
LEARN THE PATTERN. EXPLAIN THE WHY.

**YOUR MEMORY CAN HAVE
A METHOD.**

NCLEX-RN Medication Guide

*Learn the pattern.
Remember the why.*



You are building the judgment a nurse uses: connect the medication to the patient, notice meaningful changes, and explain the safest next step.

101

individual medicines

24

medication categories

30

application questions

Built for active recall. Individual medicine entries plus 64 family comparison cards: actions, assessment cues, urgent risks, teaching, memory hooks, and recall explanations with linked primary sources.

Read this first: This independent educational guide supports study. It is not a prescribing guide, dosing reference, or substitute for clinical supervision. It has not undergone independent pharmacist or RN-educator validation.

Research checked October 22, 2026 · Expanded edition

Original content developed with AI assistance. No official NCLEX affiliation or guarantee of an exam result.

[Open the searchable online guide](#)

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How to use each card

Connect. Say what the drug changes in the body.

Check. Name the relevant assessment, lab trend, and patient context.

Notice. Explain which change needs prompt action.

Teach. Use your own words, then use teach-back.

Retrieve. Cover the answer. Explain the recall prompt before looking.

A memory hook is a clue, not an order. The card's exceptions and patient-specific instructions still apply. Drug families help organize learning; they do not make every member interchangeable.

24 CATEGORIES. INDIVIDUAL MEDICINE LINKS.

Find the medicine. Make the link.

Choose a category below, or use the linked generic-name index to find an individual medicine. Page numbers lead to its first entry.

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Keep the individual differences in view. The 64 comparison cards follow the individual entries. They include additional generic medicines and help you connect patterns without assuming every drug is interchangeable.

STUDY METHOD & SAFETY

Build a safer memory

Your goal is not to recite a pharmacy shelf. It is to recognize what a medicine is meant to do, notice when a patient may be in danger, and explain safe use clearly. Learn one family, connect one risk, and practice one decision.

This original NCLEX-RN study companion uses selected generic medicines, family comparisons, memory hooks, and application questions. It is not a complete drug reference, dosing guide, treatment protocol, or prediction of exam content. Check the exact current product label, prescription, patient factors, and local policy in clinical care.

Prepared with AI assistance and checked against the linked sources on October 22, 2026. Independent pharmacist or RN educator review has not yet been completed. The memory hooks are learning cues, not clinical rules.

The four-question memory routine

Turn each card into a short explanation you can give without looking. Start with what the medicine does; then ask what that effect means for this patient. Your highlighter gets a supporting role, not the whole show.

- Purpose: What problem is this medicine intended to improve? Say the mechanism in plain English.
- Before: Which assessment, lab, interaction, allergy, or patient factor matters before administration?
- Danger: Which new finding would make you reassess and escalate promptly? Explain why.
- Teaching: What should the patient demonstrate, avoid, monitor, or report? Use teach-back.
- Cover the card. Answer its recall question. Check your reasoning, correct one gap, and revisit after a delay.

The safety pause comes before the mnemonic

Medication questions ask you to connect the order with the patient. A familiar name does not make an order automatically appropriate.

- Confirm patient identity, allergies and reactions, indication, exact drug, formulation, concentration, route, dose, timing, and relevant assessment under policy.
- Review prescribed medicines, over-the-counter products, supplements, interactions, and relevant organ function. Clarify an incomplete, conflicting, or unsafe order.
- Use the prescribed hold or titration parameters. A memorized pulse or blood-pressure cutoff cannot replace the individual order and assessment.
- Evaluate and document the response. For a life-threatening change, initiate the emergency response while obtaining appropriate help.
- High-alert medicines have greater potential for serious harm when an error occurs. Follow safeguards such as standardized concentrations, pump settings, and required independent checks.

Sources: [\[317\]](#), [\[318\]](#)

STUDY METHOD & SAFETY

Build a safer memory

Name endings are clues, not verdicts

Use patterns to organize a first pass, then verify the exact medicine. Similar-looking names can hide different indications, formulations, interactions, and monitoring.

- Common ACE inhibitor examples end in -pril; common ARB examples end in -sartan. Learn the specific examples and potassium/renal considerations on their cards.
- Many beta blockers end in -olol, but receptor selectivity and additional effects differ. A suffix does not establish a safe hold parameter.
- Calcium channel blockers are not one identical group: amlodipine differs from diltiazem and verapamil in effects on cardiac conduction.
- Insulin names and concentrations matter more than a broad 'insulin' label. Meal timing, mixing, route, and devices must be verified for the exact product.

Sources: [\[1\]](#), [\[3\]](#), [\[5\]](#), [\[6\]](#), [\[7\]](#), [\[8\]](#), [\[37\]](#)

Read a new symptom as a clue

A memory hook should help you notice a problem, not diagnose it by itself. Assess severity, timing, patient history, other medicines, and vital signs. Escalate based on the whole situation.

- Breathing or consciousness changes: think about anaphylaxis, opioid/sedative effects, magnesium toxicity, or another urgent cause. Severe compromise needs emergency response.
- Bleeding or neurologic change during antithrombotic therapy: assess urgently; do not assume the scheduled laboratory result makes symptoms harmless.
- Fever, rash, sore throat, or infection symptoms: the significance differs across medicines. Use the relevant card to connect the symptom with the risk.
- New palpitations or fainting: consider rhythm, electrolyte changes, interacting drugs, and the clinical setting. Do not identify the cause from a suffix alone.

Sources: [\[321\]](#), [\[72\]](#), [\[142\]](#), [\[28\]](#), [\[52\]](#)

STUDY METHOD & SAFETY

Build a safer memory

Remember why the laboratory test matters

For every test, finish this sentence: 'I am checking this because the medicine may change ____, or this result may change the medicine's safety.' Use the laboratory's units and reference range and the patient's ordered target.

- Kidney function: may affect clearance, accumulation, electrolyte balance, and selection or adjustment of treatment.
- Potassium and magnesium: connect diuretics, replacement, and rhythm-sensitive medicines instead of memorizing isolated facts.
- Blood counts: distinguish hemoglobin, platelets, white cells, and absolute neutrophil count; they do not answer the same question.
- Drug concentrations: timing of the sample and the clinical picture matter. A number alone does not exclude toxicity.
- Anticoagulant monitoring: warfarin, unfractionated heparin, low-molecular-weight heparin, and direct oral anticoagulants do not share one interchangeable test or target.

Sources: [\[317\]](#), [\[10\]](#), [\[23\]](#), [\[24\]](#), [\[30\]](#), [\[93\]](#)

Rescue medicines are not an undo button

Recognize the association and the limits together. Reversal or rescue treatment does not replace airway support, monitoring, emergency escalation, or the specific prescribed protocol.

- Opioids and naloxone: breathing may improve, then worsen again when naloxone wears off. Continued monitoring and emergency care matter.
- Severe hypoglycemia and glucagon: follow the product's rescue plan and emergency instructions; swallowing safety determines whether oral carbohydrate is appropriate.
- Magnesium toxicity and calcium: calcium may counter magnesium's effects under an emergency order; support breathing without delay.
- Benzodiazepines and flumazenil: selected situations only. Dependence and mixed overdoses can make seizure risk a major concern.
- Anaphylaxis and epinephrine: follow the specific emergency product and route. Antihistamines do not substitute for treatment of airway or circulatory compromise.

Sources: [\[75\]](#), [\[66\]](#), [\[142\]](#), [\[80\]](#), [\[321\]](#)

STUDY METHOD & SAFETY

Build a safer memory

Small symbols. Big consequences.

The numbers below illustrate safe notation, not a dose recommendation. Calculate with units, compare with the prescription, and stop if the result or order does not make sense.

- Write 0.5 mL, not .5 mL. Write 5 mL, not 5.0 mL. A missed decimal point can change an amount tenfold.
- Use the supplied calibrated device and the label's metric units for oral liquids; household spoons are not measuring devices.
- Distinguish mg from mL and dose from concentration. Different concentrations can contain different amounts in the same volume.
- Do not crush, split, open, dilute, or mix a formulation merely because another product with the same generic name permits it. Confirm with the label or pharmacist.

Sources: [\[320\]](#), [\[319\]](#)

A seven-day plan your real life can handle

Use this as a flexible practice schedule, not a promise about how quickly you must learn. Shorten the set when your explanations become rushed. A useful correction is progress.

- Day 1: Learn four unfamiliar cards. Explain purpose, before, danger, and teaching aloud.
- Day 2: Retrieve yesterday's cards before rereading. Add two closely related cards and name one important difference.
- Day 3: Draw a simple organ-to-medicine connection. Use the anatomy coloring book to label the structure, then explain the medicine's effect without looking.
- Day 4: Answer a small set of application questions. Record the reasoning error: concept, cue, interaction, formulation, or rushed reading.
- Day 5: Mix cards from different groups. Compare similar adverse effects with different mechanisms.
- Day 6: Use an NCLEX practice exam to apply what you learned; review the rationale, including why another option does not fit.
- Day 7: Revisit missed cards from memory. Choose next week's targets from the gaps you can now describe.

INDIVIDUAL MEDICINE ENTRIES

BLOOD PRESSURE

001 Lisinopril

Generic medicine: Lisinopril

MEMORY HOOK Pressure down; potassium may climb. Pair the ACE name with airway awareness.

WHAT IT DOES Reduces angiotensin II formation through ACE inhibition, lowering blood pressure and supporting selected patients with heart failure or recent myocardial infarction.

ASSESS Review blood pressure, creatinine, potassium, hydration, pregnancy status, and previous angioedema before administration and during follow-up.

WATCH & RESPOND Lip or tongue swelling, stridor, or breathing difficulty requires emergency escalation; symptomatic hypotension and rising potassium also need prompt review.

TEACH Report pregnancy immediately; discuss potassium supplements, salt substitutes, and nonprescription pain medicines before using them.

AVOID THE TRAP A dry cough can occur, but swelling or breathing difficulty must never be dismissed as an ordinary ACE-inhibitor cough.

RECALL A patient reports a new swollen tongue after taking lisinopril. Is a routine cough assessment enough?

CHECK YOUR REASONING No. Suspected angioedema threatens the airway; initiate emergency assessment and escalation rather than waiting for a routine review.

Sources: [161], [162]

BLOOD PRESSURE

002 Losartan

Generic medicine: Losartan

MEMORY HOOK Receptor blocked; pressure watched. Keep kidneys and potassium on the same study card.

WHAT IT DOES Blocks angiotensin II receptors to reduce vasoconstriction; used for hypertension and selected patients with diabetic kidney disease.

ASSESS Assess blood pressure, volume status, renal function, potassium, pregnancy status, and medicines that increase potassium or affect kidney function.

WATCH & RESPOND Escalate facial swelling or breathing difficulty immediately; investigate fainting, marked weakness, or rhythm changes for hypotension or electrolyte disturbance.

TEACH Do not use during pregnancy; report pregnancy promptly, and check before adding potassium-containing salt substitutes or anti-inflammatory pain medicines.

AVOID THE TRAP Use in diabetic kidney disease does not mean kidney monitoring is optional; dehydration and interacting drugs can increase renal risk.

RECALL Why check creatinine after a dehydrated patient receiving losartan begins an NSAID?

CHECK YOUR REASONING Losartan, volume depletion, and the NSAID can combine to impair kidney function; the team needs the clinical and laboratory trend.

Sources: [163], [164]

INDIVIDUAL MEDICINE ENTRIES

BLOOD PRESSURE

003 Metoprolol

Generic medicine: Metoprolol

MEMORY HOOK Slow the workload; keep the warning radar on. A quiet pulse does not rule out low glucose.

WHAT IT DOES Preferentially blocks beta-1 receptors, reducing heart rate and cardiac workload in selected blood-pressure, angina, heart-failure, and post-infarction regimens.

ASSESS Check pulse, blood pressure, prescribed parameters, heart-failure symptoms, glucose risk, and whether the order specifies immediate-release tartrate or extended-release succinate.

WATCH & RESPOND Escalate symptomatic bradycardia, fainting, new wheezing, or worsening breathlessness and edema; assess the whole patient rather than one pulse value.

TEACH Do not stop suddenly; follow product instructions and discuss poor intake or vomiting when diabetes treatment also increases hypoglycemia risk.

AVOID THE TRAP Beta-1 selectivity is incomplete, and formulations differ; do not assume every metoprolol product has the same schedule or handling instructions.

RECALL A diabetic patient is sweaty and confused without a racing pulse. Could glucose still be low?

CHECK YOUR REASONING Yes. Metoprolol can mask warning signs of hypoglycemia; check glucose promptly and follow the applicable hypoglycemia protocol.

Sources: [165], [159]

BLOOD PRESSURE

004 Amlodipine

Generic medicine: Amlodipine

MEMORY HOOK Think arteries first, ankles next: a pressure medicine with a visible swelling clue.

WHAT IT DOES Relaxes arterial smooth muscle through calcium-channel blockade, lowering blood pressure and helping prevent selected types of angina.

ASSESS Review blood pressure, dizziness, peripheral edema, chest-pain pattern, and liver disease; compare swelling with the baseline assessment.

WATCH & RESPOND New or worsening chest pain, fainting, or a markedly irregular heartbeat needs urgent assessment; persistent ankle swelling should be reported.

