

Content Focus: Administration

Student: deering, conor

Your ScoreCard: Correct: 0/25 Incorrect: 25/25**What administration considerations apply to captopril?**

- Available for oral use only
- Must be taken two to three times daily for hypertension; three times daily for heart failure
- Give captopril 1 hr before meals for adequate absorption

What administration considerations apply to losartan?

- ARBs are available for oral administration only
- Losartan is also available in combination with the thiazine diuretic, hydrochlorothiazide (Hyzaar)
- May be taken with or without food
- Beginning dose is decreased for clients taking diuretics or with liver failure

What administration considerations apply to spironolactone?

- Available for oral use only
- Give alone or combined with other antihypertensive drugs
- Maximum effect of eplerenone may take up to 4 weeks

What administration considerations apply to aliskiren?

- Available in oral form only
- High fat-meals decrease absorption
- Give at a consistent time daily before eating
- Expect 2 weeks before full effect is seen
- Monitor for hypotension at beginning of therapy and after any dose increase

What administration considerations apply to nifedipine?

- Available for oral use in capsules and sustained-release tablets; sustained release form is approved to treat hypertension
- Sustained-release form must be swallowed whole and not chewed or crushed
- To prevent reflex tachycardia, nifedipine may be combined with a beta-blocker

What administration considerations apply to doxazosin?

- Available in oral form only
- Give at bedtime – especially first dose; subsequent doses individualized based on orthostatic blood pressure changes

What administration considerations apply to atenolol and metoprolol?

- Atenolol and metoprolol are available for oral or IV use
- Give IV initially and then orally for acute myocardial infarction
- Give orally for hypertension
- Atenolol is available in a tablet which may be crushed or swallowed
- Metoprolol is available as an immediate-release tablet (Lopressor) or in a sustained-release dose (Toprol XL), which must not be crushed and must be swallowed whole
- Absorption of metoprolol may be enhanced with food; take at consistent time each day
- Atenolol is best taken before meals or at bedtime

What administration considerations apply to reserpine?

- Available for oral use only
- Administer with food or milk to prevent GI symptoms

What administration considerations apply to clonidine?

- Available orally or as transdermal patch to treat hypertension
- Give oral dose at bedtime to prevent daytime sedation
- Begin oral dosage low and gradually increase to prevent severe hypotension
- Apply transdermal patch to a dry, relatively hairless area of skin on the upper outer arm or anterior chest once every 7 days
- Rotate transdermal sites and monitor skin for inflammation, irritation
- Be sure to remove the old patch before applying a new patch
- Clonidine has been abused by some clients – monitor for correct dosage/administration

What administration considerations apply to carvedilol?

- Available for oral use only
- Give with food to minimize orthostatic hypotension

What administration considerations apply to hydralazine?

- Available in oral, IM, or IV forms
- Give oral dose with food to enhance effectiveness
- Oral dosage usually begins low and is gradually increased
- Administer IV form undiluted; do not add to other solutions

What administration considerations apply to hydrochlorothiazide?

- Available orally alone and in fixed-dose combination with multiple other drugs, such as potassium-sparing diuretics, ACE inhibitors, ARBs, beta blockers and other antihypertensive drugs
- Chlorothiazide is available in IV form
- Give with food to minimize GI effects
- Give last dose of day by 3 p.m. to prevent nocturia and sleep loss

What administration considerations apply to furosemide?

- Available for oral, IM, or IV use
- Give oral form with food to prevent GI symptoms
- If prescribed more than once daily, give second dose by early afternoon to prevent nocturia and sleep loss
- Give IV form undiluted; administer slowly to prevent ototoxicity
- Protect all forms from light; store oral solution in refrigerator and other forms at controlled room temperature

What administration considerations apply to digoxin?

- Available as oral tablets, capsules, and elixir, as well as for IV use
- Give oral form with or without food
- Tablets may be crushed and mixed with food if necessary
- IV form may be administered directly over at least 5 min; monitor site carefully for infiltration, which can cause tissue damage

What administration considerations apply to dobutamine?

- Available for IV infusion only
- Dose based on client's weight and titrated based on continuous monitoring of vital signs, ECG, urine output, and (if available) cardiac output and pulmonary wedge pressures
- Peak effect obtained about 10 minutes after infusion begins
- Multiple infusion incompatibilities exist; use dedicated IV line for infusion
- Correct any fluid volume deficits before administering dobutamine

What administration considerations apply to milrinone?

