A, C, D, E

Rationale: The nurse should note the client's respiratory rate, lungs sounds, intake, and output and use of accessory muscles in breathing every 4 hours as the client returns to a normal breathing pattern following an acute asthma attack.
Question format: Multiple Select
Chapter: 31
Learning Objective: 2
Cognitive Level: Apply
Client Needs: Physiological Integrity: Reduction of Risk Potential
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 389, Ongoing Assessment

24. During stable chronic phases of asthma, the nurse should advise the client to monitor which symptom(s)? Select all that apply.
A) Blood pressure
B) Wheezing
C) Respiratory rate
D) Coughing

E) Peak flow changes

Answer: B, D, E

Rationale: Clients with chronic stable asthma should monitor for symptoms such as wheezing, coughing, peak flow changes, and triggers that might be making the asthma worse.
Question format: Multiple Select
Chapter: 31
Learning Objective: 2
Cognitive Level: Apply
Client Needs: Physiological Integrity: Reduction of Risk Potential
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 389, Ongoing Assessment

25. A client with asthma is preparing to go home after being hospitalized with an acute attack with a new prescription for fluticasone/salmeterol inhalant. Which point(s) should the nurse **prioritize** in the discharge teaching? Select all that apply.
A) Take the medication as needed.
B) Continue to carry a rescue inhaler.
C) Check peak flow daily.
D) Rinse mouth after each use.
E) Shake meter well before using.

Answer: B, C, D

Rationale: The drug is a dry powder inhaler that contains an inhaled corticosteroid and a long-acting beta agonist. The medication should be taken every day as per the directions on the label to prevent future exacerbations. The client should continue to carry a rescue inhaler and check peak flow around the same time each day. Advair does not need to be shaken prior to use as it is a dry powder inhaler. The client should be advised to rinse their mouth out after each use to prevent oral thrush.
Question format: Multiple Select
Chapter: 31
Learning Objective: 4
Cognitive Level: Apply
Client Needs: Physiological Integrity: Reduction of Risk Potential
Integrated Process: Teaching/Learning
Reference: p. 391, Long-Term Control of Symptoms

26. The nurse is preparing to teach a young client and caregiver about the prescribed cromolyn. The nurse should point out this can be administered in which manner(s)? Select all that apply.
A) Via a nebulizer
B) Orally
C) Nasal spray
D) Metered-dose inhaler

E) Subcutaneous injection

Answer: A, B, C, D

Rationale: Cromolyn may be administered via a nebulizer, as an aerosol metered spray, as a nasal spray, or orally. It is not given subcutaneously.
Question format: Multiple Select
Chapter: 31
Learning Objective: 1
Cognitive Level: Understand
Client Needs: Physiological Integrity: Pharmacological Therapies
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 395, Summary Drug Table

27. A nurse is teaching a client about the prescribed zileuton. The nurse determines the session is successful when the client correctly points out they will contact the health care provider if which reactions occur? Select all that apply.
A) Jaundice
B) Pruritus
C) Fatigue
D) Dizziness
E) Restlessness

Answer: A, B, C

Rationale: Zileuton may cause liver damage, which may present with the following symptoms: upper right quadrant pain, nausea, fatigue, lethargy, pruritus, and jaundice. Dizziness is a potential adverse reaction to albuterol, epinephrine, levalbuterol, terbutaline arformoterol, formoterol, ipratropium, and cromolyn. Restlessness is a potential adverse reaction to aminophylline, theophylline toxicity, xanthine derivative, and adrenergic bronchodilators.
Question format: Multiple Select
Chapter: 31
Learning Objective: 4
Cognitive Level: Apply
Client Needs: Physiological Integrity: Reduction of Risk Potential
Integrated Process: Clinical Problem-solving Process (Nursing Process)
Reference: p. 387, Leukotriene Modifiers and Immunomodulators

28. The nurse teaches a client receiving an inhaled corticosteroid about the possibility of developing oral thrush. Which action(s) would the nurse include in the teaching plan as a way to reduce this risk? Select all that apply.
A) Need to avoid eating after administration
B) Performing strict oral hygiene
C) Cleaning the inhaler per package instructions
D) Using proper technique when administering dose
E) Administering a dose only every other day

Answer: B, C, D

Rationale: To decrease the likelihood of developing oral thrush, a client should use strict oral hygiene, cleanse the inhaler as directed in the package instructions, and use proper technique when administering a dose. There is no need to avoid eating after administration, and using the drug only every other day would not be effective.
Question format: Multiple Select
Chapter: 31
Learning Objective: 4
Cognitive Level: Apply
Client Needs: Physiological Integrity: Reduction of Risk Potential
Integrated Process: Teaching/Learning
Reference: p. 393, Impaired Oral Mucous Membranes

29. A nurse is preparing to teach a client with asthma about the prescribed medication. The nurse will point out the increased risk of developing *Candida albicans* with which medication(s)? Select all that apply.
A) Albuterol
B) Cromolyn
C) Fluticasone
D) Tiotropium
E) Budesonide/formoterol

Answer: B, C, E

Rationale: Mast cell aerosols such as cromolyn and inhaled corticosteroids (ICSs) such as fluticasone and budesonide/formoterol have been associated with the development of oral thrush. Therefore, the client needs instructions on how to reduce their risk. Albuterol, a short-acting $beta_2$ agonist, and tiotropium, a cholinergic blocker, are not associated with the development of thrush.
Question format: Multiple Select
Chapter: 31
Learning Objective: 4
Cognitive Level: Apply
Client Needs: Physiological Integrity: Pharmacological Therapies
Integrated Process: Teaching/Learning
Reference: p. 393, Impaired Oral Mucous Membranes