TEACH Take it consistently even when feeling well, rise carefully, and report troublesome swelling or a change in chest-pain frequency.

AVOID THE TRAP Amlodipine prevents angina but is not a rescue treatment for an attack; it does not have diltiazem's usual role in slowing AV-node conduction.

RECALL The patient wants an extra amlodipine tablet for new severe chest pain. What is the teaching priority?

CHECK YOUR REASONING Use the prescribed emergency chest-pain plan and seek urgent help; an extra maintenance tablet is not a substitute for immediate assessment.

Sources: [166]

INDIVIDUAL MEDICINE ENTRIES

BLOOD PRESSURE

005 Diltiazem

Generic medicine: Diltiazem

MEMORY HOOK Two checks before the next connection: pressure and electrical conduction.

WHAT IT DOES Blocks calcium entry, relaxing vessels and slowing AV-node conduction; the indication and monitoring depend on the oral or intravenous product.

ASSESS Check blood pressure, pulse, rhythm when indicated, heart-failure history, and concurrent beta blockers or digoxin that can further slow conduction.

WATCH & RESPOND Escalate symptomatic bradycardia, new heart block, syncope, or worsening breathlessness; low blood pressure can reduce organ perfusion.

TEACH Follow the exact formulation instructions, including whether an extended-release product can be opened; ask before changing products or schedules.

AVOID THE TRAP Do not transfer an instruction from one extended-release capsule to every diltiazem product, or treat all calcium-channel blockers as equivalent rate-control drugs.

RECALL Why does a new beta-blocker order matter for a patient already taking diltiazem?

CHECK YOUR REASONING Both can slow cardiac conduction and reduce heart rate; assess the combined risk and clarify concerning findings before administration.

Sources: [167]

BLOOD PRESSURE

006 Clonidine

Generic medicine: Clonidine

MEMORY HOOK Turn down the sympathetic volume; do not yank out the plug.

WHAT IT DOES Acts centrally at alpha-adrenergic receptors to reduce sympathetic activity, lowering blood pressure and often slowing heart rate.

ASSESS Assess blood pressure, pulse, sedation, falls risk, recent missed doses, and which oral or transdermal formulation is prescribed.

WATCH & RESPOND A sharp blood-pressure rise with headache, palpitations, or chest tightness after abrupt interruption needs urgent review; severe sedation or syncope also warrants assessment.

TEACH Do not stop suddenly or double a missed dose; ask for a prescriber-directed taper and avoid driving until the sedating effect is understood.

AVOID THE TRAP Different oral and patch products have different instructions and onset; replacing a missed tablet with an unprescribed patch is unsafe.

RECALL A patient stopped clonidine because of dry mouth and now has a pounding headache. What connection matters?

CHECK YOUR REASONING Abrupt withdrawal can cause rebound hypertension. Assess vital signs and symptoms and escalate promptly rather than simply reassuring the patient.

Sources: [148]

INDIVIDUAL MEDICINE ENTRIES

BLOOD PRESSURE

007 Nitroprusside

Generic medicine: Nitroprusside

MEMORY HOOK Fast pressure change needs fast observation; remember both cyanide and thiocyanate.

WHAT IT DOES Releases nitric oxide to rapidly dilate arteries and veins; given by controlled intravenous infusion for selected hypertensive emergencies or acute heart failure.

ASSESS Continuously monitor blood pressure and perfusion; review infusion concentration, pump settings, renal and hepatic function, duration, and prescribed toxicity monitoring.

WATCH & RESPOND Excessive hypotension, unexplained acidosis, deteriorating mental status, or increasing infusion requirements can signal serious toxicity; escalate immediately under the critical-care protocol.

TEACH Explain that close monitoring is necessary because effects change rapidly; ask the patient to report new confusion, breathlessness, or ringing in the ears.

AVOID THE TRAP Cyanide risk rises with exposure and impaired hepatic handling; thiocyanate accumulates with impaired renal clearance. A normal early acid-base result does not exclude toxicity.

RECALL Why is a newly rising infusion requirement more than a pump-adjustment question?

CHECK YOUR REASONING It can be an early cyanide-toxicity clue; reassess the patient and urgently involve the prescribing team rather than automatically escalating the rate.

Sources: [149]

HEART RHYTHM

008 Digoxin

Generic medicine: Digoxin

MEMORY HOOK Pump, pulse, potassium: connect the therapeutic effect with the toxicity checks.

WHAT IT DOES Increases myocardial contraction and slows AV-node conduction; used for selected heart-failure patients and ventricular-rate control in chronic atrial fibrillation.

ASSESS Review pulse and rhythm, renal function, potassium and magnesium, interacting medicines, and appropriately timed serum concentrations when ordered.

WATCH & RESPOND New anorexia, nausea, visual changes, confusion, or an abnormal rhythm can indicate toxicity; promptly assess and escalate before further administration.

TEACH Take the prescribed amount consistently, avoid doubling missed doses, and report new gastrointestinal or visual symptoms and any newly added medicines.

AVOID THE TRAP A laboratory concentration alone does not decide safety; symptoms, sample timing, renal clearance, and electrolyte abnormalities change its meaning.

RECALL Why is nausea more concerning when a patient taking digoxin also develops low potassium after diuresis?

CHECK YOUR REASONING Low potassium increases susceptibility to digoxin toxicity. The combined findings require prompt rhythm, electrolyte, renal-function, and medication review.

Sources: [168]

INDIVIDUAL MEDICINE ENTRIES

HEART RHYTHM

009 Amiodarone

Generic medicine: Amiodarone

MEMORY HOOK Follow the rhythm, then check lungs, liver, and thyroid: one medicine, several surveillance windows.

WHAT IT DOES Alters cardiac electrical activity to treat selected serious arrhythmias; oral maintenance therapy and intravenous emergency regimens have different instructions.

ASSESS Review rhythm, pulse, blood pressure, potassium, magnesium, thyroid and liver tests, pulmonary assessment, and the interacting-medication list.

WATCH & RESPOND New cough or breathlessness, jaundice, fainting, or a new rhythm disturbance needs prompt assessment; serious lung, liver, and cardiac toxicity can occur.

TEACH Keep monitoring appointments, use sun protection, discuss grapefruit and other medicines with the pharmacist, and report symptoms even after stopping therapy.

AVOID THE TRAP Amiodarone persists in tissues for a long time; stopping it does not immediately end adverse effects or interactions.

RECALL A patient says a new dry cough is irrelevant because amiodarone was stopped last week. What should the nurse explain?

CHECK YOUR REASONING Drug effects can persist after discontinuation; a new respiratory symptom still needs evaluation for pulmonary toxicity and other causes.

Sources: [169]

HEART RHYTHM

010 Adenosine

Generic medicine: Adenosine

MEMORY HOOK A brief electrical pause needs a prepared team, not a casual push.

WHAT IT DOES Briefly slows AV-node conduction; a rapid intravenous bolus product can terminate selected AV-node-dependent supraventricular tachycardias.

ASSESS Confirm the rhythm and prescribed protocol, obtain continuous ECG and blood-pressure monitoring, assess bronchospasm history, and check interacting medicines and caffeine exposure.

WATCH & RESPOND Transient flushing or chest pressure may occur, but persistent instability, prolonged bradycardia, or bronchospasm needs immediate assessment with resuscitation capability available.

TEACH Explain that a short-lived uncomfortable sensation may occur and that staff will watch the rhythm continuously throughout administration.

AVOID THE TRAP It does not convert every fast rhythm; the bolus regimen is different from adenosine infusion used for pharmacologic stress testing.

RECALL Why is a routine slow infusion inappropriate for the ordered rapid-bolus treatment of a suitable supraventricular tachycardia?

CHECK YOUR REASONING Adenosine is cleared within seconds; correct protocol, rapid delivery, and immediate monitoring are essential to the intended AV-node effect.

Sources: [170]

INDIVIDUAL MEDICINE ENTRIES

CIRCULATORY EMERGENCIES

011 Atropine

Generic medicine: Atropine

MEMORY HOOK Release the vagal brake, then reassess the road: rate improvement must improve perfusion.

WHAT IT DOES Blocks muscarinic effects of acetylcholine; in selected adults with symptomatic bradycardia it can increase heart rate by reducing vagal influence.

ASSESS Assess pulse, ECG, blood pressure, perfusion, symptoms, reversible causes, and the emergency algorithm; prepare for further measures if response is inadequate.

WATCH & RESPOND Watch for excessive tachycardia, chest pain, urinary retention, and anticholinergic effects; continued poor perfusion requires urgent escalation rather than repeated observation alone.

TEACH Explain the need for rhythm monitoring and ask the patient to report chest discomfort, severe visual symptoms, or difficulty passing urine.

AVOID THE TRAP A slow heart rate without instability is not automatically an atropine indication; the cause and clinical setting determine treatment.

RECALL If the heart rate rises but hypotension and altered mental status continue, is the emergency resolved?

CHECK YOUR REASONING No. Reassess circulation and reversible causes and continue the resuscitation pathway; the pulse number alone does not establish adequate perfusion.

Sources: [150], [151]

CIRCULATORY EMERGENCIES

012 Epinephrine

Generic medicine: Epinephrine

MEMORY HOOK Airway and circulation get urgent support; route and concentration must match the emergency.

WHAT IT DOES Stimulates alpha and beta receptors to support vascular tone and open airways; intramuscular epinephrine is central to emergency treatment of anaphylaxis.

ASSESS Assess airway, breathing, circulation, exposure history, and response; verify the indication, concentration, route, and device before administration.

WATCH & RESPOND Persistent airway swelling, shock, or recurrent symptoms requires emergency care; monitor for significant arrhythmia, chest pain, or severe hypertension.

TEACH Practice with the prescribed training device, carry the recommended supply, check expiry, and obtain emergency medical care after use for anaphylaxis.

AVOID THE TRAP An auto-injector intended for the outer thigh is not an intravenous product; cardiac-arrest and shock protocols use different preparations and instructions.

RECALL The patient feels better after using an auto-injector. Can emergency evaluation be skipped?

CHECK YOUR REASONING No. Improvement does not replace emergency assessment; severe symptoms can persist or recur, and additional monitored treatment may be needed.

Sources: [171], [151]

INDIVIDUAL MEDICINE ENTRIES

CIRCULATORY EMERGENCIES

013 Norepinephrine

Generic medicine: Norepinephrine

MEMORY HOOK Pressure is the headline; tissue perfusion is the story underneath it.

WHAT IT DOES Predominantly stimulates alpha receptors, with cardiac beta activity, to raise vascular tone and blood pressure in severe acute hypotension.

ASSESS Assess volume status, blood pressure, ECG, mental status, urine output, peripheral perfusion, and the infusion site; verify the concentration and pump.

WATCH & RESPOND Blanching, pain, cool skin, or swelling near the infusion can indicate extravasation; respond immediately under protocol and urgently assess systemic ischemia or arrhythmias.

TEACH Explain the frequent circulation and IV-site checks; ask the patient to report burning, pain, or coldness around the catheter immediately.

AVOID THE TRAP A higher blood-pressure reading does not prove adequate circulating volume or tissue blood flow; assess the patient and trends together.

RECALL Why should a pale painful IV site be addressed immediately even when the blood pressure is improving?

CHECK YOUR REASONING Escaped norepinephrine can produce severe local vasoconstriction and tissue injury; protect the site and escalate for protocol-directed treatment without delay.

Sources: [152]

CIRCULATORY EMERGENCIES

014 Dopamine

Generic medicine: Dopamine

MEMORY HOOK Support the circulation; keep checking the rhythm and the route.

WHAT IT DOES Stimulates catecholamine receptors to support cardiac output and vascular tone in selected shock or symptomatic-bradycardia treatment pathways.

ASSESS Review ECG, blood pressure, tissue perfusion, urine output, volume status, oxygenation, acid-base status, pump settings, and IV-site patency.

WATCH & RESPOND New tachyarrhythmia, chest pain, mottled extremities, or a painful pale infusion site requires urgent assessment for cardiac stress, ischemia, or extravasation.

TEACH Explain why the infusion is adjusted by trained staff; ask the patient to report chest discomfort, palpitations, or new IV-site pain.

AVOID THE TRAP Response varies with the patient and infusion rate; urine output alone cannot demonstrate that dopamine is protecting the kidneys or correcting shock.

RECALL A patient receiving dopamine develops frequent ventricular ectopy. Should the nurse judge effectiveness only by the improved pressure?

CHECK YOUR REASONING No. The new rhythm disturbance may threaten perfusion and requires prompt reassessment and escalation while following the ordered monitoring protocol.

Sources: [153], [151]

INDIVIDUAL MEDICINE ENTRIES

ANGINA RELIEF

015 Nitroglycerin

Generic medicine: Nitroglycerin

MEMORY HOOK Less workload, but less pressure too: check before the next relief step.

WHAT IT DOES Relaxes vascular smooth muscle, reducing cardiac workload and oxygen demand; sublingual products provide prescribed relief for episodes of angina.

ASSESS Assess chest pain, blood pressure, dizziness, and recent phosphodiesterase-5 inhibitor or riociguat use; confirm the formulation and emergency chest-pain plan.

WATCH & RESPOND Severe hypotension, syncope, or persistent or worsening chest pain requires urgent assessment; contraindicated drug combinations can cause a dangerous pressure fall.