- Available for IV infusion only

Give a loading dose over
10 minutes and then administer a dose based on client's weight by continuous infusion
Some solution incompatibilities exist; use dedicated IV line if possible

What administration considerations apply to atorvastatin?

Available orally only
For greatest effectiveness, take in the evening with or without food (take one statin, lovastatin [Mevacor], with food for better absorption)

What administration considerations apply to gemfibrozil?

Available oral use only
Usually taken twice daily, 30 minutes before breakfast and evening meals
Monitor periodic LDL, HDL, triglyceride, and total cholesterol levels for improvement

What administration considerations apply to nitroglycerin and isosorbide?

Nitroglycerin available as sublingual tablets, sustained-release capsules or tablets, a translingual spray or transmucosal tablets, transdermal ointment or patch, and IV form
Two types of isosorbide are available
 isosorbide dinitrate (Isordil) available in regular, chewable, sublingual or sustained release tablets.
 isosorbide mononitrate (Ismo, Imdur) available in sustained release and immediate release tablets or capsules
Place sublingual tablets under tongue to dissolve when chest pain starts; if not relieved in 5 minutes, call 911, take a second tablet; take a third tablet 5 minutes later if no relief
Sublingual sprays: Dose equals 1 or 2 sprays; as for sublingual tablets, no more than 3 doses in a 15-minute period
Client should not swallow transdermal or transmucosal tablets; may need to moisten mouth to help tablet dissolve
Store tablets in a dark tightly closed container for no more than 24 months after opening.
Transdermal patches are for prevention only; apply to a hairless area and rotate sites.
Remove patches for 10–12 hours daily to prevent tolerance; apply patch in morning, remove at night.
Topical ointment: dosage measured as amount squeezed from tube (e.g. 2 inches = 30 mg); apply to dry skin and cover area with plastic wrap.
When discontinuing long-acting forms, taper doses to prevent increased chest pain (vasospasm)
IV form is infused continuously in a glass bottle with special tubing only

What administration considerations apply to quinidine and procainamide?

Available in oral, IM and IV forms
IM administration is painful and has poor absorption
Oral dosing is preferred – Give oral dose 1 hr before or 2 hr after meals for best absorption; give with food if GI symptoms occur
Do not crush or chew extended-release tablets
If giving IV procainamide, wait 4 hr before administering an oral dose
For IV doses, use an IV pump and infuse at recommended rate and dilution
Multiple IV solution incompatibilities exist; avoid infusing with other drugs or solutions

What administration considerations apply to lidocaine?

Available for IV infusion (IV preferred for dysrhythmias; local administration for anesthesia only)
IM administration is for emergency use only
Add 2 g lidocaine to 250 or 500 mL D5W and infuse at 1 to 4 mg/minute (per prescription) using an IV pump
Assure that the correct lidocaine preparation is used for the specific type of therapy (e.g. labeled for IV use only)
Incompatible in solution or tubing with other drugs, such as some antibiotics, phenytoin

What administration considerations apply to flecainide and propafenone?

Available for oral use only
Begin with low dose and increase gradually no more frequently than every 4 days until maximum or desired dose has been reached

What administration considerations apply to propranolol?

Available for oral or IV use

Use the IV route to treat life-threatening dysrhythmias

Take either with or without food at consistent times during the day to minimize adverse effects

Take client's BP and pulse before administering propranolol; withhold drug and notify provider if BP is below 90 mm/Hg systolic or if pulse is slower than 60 beats/min

Give IV dose either directly by IV bolus over 1 minute or give an intermittent infusion over 15 to 20 minutes

What administration considerations apply to amiodarone?

Available for oral and IV use

Give oral amiodarone with or without food, but at consistent times during the day

Infuse IV dose through central line catheter to prevent thrombophlebitis of peripheral IV sites

Begin oral dosing with hospitalized client

Correct low potassium or magnesium levels before beginning therapy

What administration considerations apply to verapamil?

Available for oral or IV use

Give oral dose with food to prevent GI upset

IV form: give dose using recommended dilution over 2 to 3 minutes; monitor cardiac rhythm and vital signs continuously