TEACH Sit before using the prescribed sublingual product, let the tablet dissolve as directed, and follow the emergency plan instead of delaying help.

AVOID THE TRAP A prevention patch is not interchangeable with a rescue sublingual tablet; tingling under the tongue does not prove potency or effectiveness.

RECALL Why must recent sildenafil use be clarified before nitroglycerin administration?

CHECK YOUR REASONING The combination can markedly amplify vasodilation and cause severe hypotension; stop and clarify the plan rather than proceeding from the chest-pain symptom alone.

Sources: [172], [173]

CHOLESTEROL

016 Atorvastatin

Generic medicine: Atorvastatin

MEMORY HOOK Lower the lipid load; listen when muscles complain.

WHAT IT DOES Inhibits hepatic cholesterol synthesis to lower LDL cholesterol and reduce cardiovascular-event risk in appropriate patients.

ASSESS Review the lipid trend, liver history and ordered tests, muscle symptoms, pregnancy status, and interacting medicines that may raise statin exposure.

WATCH & RESPOND Unexplained muscle pain or weakness with dark urine needs prompt evaluation for muscle injury; jaundice or severe fatigue also warrants review.

TEACH Take consistently according to the formulation, discuss grapefruit and new medicines with the pharmacist, and report pregnancy or plans to breastfeed.

AVOID THE TRAP Atorvastatin tablets need not universally be taken at bedtime. Most pregnant patients stop statins, but specialist decisions for rare high-risk situations require individualized review.

RECALL A patient assumes severe muscle weakness is harmless exercise soreness. What detail makes escalation especially important?

CHECK YOUR REASONING Dark urine with weakness can suggest significant muscle breakdown; assess promptly and notify the treating team rather than encouraging the patient to push through.

Sources: [174], [175]

INDIVIDUAL MEDICINE ENTRIES

FLUID BALANCE

017 Furosemide

Generic medicine: Furosemide

MEMORY HOOK Fluid leaves the loop; electrolytes need a second look.

WHAT IT DOES Blocks sodium reabsorption in the loop of Henle, increasing salt and water excretion to reduce fluid overload.

ASSESS Trend weight, intake and output, blood pressure, edema, lung findings, renal function, sodium, potassium, and magnesium; verify the prescribed IV rate when applicable.

WATCH & RESPOND Escalate severe dizziness, oliguria, muscle weakness, rhythm changes, or new tinnitus or hearing loss; excessive diuresis can deplete circulating volume.

TEACH Rise slowly, follow the individualized fluid and electrolyte plan, and report sudden weight or symptom changes using the agreed monitoring instructions.

AVOID THE TRAP More urine is not always better. Rapid IV administration and certain clinical circumstances increase hearing-injury risk; follow the exact product and administration policy.

RECALL Why can improved edema coexist with new palpitations after furosemide?

CHECK YOUR REASONING Fluid removal may improve congestion while potassium or magnesium falls; evaluate the rhythm and electrolyte trend rather than assuming every effect is beneficial.

Sources: [176], [177]

FLUID BALANCE

018 Spironolactone

Generic medicine: Spironolactone

MEMORY HOOK Spare potassium, not monitoring: the retained electrolyte can become the risk.

WHAT IT DOES Blocks aldosterone, promoting sodium and water excretion while retaining potassium; used in selected heart-failure, edema, and hypertension regimens.

ASSESS Assess potassium, renal function, volume status, blood pressure, and concurrent ACE inhibitors, ARBs, potassium products, or other interacting medicines.

WATCH & RESPOND New marked weakness, palpitations, or concerning ECG changes may indicate hyperkalemia; urgently assess and escalate rather than assuming a diuretic lowers potassium.

TEACH Check before using salt substitutes or supplements, keep laboratory appointments, and discuss breast tenderness or enlargement if it develops.

AVOID THE TRAP Spironolactone is not interchangeable with every potassium-sparing diuretic, and combining potassium-raising drugs needs an individualized monitoring plan.

RECALL A patient adds potassium salt substitute because another diuretic once lowered potassium. What misconception needs correction?

CHECK YOUR REASONING Spironolactone can increase potassium; the old replacement advice may be unsafe now. Review the full regimen and current laboratory results with the team.

Sources: [178]

INDIVIDUAL MEDICINE ENTRIES

FLUID BALANCE

019 Hydrochlorothiazide

Generic medicine: Hydrochlorothiazide

MEMORY HOOK The distal drain can lower sodium and potassium while uric acid may rise.

WHAT IT DOES Reduces sodium reabsorption in the distal tubule, increasing excretion of salt and water to help control hypertension and selected edema.

ASSESS Review blood pressure, hydration, renal function, sodium and potassium, glucose when relevant, and gout or lithium-use history.

WATCH & RESPOND Confusion, severe weakness, palpitations, or marked dizziness can reflect electrolyte or volume disturbance; acute eye pain or vision change needs urgent assessment.

TEACH Use sun protection, rise carefully, keep monitoring appointments, and follow the prescribed schedule and individualized potassium advice.

AVOID THE TRAP Thiazides do not behave exactly like loop diuretics: they reduce urinary calcium loss and can worsen gout or raise blood glucose.

RECALL A patient with gout develops a painful swollen toe after starting hydrochlorothiazide. Why review the medication?

CHECK YOUR REASONING Thiazides can increase uric acid and precipitate gout; the new symptom needs assessment and a treatment review rather than being dismissed as unrelated.

Sources: [179], [180]

RED BLOOD CELL SUPPORT

020 Epoetin alfa

Generic medicine: Epoetin alfa

MEMORY HOOK Build red cells carefully; a higher hemoglobin is not automatically a safer target.

WHAT IT DOES Stimulates bone marrow red-cell production in selected anemias, including some chronic-kidney-disease and chemotherapy settings, to reduce transfusion requirements.

ASSESS Review hemoglobin trend, blood pressure, iron availability, indication, cancer-treatment context, and prior clotting or cardiovascular events.

WATCH & RESPOND New chest pain, focal weakness, breathlessness, painful leg swelling, or loss of dialysis-access function can indicate thrombosis and requires urgent evaluation.

TEACH Keep blood-count and pressure checks, use the exact product storage and injection instructions, and do not shake or independently increase the dose.

AVOID THE TRAP Epoetin is not immediate treatment for life-threatening anemia. Raising hemoglobin toward normal can increase cardiovascular and clotting risks in relevant populations.

RECALL Why would the clinician reduce epoetin even though the patient still hopes for a higher hemoglobin?

CHECK YOUR REASONING Treatment balances transfusion reduction against serious harm; the hemoglobin trend and individualized indication guide dosing, rather than a goal of normalizing every result.

Sources: [154], [155]

INDIVIDUAL MEDICINE ENTRIES

RED BLOOD CELL SUPPORT

021 Ferrous sulfate

Generic medicine: Ferrous sulfate

MEMORY HOOK Refill the iron store; check what travels beside it.

WHAT IT DOES Supplies iron needed for hemoglobin production and replenishes iron stores when iron deficiency is established.

ASSESS Review hemoglobin and iron studies, the cause of deficiency, gastrointestinal tolerance, adherence, and interacting medicines or supplements.

WATCH & RESPOND Severe abdominal pain, vomiting, suspected overdose, or tarry stool with weakness needs prompt assessment; accidental ingestion can be especially dangerous in children.

TEACH Store securely, use the prescribed elemental-iron amount, and ask about separating iron from calcium, antacids, or interacting medicines.

AVOID THE TRAP The tablet's salt weight is not the same as elemental iron. Dark stool can occur, but bleeding symptoms must not be automatically attributed to supplementation.

RECALL Why should a patient avoid taking ferrous sulfate alongside a calcium supplement without checking the schedule?

CHECK YOUR REASONING Calcium can reduce iron absorption. The pharmacist can help space products while balancing tolerance, adherence, and the instructions for the specific regimen.

Sources: [181], [182]

ANTICOAGULATION

022 Rivaroxaban

Generic medicine: Rivaroxaban

MEMORY HOOK Factor Xa is blocked; the calendar and meal instructions still matter.

WHAT IT DOES Directly inhibits factor Xa, reducing clot formation in specified venous-thromboembolism and cardiovascular prevention or treatment regimens.

ASSESS Review indication, exact dose and schedule, renal and hepatic function, bleeding history, interacting medicines, and planned spinal or surgical procedures.

WATCH & RESPOND Uncontrolled bleeding, severe headache after injury, black tarry stool, or new leg weakness after neuraxial procedures needs urgent assessment.

TEACH Do not stop without a plan; follow the exact food and missed-dose instructions because they differ between regimens, and report all new medicines.

AVOID THE TRAP Routine INR targets used for warfarin do not guide rivaroxaban dosing, but blood counts, kidney function, and clinical bleeding surveillance remain important.

RECALL A patient wants to skip rivaroxaban for several days because bruising is inconvenient. What should be explained?

CHECK YOUR REASONING Unplanned interruption can increase clot or stroke risk. Assess the bruising and arrange clinician advice rather than treating stopping as harmless.

Sources: [183], [160]

INDIVIDUAL MEDICINE ENTRIES

ANTICOAGULATION

023 Warfarin

Generic medicine: Warfarin

MEMORY HOOK Keep vitamin K steady; let the INR guide the conversation.

WHAT IT DOES Reduces synthesis of vitamin-K-dependent clotting factors, providing anticoagulation for selected thromboembolic conditions and mechanical-valve regimens.

ASSESS Check the prescribed INR target and recent result, bleeding findings, medication changes, diet consistency, illness, and pregnancy considerations.

WATCH & RESPOND Persistent bleeding, severe headache, black tarry stool, blood in urine, or unexpected weakness needs prompt assessment; serious injury may require emergency evaluation.

TEACH Maintain a consistent vitamin K intake, keep INR appointments, and check before adding antibiotics, pain relievers, supplements, or herbal products.

AVOID THE TRAP The target INR depends on the indication. Avoiding all leafy vegetables is not the goal, and dose changes should follow the clinician's plan.

RECALL Why can a newly prescribed antibiotic change an otherwise stable warfarin plan?

CHECK YOUR REASONING Drug interactions and illness can alter anticoagulant response; arrange appropriate INR and bleeding follow-up rather than assuming the established dose remains safe.

Sources: [184]

ANTICOAGULATION

024 Heparin

Generic medicine: Heparin

MEMORY HOOK Watch the clotting tests and the platelet story; fewer platelets can still mean more clots.

WHAT IT DOES Enhances antithrombin activity to limit thrombin and factor Xa, preventing new clot formation and extension of existing clots.

ASSESS Verify product concentration and indication; review bleeding, platelet count, hematocrit, and protocol-specific coagulation testing for therapeutic regimens.

WATCH & RESPOND Suspected heparin-induced thrombocytopenia requires stopping heparin and urgent protocol-directed evaluation; escalate new thrombosis, a platelet decline, major bleeding, or neurological change.

TEACH Report bruising, bleeding, or new limb pain and disclose heparin before procedures; follow injection training and sharps-disposal instructions when self-administering.

AVOID THE TRAP Therapeutic heparin, prophylaxis, and catheter-flush products are not interchangeable. Heparin prevents clot propagation but does not directly dissolve an established clot.

RECALL Why is new painful leg swelling with a falling platelet count concerning during heparin therapy?

CHECK YOUR REASONING It can indicate immune-mediated HIT with thrombosis. Stop heparin and seek urgent protocol-directed evaluation and an alternative anticoagulation plan, even without visible bleeding.

Sources: [185], [186]

INDIVIDUAL MEDICINE ENTRIES

ANTICOAGULATION

025 Enoxaparin

Generic medicine: Enoxaparin

MEMORY HOOK Shorter heparin chains, major checks: kidneys, bleeding, and the spine.

WHAT IT DOES A low-molecular-weight heparin that increases antithrombin-mediated inhibition, predominantly of factor Xa, to prevent or treat selected thrombotic conditions.

ASSESS Review indication, weight, renal function, blood counts, bleeding, prior HIT, and the timing of neuraxial procedures and other anticoagulants.

WATCH & RESPOND Major bleeding or new back pain, leg weakness, numbness, or bladder dysfunction around a spinal procedure needs urgent evaluation for hematoma.

TEACH Demonstrate the prescribed subcutaneous technique, follow device-specific instructions, and report bleeding; do not independently stop or change the injection schedule.

AVOID THE TRAP Enoxaparin is not unit-for-unit interchangeable with unfractionated heparin. Routine aPTT does not measure its anticoagulant effect reliably; special testing may be ordered in selected circumstances.

RECALL Why does worsening renal function matter even if the injection dose has not changed?

CHECK YOUR REASONING Reduced clearance can increase exposure and bleeding risk; review the regimen and monitoring rather than assuming an unchanged order means unchanged safety.

Sources: [187], [188]

PLATELET CONTROL

026 Clopidogrel

Generic medicine: Clopidogrel

MEMORY HOOK Platelets need a signal; clopidogrel silences one after activation.

WHAT IT DOES Blocks platelet P2Y₁₂ signaling after metabolic activation, reducing platelet aggregation in selected vascular-disease and coronary-stent regimens.

ASSESS Review bleeding, blood counts when indicated, indication and stent history, planned procedures, and medicines that interfere with activation or increase bleeding.

WATCH & RESPOND Persistent bleeding, new neurological symptoms, or unexplained fever with bruising and weakness requires prompt assessment, including rare serious blood disorders.

TEACH Do not interrupt therapy without the treating clinician's plan, especially after stenting; report all medicines and tell procedural teams before treatment.

AVOID THE TRAP People vary in their ability to activate clopidogrel, and interacting drugs can reduce its effect. Lack of bruising does not prove that it is ineffective.

RECALL Why should a patient contact the cardiac team before stopping clopidogrel for dental treatment?

CHECK YOUR REASONING Unplanned interruption may increase thrombotic risk, particularly after stenting; the procedural and prescribing teams must coordinate the bleeding and clotting plan.

Sources: [189]

INDIVIDUAL MEDICINE ENTRIES

PLATELET CONTROL

027 Aspirin

Generic medicine: Aspirin

MEMORY HOOK Platelet effect outlasts the tablet; check bleeding beyond the last swallowed dose.

WHAT IT DOES Irreversibly inhibits platelet cyclooxygenase at antiplatelet doses; other regimens also provide pain, fever, and inflammatory symptom relief.

ASSESS Review the indication, formulation, bleeding or ulcer history, aspirin-sensitive asthma, other antithrombotic drugs, and age or viral-illness context.

WATCH & RESPOND Black tarry stool, vomiting blood, severe wheezing, or persistent bleeding needs urgent assessment; ringing in the ears can indicate excessive salicylate exposure.

TEACH Use only the advised regimen, check combination products for duplicate aspirin, and discuss other pain medicines and procedures with the care team.

AVOID THE TRAP Do not routinely give aspirin to children or teenagers with viral illness because of Reye syndrome risk; clinician-directed exceptions require a specific indication.

RECALL Why should an over-the-counter aspirin product still appear in a preoperative medication history?

CHECK YOUR REASONING Its antiplatelet effect can influence procedural bleeding, and duplicate or interacting medicines may add risk; nonprescription status does not make it irrelevant.

Sources: [156]

CLOT-DISSOLVING THERAPY

028 Alteplase

Generic medicine: Alteplase

MEMORY HOOK Dissolve the obstructing clot; keep the bleeding alarm switched on.

WHAT IT DOES Activates plasminogen to plasmin, breaking down fibrin in selected acute thrombotic emergencies; eligibility depends on the condition and current protocol.

ASSESS Confirm indication, symptom timing, blood pressure, bleeding history, relevant imaging and laboratory results, recent procedures, and anticoagulant exposure with the specialist team.

WATCH & RESPOND Sudden severe headache, neurological deterioration, major bleeding, or tongue swelling requires immediate emergency escalation and protocol-directed interruption and assessment.

TEACH Explain the need for frequent neurological, blood-pressure, and bleeding checks; ask the patient to report headache, new weakness, or mouth swelling immediately.

AVOID THE TRAP Stroke thrombolysis requires exclusion of intracranial hemorrhage and condition-specific eligibility. Catheter-clearing alteplase products and instructions are not systemic stroke regimens.

RECALL Why is a new severe headache during alteplase therapy a red flag rather than an expected inconvenience?

CHECK YOUR REASONING It may signal intracranial bleeding; urgently assess neurological status and alert the treating team while following the thrombolysis emergency protocol.

Sources: [157], [158]

INDIVIDUAL MEDICINE ENTRIES

BREATHING & ALLERGY

029 Albuterol

Generic medicine: Albuterol

MEMORY HOOK Open the airway, then check the heartbeat: remember both benefit and stimulation.

WHAT IT DOES Albuterol stimulates beta-2 receptors to relax airway smooth muscle and relieve bronchospasm; inhaled products commonly serve as quick-relief therapy.

ASSESS Assess breath sounds, work of breathing, oxygenation, pulse, inhaler technique, and how often relief is needed; reassess the response.

WATCH & RESPOND Worsening wheeze immediately after inhalation, chest pain, or a marked racing heartbeat requires prompt assessment and escalation.

TEACH Follow the prescribed rescue plan and device instructions; seek help when the usual treatment no longer relieves symptoms or is needed more often.

AVOID THE TRAP Tremor can occur, but repeated rescue use is a cue to reassess control, not permission to keep increasing doses.

RECALL Why ask how many times the rescue inhaler was used this week?

CHECK YOUR REASONING An increasing need can signal worsening disease or ineffective technique; symptom relief alone does not establish adequate long-term control.

Sources: [190]

BREATHING & ALLERGY

030 Ipratropium

Generic medicine: Ipratropium

MEMORY HOOK Airways open; eyes stay protected. Route awareness belongs beside the drug name.

WHAT IT DOES Ipratropium blocks muscarinic effects in the airways, reducing bronchoconstriction; inhaled treatment commonly supports COPD symptom control.

ASSESS Check respiratory status, response to treatment, device technique, glaucoma history, and difficulty passing urine before reinforcing the prescribed plan.

WATCH & RESPOND New eye pain, blurred vision, urinary retention, or worsening breathing after inhalation needs prompt assessment and communication.

TEACH Keep the inhaled mist out of the eyes; ensure a nebulizer mask fits well and demonstrate correct mouthpiece use.

AVOID THE TRAP Ipratropium may be part of an acute-care combination, but a maintenance prescription is not a stand-alone plan for sudden severe breathlessness.

RECALL A client reports eye pain after a leaking nebulizer mask. What connection matters?

CHECK YOUR REASONING Antimuscarinic mist reaching the eyes can worsen narrow-angle glaucoma; assess promptly and arrange urgent evaluation rather than dismissing the symptom.

Sources: [191]

INDIVIDUAL MEDICINE ENTRIES

BREATHING & ALLERGY

031 Fluticasone

Generic medicine: Fluticasone

MEMORY HOOK Calm the airway lining; keep the rescue plan ready. Prevention and immediate relief are different jobs.

WHAT IT DOES Fluticasone is a corticosteroid; inhaled formulations reduce airway inflammation for asthma control, while nasal products treat nasal symptoms.

ASSESS Confirm the route, device, scheduled use, symptom trend, rescue plan, and mouth or throat changes; review technique with a return demonstration.

WATCH & RESPOND Persistent oral white patches or hoarseness needs review; sudden worsening breathing or facial swelling requires urgent assessment.

TEACH After oral inhalation, rinse the mouth and spit out the water; continue scheduled therapy as prescribed even when breathing feels comfortable.

AVOID THE TRAP A nasal spray cannot substitute for an asthma inhaler, and fluticasone alone does not stop an acute asthma attack.

RECALL Why does a client still need a separate action plan for sudden wheezing?

CHECK YOUR REASONING Fluticasone controls inflammation over time. Acute symptoms require the prescribed reliever and escalation plan, not extra preventive doses.

Sources: [192], [228]

BREATHING & ALLERGY

032 Montelukast

Generic medicine: Montelukast

MEMORY HOOK Airway plan plus mood check: remember the person behind the breathing symptom.

WHAT IT DOES Montelukast blocks leukotriene receptors to help prevent asthma symptoms and, in selected patients, relieve allergic rhinitis.

ASSESS Review symptom control, other asthma medicines, mental health history, and any changes in sleep, mood, or behavior after treatment begins.

WATCH & RESPOND New nightmares, agitation, depression, or suicidal thoughts require stopping montelukast and contacting the prescriber promptly; immediate danger needs emergency help.

TEACH Explain the mental health warning to the client and caregiver, and maintain the prescribed rescue inhaler plan for sudden symptoms.

AVOID THE TRAP It is not an acute rescue drug; for allergic rhinitis, its serious risks mean alternatives should generally be tried or considered first.

RECALL Why take a report of new vivid nightmares seriously even without prior psychiatric illness?

CHECK YOUR REASONING Neuropsychiatric effects can occur without a previous mental health diagnosis and may also occur after treatment ends; the report needs timely action.

Sources: [193]

INDIVIDUAL MEDICINE ENTRIES

BREATHING & ALLERGY

033 Diphenhydramine

Generic medicine: Diphenhydramine

MEMORY HOOK Dry, drowsy, and dizzy: a cue to assess, not a complete adverse-effect list.

WHAT IT DOES Diphenhydramine blocks histamine H1 effects to reduce allergy symptoms; it also has sedating and anticholinergic effects.

ASSESS Assess alertness, fall risk, urinary difficulty, glaucoma, age, alcohol use, and other sedating or anticholinergic medicines, including combination cold products.

WATCH & RESPOND New confusion, difficulty urinating, or vision problems need prompt review; severe sedation or breathing difficulty requires urgent evaluation.

TEACH Avoid alcohol and driving until effects are known; check ingredient labels to prevent duplicate dosing and never use it merely to make a child sleep.

AVOID THE TRAP An over-the-counter label does not make this a low-risk sleep aid, especially for older adults or clients taking other sedatives.

RECALL Why question nightly diphenhydramine in an older adult who has started falling?

CHECK YOUR REASONING Sedation, dizziness, and anticholinergic effects can undermine safety; reconcile all medicines and request a safer individualized treatment review.

Sources: [194]

BREATHING & ALLERGY

034 Theophylline

Generic medicine: Theophylline

MEMORY HOOK Level, lifestyle, and new illness: three prompts for a narrow safety margin.

WHAT IT DOES Theophylline relaxes airway smooth muscle to support breathing; its useful effect and toxic exposure can be close together.

ASSESS Review prescribed serum-level monitoring, pulse, symptoms, liver and cardiac conditions, interacting medicines, fever, and changes in smoking status.

WATCH & RESPOND Persistent vomiting, pronounced tachycardia, an irregular rhythm, or seizures may indicate toxicity and require urgent assessment and escalation.

TEACH Report smoking cessation or changes promptly so monitoring can be adjusted; avoid excess caffeine and check before changing brands or other medicines.

AVOID THE TRAP A previously tolerated dose can become unsafe when clearance changes; a single old normal level does not guarantee current safety.

RECALL Why should a client report stopping smoking while taking theophylline?

CHECK YOUR REASONING Smoke exposure affects drug clearance. Stopping can increase exposure, so the prescriber may need to reassess levels and treatment rather than leaving monitoring unchanged.

Sources: [195], [218]

INDIVIDUAL MEDICINE ENTRIES

DIABETES & GLUCOSE

035 Insulin lispro

Generic medicine: Insulin lispro

MEMORY HOOK Lispro links to lunch: a meal-coordination reminder, not a universal timing instruction.

WHAT IT DOES Insulin lispro is a rapid-acting insulin used for meal-related glucose control and selected pump regimens; it moves glucose into tissues.

ASSESS Check glucose, the exact product and concentration, meal availability, injection or pump settings, and recent activity or reduced intake.

WATCH & RESPOND Sweating, shaking, confusion, or reduced consciousness may indicate hypoglycemia; check promptly and follow the appropriate hypoglycemia response protocol.

TEACH Coordinate the prescribed product with meals, rotate injection sites, never share pens, and carry the agreed low-glucose treatment supplies.

AVOID THE TRAP Lispro formulations differ; use the actual product instructions rather than assuming every rapid-acting pen has identical meal timing or mixing rules.

RECALL A meal is unexpectedly delayed after mealtime insulin. What needs attention?

CHECK YOUR REASONING Insulin action may outpace available carbohydrate. Assess glucose and the situation promptly, then use the prescribed nutrition and hypoglycemia plan.

Sources: [196]

DIABETES & GLUCOSE

036 Regular human insulin

Generic medicine: Regular human insulin

MEMORY HOOK Regular still requires a route check. A familiar name never replaces the concentration check.

WHAT IT DOES Regular human insulin lowers glucose; U-100 is short-acting and may be given intravenously under monitored clinical protocols when specifically ordered.

ASSESS Check glucose, concentration, route, delivery device, nutrition, and prescribed potassium monitoring; verify the actual formulation before preparing a dose.

WATCH & RESPOND Hypoglycemia or falling potassium can cause neurologic or cardiac problems; assess symptoms and escalate abnormal findings according to the protocol.

TEACH Use the matching device and product-specific meal instructions; never transfer concentrated insulin from a pen into a syringe.

AVOID THE TRAP U-500 regular insulin has different action and administration requirements; it must not be given intravenously or treated as interchangeable with U-100.

RECALL Why is an order stating only regular insulin insufficient for safe preparation?

CHECK YOUR REASONING Concentration, route, device, timing, and dose must be clear; confusing formulations can produce a serious medication error even when the generic name matches.

Sources: [197], [219], [220]

INDIVIDUAL MEDICINE ENTRIES

DIABETES & GLUCOSE

037 NPH insulin

Generic medicine: NPH insulin

MEMORY HOOK Cloudy does not mean careless: resuspend, inspect, and plan for the peak.

WHAT IT DOES NPH insulin is an intermediate-acting insulin suspension that provides background glucose control with a clinically important peak.

ASSESS Check glucose patterns, meal timing, overnight symptoms, injection-site rotation, and the suspension's appearance after the product's gentle resuspension procedure.

WATCH & RESPOND Sweating, nightmares, morning headache, confusion, or weakness may signal hypoglycemia; assess glucose and respond using the prescribed plan.

TEACH Gently mix as instructed rather than vigorously shaking; use the correct device, check the label each time, and never share pens.

AVOID THE TRAP NPH is not peakless and is not for intravenous administration or insulin pumps; a cloudy appearance is expected only when uniformly resuspended as directed.

RECALL Why review overnight glucose when a client reports waking sweaty after an evening dose?

CHECK YOUR REASONING The NPH peak can contribute to nocturnal hypoglycemia. Assess the pattern and seek regimen review rather than assuming the sweating is unrelated.

Sources: [221]

DIABETES & GLUCOSE

038 Insulin glargine

Generic medicine: Insulin glargine

MEMORY HOOK Basal is the background line: steadier coverage still needs safety checks.

WHAT IT DOES Insulin glargine supplies long-acting basal insulin to help control glucose between meals and overnight.

ASSESS Assess glucose trends, the exact concentration and device, recent illness or intake changes, kidney function, and hypoglycemia history.

WATCH & RESPOND Confusion, sweating, tremor, or reduced consciousness requires prompt glucose assessment and the appropriate hypoglycemia response; prolonged effects may require continued monitoring.

TEACH Use at the prescribed consistent time, rotate sites, never share pens, and do not dilute or mix glargine with other insulins.

AVOID THE TRAP Long-acting does not mean incapable of causing hypoglycemia; glargine is not an immediate correction dose or an intravenous insulin.

RECALL A client wants to mix glargine with mealtime insulin to save an injection. What teaching matters?

CHECK YOUR REASONING The products must be administered as directed separately; mixing can alter glargine's intended action. Review the prescribed devices and schedule with the client.

Sources: [198]

INDIVIDUAL MEDICINE ENTRIES

DIABETES & GLUCOSE

039 Metformin

Generic medicine: Metformin

MEMORY HOOK Liver output down; kidney clearance checked. Both sides belong in the memory picture.

WHAT IT DOES Metformin reduces liver glucose production and improves insulin response in type 2 diabetes without directly stimulating pancreatic insulin release.

ASSESS Review kidney function, hydration, acute illness, alcohol intake, and planned contrast procedures; follow ordered glucose and vitamin B12 monitoring.

WATCH & RESPOND Unusual severe weakness, abdominal symptoms, or rapid deep breathing may indicate rare lactic acidosis and requires urgent evaluation.

TEACH Take the prescribed formulation with food when directed; report significant vomiting or poor intake and follow the individualized sick-day instructions.

AVOID THE TRAP Contrast-related interruption depends on renal function, procedure, and risk factors; it is not the same blanket rule for every scan.

RECALL Why report a new dehydrating illness rather than simply continuing the usual routine?

CHECK YOUR REASONING Dehydration can compromise renal function and increase metformin-related risk. The care team should review whether treatment needs temporary adjustment and when it can resume.

Sources: [199]

INDIVIDUAL MEDICINE ENTRIES

DIABETES & GLUCOSE

040 Glipizide

Generic medicine: Glipizide

MEMORY HOOK Pancreas prompted, glucose watched: stimulation can continue when food is missing.

WHAT IT DOES Glipizide is a sulfonylurea that stimulates pancreatic insulin release to lower glucose in type 2 diabetes.

ASSESS Review glucose, meal intake, renal or hepatic problems, previous hypoglycemia, and whether the prescription is immediate-release or extended-release.

WATCH & RESPOND Sweating, shaking, confusion, or loss of consciousness suggests hypoglycemia; assess promptly and follow the appropriate treatment and escalation plan.

TEACH Follow formulation-specific meal instructions, swallow extended-release tablets whole, and learn what to do when meals are missed or illness changes intake.

AVOID THE TRAP This medicine needs functioning insulin-producing cells and is not a replacement for insulin in type 1 diabetes or ketoacidosis.

RECALL A client takes glipizide but skips breakfast because of nausea. What concern should guide assessment?

CHECK YOUR REASONING Insulin release may lower glucose despite reduced carbohydrate intake. Check for hypoglycemia and clarify the sick-day and medication plan rather than assuming oral therapy is harmless.

Sources: [200]

DIABETES & GLUCOSE

041 Glucagon

Generic medicine: Glucagon

MEMORY HOOK Rescue, respond, then refuel safely: recovery requires more than one improved reading.

WHAT IT DOES Glucagon raises glucose by prompting the liver to release stored glucose; rescue products treat severe hypoglycemia when oral treatment is unsafe.

ASSESS Assess responsiveness, breathing, glucose when available, and which injection or nasal product is present; activate the emergency response appropriate to the setting.

WATCH & RESPOND Vomiting and recurrent hypoglycemia require close observation; protect the airway and seek emergency help rather than leaving the person alone after improvement.

TEACH Train caregivers with the actual device; give oral carbohydrate only after the person is alert and can safely swallow, following the recovery plan.

AVOID THE TRAP Glucagon relies on available liver stores and may work poorly when stores are depleted; unconscious clients must not receive food or drink by mouth.

RECALL Why continue monitoring after the client awakens?

CHECK YOUR REASONING The cause of hypoglycemia may persist. Glucose can fall again, and vomiting can threaten the airway; ongoing assessment and emergency follow-up remain necessary.

Sources: [201], [222]

INDIVIDUAL MEDICINE ENTRIES

THYROID & WATER REGULATION

042 Levothyroxine

Generic medicine: Levothyroxine

MEMORY HOOK Thyroid replacement likes a routine: the dose and its surroundings both matter.

WHAT IT DOES Levothyroxine replaces thyroid hormone in hypothyroidism; its clinical effect develops gradually rather than providing an immediate energy boost.

ASSESS Review thyroid-function tests, symptoms, pulse, cardiac history, consistency of administration, and interacting supplements or medicines.

WATCH & RESPOND New chest pain, pronounced palpitations, or significant breathlessness requires prompt evaluation; tremor and heat intolerance can suggest excessive replacement.

TEACH Take the prescribed formulation consistently on an empty stomach as directed; separate calcium and iron by at least four hours.

AVOID THE TRAP It is not a weight-loss drug, and feeling better does not mean replacement is no longer needed.

RECALL Why ask about a new iron supplement when previously stable thyroid tests change?

CHECK YOUR REASONING Iron can reduce levothyroxine absorption if taken too close together. Review administration and interactions before assuming the prescribed dose alone explains the change.

Sources: [202]

THYROID & WATER REGULATION

043 Propylthiouracil

Generic medicine: Propylthiouracil

MEMORY HOOK Thyroid slowed; throat and liver heard. Those symptoms deserve attention.

WHAT IT DOES Propylthiouracil reduces thyroid-hormone synthesis and limits conversion of T4 to T3 in selected treatment of hyperthyroidism.

ASSESS Follow thyroid-function monitoring and review liver disease, pregnancy status, blood-cell concerns, and symptoms suggesting excessive or insufficient thyroid suppression.

WATCH & RESPOND Fever or sore throat may signal agranulocytosis; jaundice, dark urine, or right-upper abdominal pain may signal serious liver injury and needs immediate evaluation.

TEACH Report these warning signs promptly rather than treating them at home and waiting; keep appointments even when palpitations improve.

AVOID THE TRAP Because severe liver injury can occur, propylthiouracil is reserved for particular situations rather than being the automatic first choice for everyone.

RECALL Why is a new fever and sore throat more than a routine comfort issue?

CHECK YOUR REASONING A dangerous fall in infection-fighting white cells is possible. Prompt assessment and prescriber contact are needed before continuing the usual routine.

Sources: [203], [229]

INDIVIDUAL MEDICINE ENTRIES

THYROID & WATER REGULATION

044 Desmopressin

Generic medicine: Desmopressin

MEMORY HOOK Water kept, sodium checked: less urine is only half the story.

WHAT IT DOES Desmopressin mimics antidiuretic hormone, reducing urine loss in central diabetes insipidus; certain formulations have other specific indications.

ASSESS Check the indication and formulation, serum sodium, fluid intake and output, weight, renal function, and medicines that increase hyponatremia risk.

WATCH & RESPOND Headache, nausea, rapid weight gain, confusion, or seizures can indicate water retention with low sodium; obtain urgent assessment and escalate severe neurologic changes.

TEACH Follow the individualized fluid instructions and laboratory schedule; report illness, vomiting, or changes in fluid needs before adjusting treatment.

AVOID THE TRAP Oral, nasal, and injectable products are not interchangeable dose for dose; restrictions and approved uses differ by product.

RECALL Why is reduced urine output not enough to judge treatment success?

CHECK YOUR REASONING Excess water retention can dilute sodium dangerously. Fluid balance, symptoms, and sodium monitoring are needed alongside the expected reduction in urine.

Sources: [204], [223]

ADRENAL STEROIDS

045 Prednisone

Generic medicine: Prednisone

MEMORY HOOK Inflammation quieter, surveillance louder: benefit does not cancel infection and glucose monitoring.

WHAT IT DOES Prednisone is a systemic glucocorticoid that suppresses inflammation and immune activity; it is also used in some hormone-replacement regimens.

ASSESS Review infection symptoms, glucose, blood pressure, mood, treatment duration, bone risk, and the prescribed plan for illness or stopping therapy.

WATCH & RESPOND Serious infection, major mood changes, gastrointestinal bleeding, or severe weakness with dizziness after withdrawal requires prompt assessment and escalation.

TEACH Take with food when directed, discuss vaccines with the care team, and follow the prescribed continuation or taper plan.

AVOID THE TRAP Not every brief course requires tapering, but prolonged exposure can suppress adrenal function; do not invent a stopping schedule.

RECALL Why should emergency staff know about recent prolonged prednisone use?

CHECK YOUR REASONING The body may not mount a normal cortisol response to stress. Recent use and withdrawal history can affect urgent assessment and the clinician's treatment plan.

Sources: [205]

INDIVIDUAL MEDICINE ENTRIES

ADRENAL STEROIDS

046 Fludrocortisone

Generic medicine: Fludrocortisone

MEMORY HOOK Salt stays, potassium may stray: a reminder to pair volume checks with electrolytes.

WHAT IT DOES Fludrocortisone provides strong mineralocorticoid activity, retaining sodium and water while increasing potassium loss in conditions such as primary adrenal insufficiency.

ASSESS Monitor blood pressure, weight trend, edema, sodium and potassium, and the complete adrenal-replacement plan; review heart and kidney disease.

WATCH & RESPOND New breathlessness, substantial swelling, severe headache, muscle weakness, or palpitations requires prompt assessment for fluid overload, hypertension, or low potassium.

TEACH Take consistently as prescribed, report weight and swelling changes, and follow individualized salt and fluid advice rather than changing intake independently.

AVOID THE TRAP Its mineralocorticoid role does not replace all glucocorticoid needs in adrenal insufficiency; the full regimen matters.

RECALL Why should new ankle swelling and a rising blood pressure be reported together?

CHECK YOUR REASONING Both can reflect excessive sodium and water retention. The care team needs the pattern, weight trend, and laboratory results to reassess treatment safely.

Sources: [206], [224]

BONE HEALTH & GOUT

047 Alendronate

Generic medicine: Alendronate

MEMORY HOOK Water, wait, upright: three steps that protect the swallowing tube and absorption.

WHAT IT DOES Alendronate is a bisphosphonate that limits bone breakdown to treat or prevent osteoporosis and treat selected bone disease.

ASSESS Assess swallowing problems, ability to remain upright, calcium status, kidney disease, and dental concerns before reinforcing administration instructions.

WATCH & RESPOND New painful swallowing, chest discomfort, worsening heartburn, jaw problems, or unusual thigh pain needs prompt clinical review.

TEACH For standard tablets, take on rising with plain water at least thirty minutes before food, other drinks, or medicines; stay upright at least thirty minutes and until after the first food.

AVOID THE TRAP Effervescent tablets and oral solution have different preparation instructions; do not apply standard-tablet handling to every product.

RECALL A client wants to take the weekly tablet at bedtime. What is the concern?

CHECK YOUR REASONING Lying down increases esophageal injury risk, and food or other medicines can reduce absorption. Review the morning routine and whether the client can follow it safely.

Sources: [207]

INDIVIDUAL MEDICINE ENTRIES

BONE HEALTH & GOUT

048 Allopurinol

Generic medicine: Allopurinol

MEMORY HOOK Lower tomorrow's urate; do not ignore today's rash. Prevention and safety run together.

WHAT IT DOES Allopurinol inhibits xanthine oxidase to reduce uric-acid production, supporting long-term gout prevention and selected hyperuricemia treatment.

ASSESS Review uric-acid trends, renal and liver status, allergy history, and interacting medicines; confirm the separate plan for an acute gout flare.

WATCH & RESPOND Any new rash, blistering, mouth sores, fever, or jaundice requires stopping the medicine and obtaining immediate clinical evaluation for serious hypersensitivity.

TEACH Continue the prescribed prevention plan even between attacks; discuss hydration appropriate to the client and report skin changes promptly.

AVOID THE TRAP It is not an immediate pain reliever; flares may occur early in treatment without proving that long-term prevention has failed.

RECALL Why should a new rash not simply be covered with an antihistamine?

CHECK YOUR REASONING Allopurinol can cause severe systemic skin reactions. Masking the symptom and continuing treatment may delay recognition of a dangerous adverse reaction.

Sources: [208]

DIGESTIVE HEALTH

049 Omeprazole

Generic medicine: Omeprazole

MEMORY HOOK Less acid, same assessment: symptom relief is not proof that the cause is harmless.

WHAT IT DOES Omeprazole is a proton-pump inhibitor that reduces gastric acid production for indicated reflux, ulcer, and related conditions.

ASSESS Review the reason and duration of therapy, swallowing or bleeding symptoms, other medicines, and magnesium monitoring when clinically indicated.

WATCH & RESPOND Persistent watery diarrhea with fever, marked muscle cramps or palpitations, or signs of gastrointestinal bleeding need prompt assessment.

TEACH Follow the prescribed relation to meals; do not crush delayed-release granules, and use only the product-approved method if a capsule must be opened.

AVOID THE TRAP It is not an instant antacid, and persistent symptoms still need evaluation; long-term use should have a reviewed indication.

RECALL Why report persistent watery diarrhea instead of assuming it is a minor stomach upset?

CHECK YOUR REASONING Acid suppression is associated with increased risk of some intestinal infections. Ongoing diarrhea, dehydration, or fever warrants assessment rather than simply adding another remedy.

Sources: [209]

INDIVIDUAL MEDICINE ENTRIES

DIGESTIVE HEALTH

050 Famotidine

Generic medicine: Famotidine

MEMORY HOOK H2 calms acid; kidneys shape exposure. Remember the clearance check.

WHAT IT DOES Famotidine blocks histamine H2 receptors in the stomach, decreasing acid secretion to help manage indicated reflux and ulcers.

ASSESS Assess symptom pattern, swallowing concerns, renal function, age, and other acid-suppressing medicines, including nonprescription combinations.

WATCH & RESPOND New confusion, unusual lethargy, or hallucinations warrants prompt review, particularly in older adults or renal impairment; allergic breathing symptoms require urgent care.

TEACH Follow the prescribed formulation instructions and avoid continuing over-the-counter treatment beyond its label without clinical review.

AVOID THE TRAP Reduced kidney function can require a different dose or interval; do not assume a familiar over-the-counter medicine is appropriate unchanged.

RECALL Why review famotidine when an older client with kidney disease becomes confused?

CHECK YOUR REASONING Accumulation can increase central nervous system adverse effects. Evaluate other causes too, while reviewing renal function and the current regimen with the care team.

Sources: [210], [225]

DIGESTIVE HEALTH

051 Docusate

Generic medicine: Docusate

MEMORY HOOK Softer is the goal; a bowel assessment is still the starting point.

WHAT IT DOES Docusate is a stool softener used for short-term constipation relief when easier stool passage and less straining are desired.

ASSESS Review bowel pattern, stool consistency, abdominal symptoms, fluid restrictions, mobility, diet, and other medicines that may cause constipation.

WATCH & RESPOND Persistent or severe abdominal pain, vomiting, fever, or ongoing constipation requires assessment rather than repeated self-treatment; allergic symptoms need urgent attention.

TEACH Follow the product directions, use an appropriate fluid intake, and seek review if symptoms persist; do not combine with mineral oil without advice.

AVOID THE TRAP Docusate is not an immediate evacuation medicine, and taking it does not establish that constipation has resolved or that the underlying cause is addressed.

RECALL Why reassess a client whose stools remain hard despite regular use?

CHECK YOUR REASONING The regimen may not be effective or another problem may be present. Review actual bowel outcomes and contributing factors instead of assuming the prescription guarantees relief.

Sources: [211]

INDIVIDUAL MEDICINE ENTRIES

DIGESTIVE HEALTH

052 Lactulose

Generic medicine: Lactulose

MEMORY HOOK Bowel response plus brain response: count more than bathroom trips.

WHAT IT DOES Lactulose draws water into the bowel and promotes stool passage; in hepatic encephalopathy it also helps reduce intestinal ammonia absorption.

ASSESS Identify the indication and prescribed stool goal, then assess stool frequency and consistency, mental status, hydration, and electrolytes as ordered.

WATCH & RESPOND Excessive diarrhea, weakness, dizziness, or worsening confusion requires prompt review for dehydration, electrolyte disturbance, or ongoing encephalopathy.

TEACH Measure the liquid with an appropriate device and track bowel response; contact the team about excessive diarrhea instead of pursuing ever more stools.

AVOID THE TRAP The target for hepatic encephalopathy is not unlimited watery diarrhea, and constipation instructions cannot automatically be substituted for that regimen.

RECALL Why can frequent watery stools undermine the intended benefit?

CHECK YOUR REASONING Fluid and electrolyte losses can worsen the client's condition. Compare bowel response with hydration and cognition, then seek adjustment under the prescribed plan.

Sources: [212]

DIGESTIVE HEALTH

053 Loperamide

Generic medicine: Loperamide

MEMORY HOOK Slow the bowel only after checking the story: fewer stools are not the only outcome.

WHAT IT DOES Loperamide slows intestinal movement to reduce diarrhea in appropriate situations; it does not identify or remove the underlying cause.

ASSESS Assess hydration, stool appearance, fever, abdominal distension, recent antibiotics, age, and the reason for diarrhea before supporting use.

WATCH & RESPOND Bloody stools, fever, increasing abdominal pain or swelling, fainting, or an irregular heartbeat needs prompt evaluation; severe cardiac symptoms require emergency care.

TEACH Never exceed the labeled or prescribed amount; replace fluids as advised, and stop self-treatment and seek review if acute diarrhea persists beyond forty-eight hours.

AVOID THE TRAP It is inappropriate for some infectious or inflammatory diarrheas; excessive doses and interacting medicines can cause dangerous heart rhythms.

RECALL Why question loperamide for diarrhea accompanied by fever and blood?

CHECK YOUR REASONING Those features suggest a condition requiring assessment; suppressing motility without evaluating the cause may be unsafe and can delay appropriate treatment.

Sources: [213], [226]

INDIVIDUAL MEDICINE ENTRIES

DIGESTIVE HEALTH

054 Ondansetron

Generic medicine: Ondansetron

MEMORY HOOK Nausea quieter; rhythm still matters. Relief does not remove cardiac risk.

WHAT IT DOES Ondansetron blocks serotonin 5-HT₃ signaling to prevent or treat nausea and vomiting in selected clinical settings.

ASSESS Assess nausea, hydration, bowel symptoms, QT-prolongation history, potassium and magnesium concerns, and interacting medicines before administration.

WATCH & RESPOND Fainting, palpitations, or chest pain needs prompt evaluation; agitation with fever, sweating, and muscle rigidity may signal serotonin toxicity.

TEACH Handle orally disintegrating tablets with dry hands, peel the blister, and allow the tablet to dissolve as directed; report worsening symptoms.

AVOID THE TRAP An antiemetic does not correct dehydration, electrolyte loss, or an obstructed bowel; the cause of vomiting still requires assessment.

RECALL Why review electrolytes in a vomiting client with a history of prolonged QT?

CHECK YOUR REASONING Low potassium or magnesium can increase vulnerability to arrhythmias. Ondansetron's risk must be considered alongside those abnormalities and the rest of the medicine list.

Sources: [214]

DIGESTIVE HEALTH

055 Metoclopramide

Generic medicine: Metoclopramide

MEMORY HOOK Stomach moves; watch for movements elsewhere. The same prescription needs two kinds of observation.

WHAT IT DOES Metoclopramide promotes upper gastrointestinal movement and blocks dopamine signaling, helping selected clients with gastroparesis or reflux symptoms.

ASSESS Review the indication, planned duration, kidney function, movement-disorder history, bowel-obstruction concerns, and other dopamine-blocking medicines.

WATCH & RESPOND New lip-smacking, tongue movements, neck spasms, severe restlessness, or fever with rigidity requires urgent assessment; stop the medicine and contact the prescriber immediately.

TEACH Follow the prescribed timing around meals and avoid driving until effects are known; report abnormal movements immediately rather than waiting for follow-up.

AVOID THE TRAP Tardive dyskinesia may persist after stopping; treatment beyond twelve weeks is generally avoided because cumulative exposure increases risk.

RECALL Why is repetitive lip-smacking a significant new finding?

CHECK YOUR REASONING It can be a drug-induced movement disorder rather than a harmless habit. Prompt recognition and treatment review may limit further exposure, even if the stomach symptoms improved.

Sources: [215], [227]

INDIVIDUAL MEDICINE ENTRIES

DIGESTIVE HEALTH

056 Pancrelipase

Generic medicine: Pancrelipase

MEMORY HOOK Enzymes meet the meal: timing connects the medicine to its work.

WHAT IT DOES Pancrelipase replaces pancreatic digestive enzymes in exocrine pancreatic insufficiency, helping the body digest and absorb nutrients from food.

ASSESS Review meal and snack timing, stool characteristics, weight trend, nutrition, product strength, swallowing ability, and pork-product allergy history.

WATCH & RESPOND New severe abdominal pain, distension, vomiting, or difficulty passing stool needs prompt assessment; breathing difficulty or swelling suggests an emergency allergic reaction.

TEACH Take with meals and snacks as prescribed; swallow delayed-release granules without chewing, using only the approved soft acidic food if opening a capsule.

AVOID THE TRAP Brands and strengths are not automatically interchangeable; crushing coated granules can damage their delivery and irritate the mouth.

RECALL Why might taking every capsule long after eating fail to improve greasy stools?

CHECK YOUR REASONING The enzymes must be available with food for digestion. Assess timing, product instructions, intake, and the prescribed regimen before assuming the dose alone is inadequate.

Sources: [216]

DIGESTIVE HEALTH

057 Sulfasalazine

Generic medicine: Sulfasalazine

MEMORY HOOK Quiet inflammation; keep blood, liver, and skin in the conversation.

WHAT IT DOES Sulfasalazine reduces inflammation in ulcerative colitis; delayed-release products are also used for selected inflammatory arthritis conditions.

ASSESS Review sulfonamide and salicylate allergies, blood counts, liver and kidney monitoring, infection symptoms, bowel pattern, and treatment response.

WATCH & RESPOND Rash, blistering, fever, sore throat, unusual bruising, or jaundice requires stopping the medicine and contacting the prescriber promptly for potentially serious toxicity.

TEACH Take with food and fluids as directed, swallow delayed-release tablets whole, use sun protection, and keep laboratory appointments.

AVOID THE TRAP Orange-yellow urine can occur, but yellow eyes or other liver-injury symptoms must not be dismissed as harmless discoloration.

RECALL Why is a new sore throat with bruising more concerning than mild nausea?

CHECK YOUR REASONING The combination may indicate blood-cell toxicity or infection. It needs timely clinical assessment and laboratory review rather than routine reassurance about stomach tolerance.

Sources: [217]

INDIVIDUAL MEDICINE ENTRIES

BACTERIAL INFECTIONS

058 Amoxicillin

Generic medicine: Amoxicillin

MEMORY HOOK “Amoxicillin: match the bug, measure the bottle.” This links appropriate selection with accurate liquid administration, not a shortcut for choosing an antibiotic.

WHAT IT DOES Amoxicillin is a penicillin antibiotic for susceptible bacterial infections; some ulcer regimens combine it with other medicines to eliminate *Helicobacter pylori*.

ASSESS Clarify the exact symptoms and timing of previous penicillin or cephalosporin reactions, review kidney history, and follow the infection's clinical response.

WATCH & RESPOND Facial swelling, wheezing, or breathing difficulty needs emergency assessment; severe or bloody diarrhea during or after treatment also needs prompt evaluation.

TEACH Take the prescribed course unless the clinician changes it; shake liquid doses and use an oral measuring device, not a kitchen spoon.

AVOID THE TRAP A viral cough does not become an indication just because amoxicillin is available; leftover antibiotics should not be shared or saved for self-treatment.

RECALL A child feels better after several doses. Should the caregiver independently stop the medicine?

CHECK YOUR REASONING No. Improvement does not establish that the prescribed treatment is complete; follow the plan and contact the clinician about adverse effects or changes.

Sources: [230], [269]

INDIVIDUAL MEDICINE ENTRIES

BACTERIAL INFECTIONS

059 Ceftriaxone

Generic medicine: Ceftriaxone

MEMORY HOOK “Ceftriaxone: check the calcium connection.” This prompts an IV compatibility review, with additional neonatal restrictions.

WHAT IT DOES Ceftriaxone is an injectable cephalosporin antibiotic used for selected bacterial infections and some surgical infection-prevention regimens.

ASSESS Review beta-lactam allergy history, age and bilirubin status in newborns, and every IV solution sharing the line; confirm the prescribed route and preparation.

WATCH & RESPOND Treat anaphylaxis cues as an emergency, and promptly escalate severe diarrhea, new abdominal pain, or unexpected anemia during therapy.

TEACH Explain that symptom improvement does not authorize skipping the remaining treatment and that troublesome diarrhea can begin after the antibiotic course ends.

AVOID THE TRAP Do not mix or simultaneously infuse it with calcium-containing IV fluids; neonatal contraindications are stricter. A lidocaine-containing intramuscular preparation must never be given intravenously.

RECALL A newborn receiving calcium-containing parenteral nutrition has a ceftriaxone order. Is using another IV line enough?

CHECK YOUR REASONING No. In neonates who need IV calcium, the contraindication is not solved by choosing another line; stop preparation and urgently clarify the order.

Sources: [231], [254]

INDIVIDUAL MEDICINE ENTRIES

BACTERIAL INFECTIONS

060 Vancomycin

Generic medicine: Vancomycin

MEMORY HOOK “Vancomycin: route, rate, renal review.” These are study checkpoints; the actual infusion and monitoring instructions are patient- and product-specific.

WHAT IT DOES Vancomycin treats susceptible bacterial infections; IV therapy reaches systemic infections, while oral therapy acts mainly in the intestine for selected colitis infections.

ASSESS Confirm route and indication, review kidney function and other kidney-toxic medicines, and follow the ordered concentration-monitoring and infusion plan.

WATCH & RESPOND Flushing, itching, hypotension, wheezing, or breathlessness during an infusion requires immediate assessment and stopping the infusion while emergency needs are addressed.

TEACH Report reduced urine, hearing changes, or severe diarrhea promptly; do not independently speed an infusion or substitute an oral product for IV therapy.

AVOID THE TRAP An infusion reaction is not automatically an IgE allergy, but breathing or circulation compromise must never be dismissed as a harmless rate problem.

RECALL Could oral vancomycin replace an IV order for a bloodstream infection because the generic name matches?

CHECK YOUR REASONING No. Oral vancomycin generally does not provide the systemic exposure needed; route is part of the medication order, not an interchangeable detail.

Sources: [\[232\]](#), [\[233\]](#), [\[265\]](#)

INDIVIDUAL MEDICINE ENTRIES

BACTERIAL INFECTIONS

061 Doxycycline

Generic medicine: Doxycycline

MEMORY HOOK “Doxycycline: water, sunlight, spacing.” Remember the administration and teaching checks alongside the reason it was prescribed.

WHAT IT DOES Doxycycline is a tetracycline antibiotic used for susceptible infections, including important tick-borne illnesses, and for selected acne or malaria-prevention regimens.

ASSESS Check the infection and product, pregnancy history, swallowing difficulties, and use of iron, antacids, or mineral supplements that can interfere with absorption.

WATCH & RESPOND Escalate severe headache with vision changes, painful swallowing, a serious rash, or severe diarrhea rather than treating these as routine stomach upset.

TEACH Take oral doses with a full glass of water, use sun protection, and obtain a product-specific schedule for separating interacting supplements.

AVOID THE TRAP “Never for young children” is an unsafe absolute: CDC recommends doxycycline for suspected Rocky Mountain spotted fever in children of every age.

RECALL A young child has suspected Rocky Mountain spotted fever. Should a nurse reject doxycycline solely because of age?

CHECK YOUR REASONING No. The disease-specific recommendation matters; delaying effective treatment for this potentially severe infection can be harmful. Verify the ordered regimen rather than applying a class slogan.

Sources: [234], [255]

INDIVIDUAL MEDICINE ENTRIES

BACTERIAL INFECTIONS

062 Azithromycin

Generic medicine: Azithromycin

MEMORY HOOK “Azithromycin: infection plus electrical inspection.” This connects the antibiotic indication to rhythm-risk screening, not automatic ECG testing for everyone.

WHAT IT DOES Azithromycin is a macrolide antibiotic that limits bacterial growth in susceptible infections; the infection and formulation determine the treatment schedule.

ASSESS Review previous azithromycin-related liver injury, long-QT or rhythm history, low potassium or magnesium, and other medicines that affect cardiac rhythm.

WATCH & RESPOND Fainting, a new rapid or irregular heartbeat, or severe dizziness needs urgent assessment; jaundice and severe or bloody diarrhea also require prompt evaluation.

TEACH Use the exact prescribed schedule, ask how to separate aluminum- or magnesium-containing antacids, and report worsening symptoms rather than extending treatment yourself.

AVOID THE TRAP A short prescribed course does not mean the drug is weak or that extra tablets improve treatment; do not generalize one regimen to every infection.

RECALL Why should a nurse flag low potassium in a patient who also takes another QT-prolonging medicine?

CHECK YOUR REASONING Combined risk factors can make a dangerous rhythm more likely, so the medication plan and electrolyte issue need clinician review before administration.

Sources: [235], [270]

BACTERIAL INFECTIONS

063 Gentamicin

Generic medicine: Gentamicin

MEMORY HOOK “Gentamicin: listen while you look at the kidneys.” The hook links two major toxicity concerns without replacing laboratory or bedside assessment.

WHAT IT DOES Gentamicin is an aminoglycoside antibiotic given by injection for selected serious bacterial infections, with treatment guided by the organism and patient factors.

ASSESS Follow kidney function, urine output, hydration, hearing and balance, other nephrotoxic medicines, and correctly timed drug concentrations when ordered.

WATCH & RESPOND New tinnitus, vertigo, hearing loss, reduced urine, or marked weakness requires prompt escalation; hearing injury can be permanent and must not wait for a routine visit.

TEACH Report hearing or balance changes immediately, attend monitoring appointments, and check before adding medicines such as nonprescription anti-inflammatory pain relievers.

AVOID THE TRAP Concentration targets and sampling times depend on the regimen; one remembered peak or trough number cannot safely describe every dosing strategy.

RECALL A patient says the ears started ringing after treatment began, but the latest creatinine was unchanged. Is reassurance enough?

CHECK YOUR REASONING No. Ototoxicity and kidney injury are separate concerns; an unchanged kidney result does not rule out hearing toxicity, so report the symptom promptly.

Sources: [236], [256]

INDIVIDUAL MEDICINE ENTRIES

BACTERIAL INFECTIONS

064 Trimethoprim-sulfamethoxazole

Generic medicine: Trimethoprim-sulfamethoxazole

MEMORY HOOK “TMP-SMX: skin, potassium, counts.” These are monitoring reminders, not a claim that every patient develops these complications.

WHAT IT DOES Trimethoprim-sulfamethoxazole combines two antibacterial medicines for selected susceptible infections; it is also used in specific *Pneumocystis pneumonia* regimens.

ASSESS Review sulfonamide reactions, kidney function, potassium, blood counts when indicated, pregnancy context, and interactions including warfarin and potassium-raising medicines.

WATCH & RESPOND Stop and seek prompt assessment for a new rash or systemic reaction; blistering, mucosal sores, breathing trouble, or circulatory compromise needs emergency care.

TEACH Follow the prescribed course and hydration advice appropriate to the patient, use sun protection, and report unusual bruising, weakness, or palpitations.

AVOID THE TRAP An ordinary prescribed dose can still raise potassium, especially with renal impairment or other potassium-raising drugs; risk is not limited to high-dose treatment.

RECALL A patient with kidney disease takes an ACE inhibitor and receives this antibiotic. What additional concern should the nurse flag?

CHECK YOUR REASONING Hyperkalemia risk requires review of the combination and a monitoring plan; a new antibiotic can change the safety of an otherwise familiar medication list.

Sources: [237], [257]

BACTERIAL INFECTIONS

065 Ciprofloxacin

Generic medicine: Ciprofloxacin

MEMORY HOOK “Ciprofloxacin: tendons and tingles get attention.” The cue helps distinguish potentially serious injury from a symptom to ignore until the course ends.

WHAT IT DOES Ciprofloxacin is a fluoroquinolone antibiotic for selected susceptible bacterial infections; its serious adverse-effect profile makes careful indication review important.

ASSESS Check kidney history, prior tendon problems, neuropathy, myasthenia gravis, steroid exposure, and interacting medicines or mineral supplements before treatment.

WATCH & RESPOND New tendon pain warrants stopping the medicine, resting the area, and prompt clinician contact; a tendon snap or inability to bear weight needs emergency evaluation.

TEACH Report burning, tingling, numbness, or major mental-status changes promptly, and follow the pharmacist's schedule for separating antacids, iron, or zinc.

AVOID THE TRAP Tendon injury can arise during treatment or after it; finishing the tablets does not immediately remove this risk.

RECALL A patient taking prednisone develops new Achilles pain during ciprofloxacin therapy. Is continuing strenuous exercise a reasonable way to test it?

CHECK YOUR REASONING No. Steroid exposure increases concern; protect the tendon, stop the antibiotic as directed in its safety guidance, and obtain prompt clinical assessment.

Sources: [238], [271]

INDIVIDUAL MEDICINE ENTRIES

BACTERIAL INFECTIONS

066 Metronidazole

Generic medicine: Metronidazole

MEMORY HOOK “Metronidazole: match the route, monitor the nerves.” This pairs formulation accuracy with recognition of neurologic warning signs.

WHAT IT DOES Metronidazole is a nitroimidazole antimicrobial used for selected anaerobic bacterial and protozoal infections; oral, IV, vaginal, and skin products have different purposes.

ASSESS Confirm route and indication, liver and neurologic history, recent disulfiram use, and the complete medication list before starting treatment.

WATCH & RESPOND New numbness, coordination problems, confusion, or seizures needs prompt assessment; blistering skin or mouth sores also warrants urgent evaluation.

TEACH For systemic treatment, follow product instructions to avoid alcohol and propylene glycol during therapy and for at least three days afterward; check liquid remedies too.

AVOID THE TRAP A metallic taste can occur, but it does not explain new neurologic deficits; do not collapse every adverse effect into a harmless expected reaction.

RECALL A patient reports tingling feet and difficulty walking after starting metronidazole. What is the important next step?

CHECK YOUR REASONING Promptly report and assess the new neurologic findings rather than offering reassurance based only on the drug's common unpleasant taste or stomach effects.

Sources: [239], [272]

INDIVIDUAL MEDICINE ENTRIES

BACTERIAL INFECTIONS

067 Isoniazid

Generic medicine: Isoniazid

MEMORY HOOK “Isoniazid: follow the liver and the nerve signals.” These checkpoints help organize monitoring without predicting an individual's risk.

WHAT IT DOES Isoniazid is an antituberculosis medicine used in selected latent-infection regimens and as part of combination treatment for active susceptible tuberculosis.

ASSESS Review liver risk, alcohol use, existing neuropathy, diabetes and pregnancy context, the prescribed laboratory plan, and whether pyridoxine is indicated.

WATCH & RESPOND Loss of appetite with marked fatigue, dark urine, jaundice, or right-upper-abdominal pain needs urgent review for liver injury; report new limb tingling too.

TEACH Keep monitoring appointments and discuss alcohol and other medicines. If liver-injury symptoms develop, withhold isoniazid and contact the treatment team immediately; do not restart without their direction.

AVOID THE TRAP Pyridoxine supports neuropathy prevention in patients at risk; it does not prevent liver toxicity or replace symptom assessment and prescribed laboratory monitoring.

RECALL A patient taking prescribed vitamin B6 develops jaundice. Does the vitamin make continuing without review safe?

CHECK YOUR REASONING No. Vitamin B6 does not prevent liver injury. Withhold isoniazid and obtain urgent assessment; the treatment team must direct any restart or regimen change.

Sources: [\[240\]](#), [\[258\]](#), [\[278\]](#)

INDIVIDUAL MEDICINE ENTRIES

BACTERIAL INFECTIONS

068 Rifampin

Generic medicine: Rifampin

MEMORY HOOK “Rifampin: color is a clue, interactions need a review.” Expected discoloration and dangerous symptoms are different observations.

WHAT IT DOES Rifampin treats selected bacterial infections and is one component of many active-tuberculosis regimens; it substantially changes the effects of numerous other medicines.

ASSESS Reconcile all medicines, review liver history and the monitoring plan, and discuss hormonal contraception before the first dose.

WATCH & RESPOND Promptly report jaundice, unusual bruising or bleeding, severe abdominal symptoms, or marked fatigue; these should not be dismissed as expected color changes.

TEACH Explain that urine, sweat, saliva, and tears may turn orange-red and soft contact lenses may stain; follow a clinician-approved alternative contraception plan.

AVOID THE TRAP Its use to prevent spread from certain meningococcal carriers does not make it a stand-alone treatment for symptomatic meningitis or active tuberculosis.

RECALL A patient taking an oral contraceptive receives rifampin and asks whether the pill works exactly as before. What should the nurse explain?

CHECK YOUR REASONING Rifampin can reduce hormonal contraceptive effectiveness; arrange individualized counseling on an effective alternative and the appropriate duration rather than assuming unchanged protection.

Sources: [241], [273]

INDIVIDUAL MEDICINE ENTRIES

FUNGAL & VIRAL INFECTIONS

069 Fluconazole

Generic medicine: Fluconazole

MEMORY HOOK “Fluconazole: fungus first, interactions next.” The name is a prompt to identify the organism and review safety, not evidence that every yeast infection needs it.

WHAT IT DOES Fluconazole is a triazole antifungal used for susceptible fungal infections; the infection site and organism determine whether it is an appropriate choice.

ASSESS Review pregnancy status, kidney and liver history, electrolyte or rhythm problems, and all medicines for interactions before therapy.

WATCH & RESPOND Jaundice, dark urine, a widespread or blistering rash, fainting, or a new irregular heartbeat requires prompt assessment and escalation.

TEACH Take only the prescribed regimen, report pregnancy or new adverse symptoms, and consult the pharmacist before adding even nonprescription medicines.

AVOID THE TRAP A single-dose regimen used for one indication cannot be generalized to invasive infections; pregnancy also changes treatment choices and counseling.

RECALL A patient requests the same short course a friend used for a vaginal infection to treat a different suspected fungal illness. Is that a safe substitution?

CHECK YOUR REASONING No. Diagnosis, infection site, organism, pregnancy status, and interacting medicines affect treatment; the patient needs assessment and an individualized plan.

Sources: [242], [274]

FUNGAL & VIRAL INFECTIONS

070 Acyclovir

Generic medicine: Acyclovir

MEMORY HOOK “Acyclovir: protect the kidneys while slowing the virus.” This links antiviral therapy with hydration and renal monitoring, without encouraging excessive fluids in restricted patients.

WHAT IT DOES Acyclovir is an antiviral used for selected herpes-family infections; systemic and topical preparations have different indications and cannot simply replace one another.

ASSESS Review kidney function, hydration, neurologic status, interacting nephrotoxic medicines, and the ordered IV infusion method when injection is used.

WATCH & RESPOND Reduced urine, new confusion, tremor, hallucinations, or seizures needs urgent assessment, particularly when kidney function is impaired or the patient is dehydrated.

TEACH Begin prescribed episodic treatment promptly, follow the hydration plan, and understand that symptom improvement does not eliminate herpes or guarantee prevention of transmission.

AVOID THE TRAP IV acyclovir must not be given as a rapid bolus; infusion rate, hydration, and renal adjustment are important safety requirements.

RECALL Why does a dehydrated patient with reduced kidney function need particular review before IV acyclovir?

CHECK YOUR REASONING These factors increase renal injury and drug-accumulation risk; verify the prescribed fluid, infusion, and renal-adjustment plan rather than proceeding unchanged.

Sources: [243], [259]

INDIVIDUAL MEDICINE ENTRIES

MENTAL HEALTH & SLEEP

071 Fluoxetine

Generic medicine: Fluoxetine

MEMORY HOOK “Fluoxetine: progress takes time, interactions linger.” This connects gradual benefit with the drug's prolonged presence after discontinuation.

WHAT IT DOES Fluoxetine is a selective serotonin reuptake inhibitor used for depression and several other mental-health conditions; benefit develops over time rather than immediately.

ASSESS Assess mood and suicide risk, previous mania, other serotonergic medicines, and recent antidepressant use before starting or changing treatment.

WATCH & RESPOND New suicidal thinking requires urgent support; agitation with fever, sweating, tremor, or marked muscle findings needs urgent assessment for serotonin toxicity.

TEACH Keep follow-up appointments, report worsening mood or unusual activation, and check with the prescriber before stopping, changing, or adding medicines or supplements.

AVOID THE TRAP Switching to a psychiatric MAOI requires at least five weeks after fluoxetine stops; the prescriber must manage the transition, not apply a generic two-week rule.

RECALL A patient stopped fluoxetine a week ago and is about to begin phenelzine. What should the nurse do?

CHECK YOUR REASONING Flag the unsafe interval and clarify the order; residual fluoxetine can contribute to a dangerous serotonergic interaction even though daily dosing has ended.

Sources: [244], [260]

MENTAL HEALTH & SLEEP

072 Amitriptyline

Generic medicine: Amitriptyline

MEMORY HOOK “Amitriptyline: mood, mouth, movement, rhythm.” This cue connects benefit with anticholinergic effects, fall risk, and cardiac warning signs.

WHAT IT DOES Amitriptyline is a tricyclic antidepressant; it is also prescribed for some other conditions, so confirm the intended therapeutic goal.

ASSESS Assess mood and suicide risk, cardiac history, alertness, falls, bowel and bladder function, and other medicines with sedating or anticholinergic effects.

WATCH & RESPOND New suicidal thinking, fainting, seizures, or a rapid irregular heartbeat warrants urgent evaluation; suspected overdose is an emergency even before severe symptoms appear.

TEACH Expect possible dry mouth, constipation, and drowsiness; discuss symptom management, rise carefully, store securely, and do not stop treatment abruptly without a plan.

AVOID THE TRAP Sleepiness is not proof that depression is improving, and apparently mild early symptoms do not make a possible overdose safe to observe at home.

RECALL A patient becomes faint and reports a pounding irregular heartbeat after a medication error. Is treating dry mouth the priority?

CHECK YOUR REASONING No. Potential cardiac toxicity requires urgent assessment and escalation; common nuisance effects must not distract from changes in circulation or consciousness.

Sources: [245], [275]

INDIVIDUAL MEDICINE ENTRIES

MENTAL HEALTH & SLEEP

073 Phenelzine

Generic medicine: Phenelzine

MEMORY HOOK “Phenelzine: pause before the plate or the pharmacy.” This prompts food and interaction checks; it does not replace the detailed allowed-food list.

WHAT IT DOES Phenelzine is a monoamine oxidase inhibitor used for selected depressive illnesses, usually when other approaches have not been suitable or effective.

ASSESS Review mood and suicide risk, blood pressure, diet, other medicines, supplements, and all recent antidepressants before treatment or a medication transition.

WATCH & RESPOND A sudden severe headache with palpitations, neck stiffness, sweating, or chest pain needs emergency evaluation for a possible hypertensive crisis.

TEACH Follow the individualized low-tyramine food guidance, avoid unapproved cold remedies and supplements, and tell every clinician about phenelzine before receiving new treatment.

AVOID THE TRAP Interaction precautions continue after stopping; washout intervals vary with the other drug and must be directed by the prescriber.

RECALL A patient asks whether an over-the-counter decongestant is automatically safe because it needs no prescription. How should the nurse respond?

CHECK YOUR REASONING No. Some nonprescription products can cause serious interactions; the pharmacist or prescriber must review the exact ingredient before use.

Sources: [246], [276]

INDIVIDUAL MEDICINE ENTRIES

MENTAL HEALTH & SLEEP

074 Bupropion

Generic medicine: Bupropion

MEMORY HOOK “Bupropion: count the products, protect the seizure threshold.” This highlights duplicate exposure and risk assessment without treating all formulations as interchangeable.

WHAT IT DOES Bupropion is an antidepressant also used in selected smoking-cessation regimens; the prescribed product and release formulation determine how it is taken.

ASSESS Review seizure history, eating disorders, alcohol or sedative withdrawal risk, blood pressure, mood, and all other products containing bupropion.

WATCH & RESPOND A seizure is an emergency; promptly escalate new suicidal thinking, severe agitation, or symptoms suggesting marked blood-pressure elevation.

TEACH Swallow sustained- and extended-release tablets intact, follow the prescribed spacing, and never double a missed dose or combine smoking-cessation and antidepressant products independently.

AVOID THE TRAP Anorexia nervosa or bulimia history and abrupt alcohol or sedative withdrawal are important contraindication concerns; the benefit of stopping smoking does not erase them.

RECALL A patient takes bupropion for depression and starts a second branded product for smoking cessation. What needs immediate review?

CHECK YOUR REASONING Both may contain the same medicine. Verify ingredients and the plan with the clinician to prevent unintended duplicate exposure and increased seizure risk.

Sources: [247], [277]

INDIVIDUAL MEDICINE ENTRIES

MENTAL HEALTH & SLEEP

075 Lithium

Generic medicine: Lithium

MEMORY HOOK “Lithium likes a steady water-and-salt story.” The hook supports consistency; it does not authorize extra salt, forced fluids, or self-adjusted doses.

WHAT IT DOES Lithium is a mood stabilizer used to treat and prevent manic episodes in bipolar disorder, with a narrow margin between useful and harmful exposure.

ASSESS Review kidney and thyroid function, fluid and sodium balance, interacting medicines, and correctly timed serum levels according to the prescribed monitoring plan.

WATCH & RESPOND New vomiting or diarrhea with worsening tremor, poor coordination, slurred speech, confusion, or pronounced drowsiness needs urgent assessment for toxicity.

TEACH Keep salt and fluid intake consistent with the clinician's advice, report fever or fluid loss, and check before using diuretics or nonprescription anti-inflammatory medicines.

AVOID THE TRAP A previously acceptable blood level cannot rule out current toxicity after dehydration or a medication change; assess the patient as well as the number.

RECALL A patient develops diarrhea and unsteady walking during a hot week. What makes this more than a routine stomach complaint?

CHECK YOUR REASONING Fluid loss can change lithium handling, and neurologic changes raise toxicity concern; promptly escalate for clinical and laboratory evaluation.

Sources: [248], [266]

MENTAL HEALTH & SLEEP

076 Haloperidol

Generic medicine: Haloperidol

MEMORY HOOK “Haloperidol: observe movement, temperature, and rhythm.” These checks complement symptom assessment rather than labeling every restless patient as psychiatrically worse.

WHAT IT DOES Haloperidol is a first-generation antipsychotic used for selected psychotic disorders and other specific indications; oral and injectable formulations have different schedules.

ASSESS Assess target symptoms, movement abnormalities, alertness, falls, cardiac rhythm risks, and Parkinson disease history before administration and during treatment.

WATCH & RESPOND Fever with marked rigidity and confusion is an emergency; throat or neck spasm with breathing difficulty also requires immediate assessment and escalation.

TEACH Report new restlessness, stiffness, involuntary facial or tongue movements, or fainting; use caution with driving and avoid unapproved sedating substances.

AVOID THE TRAP New pacing may be medication-induced akathisia rather than worsening agitation; simply escalating the antipsychotic without assessment can worsen the problem.

RECALL A patient develops rigid muscles, high fever, and confusion after treatment begins. Should the nurse document this as an expected calming effect?

CHECK YOUR REASONING No. The combination suggests a severe reaction such as neuroleptic malignant syndrome and requires emergency assessment and escalation, not routine observation.

Sources: [249], [267]

INDIVIDUAL MEDICINE ENTRIES

MENTAL HEALTH & SLEEP

077 Clozapine

Generic medicine: Clozapine

MEMORY HOOK “Clozapine: count cells, check the gut, notice the heart.” The cue highlights several serious risks; one normal result does not clear the others.

WHAT IT DOES Clozapine is an atypical antipsychotic for treatment-resistant schizophrenia and for reducing recurrent suicidal behavior in selected patients with schizophrenia or schizoaffective disorder.

ASSESS Follow absolute neutrophil count (ANC) monitoring, bowel function, orthostatic vital signs, metabolic measures, and cardiac symptoms according to the prescribed plan.

WATCH & RESPOND Fever or sore throat needs prompt infection assessment; chest pain, breathlessness, severe constipation with abdominal pain, or collapse requires urgent escalation.

TEACH Report bowel changes early, keep laboratory appointments, and contact the prescriber after missed treatment rather than restarting the previous dose independently.

AVOID THE TRAP The U.S. REMS program was removed in 2025, but ANC monitoring and the risk of severe neutropenia remain; enrollment changes are not monitoring exemptions.

RECALL A patient says the pharmacy no longer needs REMS enrollment, so blood tests can stop. What is the correction?

CHECK YOUR REASONING FDA still recommends ANC monitoring according to prescribing information. Explain the difference between administrative requirements and continuing clinical surveillance.

Sources: [250], [261], [262]

INDIVIDUAL MEDICINE ENTRIES

MENTAL HEALTH & SLEEP

078 Lorazepam

Generic medicine: Lorazepam

MEMORY HOOK “Lorazepam: calmer does not mean breathing is covered.” Symptom relief never removes the need to assess ventilation and alertness.

WHAT IT DOES Lorazepam is a benzodiazepine used for anxiety and selected procedural or seizure-related indications; the route and indication determine the care setting and monitoring.

ASSESS Assess respiratory status, consciousness, fall risk, opioid and alcohol exposure, and the duration of prior benzodiazepine use before administration.

WATCH & RESPOND Slow or difficult breathing, inability to awaken, or profound sedation needs immediate airway and emergency assessment, particularly when other depressants are present.

TEACH Avoid alcohol and unapproved sedating medicines, do not drive until effects are understood, and follow a clinician-led taper after regular use.

AVOID THE TRAP Physical dependence can occur with prescribed use; abrupt discontinuation can produce dangerous withdrawal, including seizures, rather than simply a return of anxiety.

RECALL A patient receiving an opioid becomes difficult to awaken after lorazepam. Should the nurse wait for the scheduled observation round?

CHECK YOUR REASONING No. Assess breathing and responsiveness immediately and activate the appropriate emergency response; combined depressant effects can progress to life-threatening respiratory compromise.

Sources: [\[251\]](#), [\[268\]](#)

INDIVIDUAL MEDICINE ENTRIES

MENTAL HEALTH & SLEEP

079 Buspirone

Generic medicine: Buspirone

MEMORY HOOK “Buspirone builds a routine.” This is a reminder about regular treatment and delayed benefit, not a promise of a particular response time.

WHAT IT DOES Buspirone is an anxiolytic used for ongoing anxiety management; therapeutic improvement usually takes repeated scheduled use rather than a single rescue dose.

ASSESS Review symptom patterns, kidney and liver disease, dizziness, recent MAOI exposure, and other serotonergic or interacting medicines before treatment.

WATCH & RESPOND New agitation with fever, sweating, tremor, or muscle stiffness requires urgent assessment for serotonin toxicity; assess significant dizziness and falls too.

TEACH Take it consistently in relation to food, avoid large amounts of grapefruit, and discuss alcohol and every new medicine with the prescriber or pharmacist.

AVOID THE TRAP Buspirone does not prevent benzodiazepine withdrawal; replacing a long-used benzodiazepine does not make abrupt discontinuation safe.

RECALL A patient switches from long-term lorazepam to buspirone and plans to stop lorazepam immediately. What needs clarification?

CHECK YOUR REASONING A clinician-directed withdrawal plan is still needed because buspirone lacks cross-tolerance with benzodiazepines and does not protect against their withdrawal complications.

Sources: [252], [263]

INDIVIDUAL MEDICINE ENTRIES

MENTAL HEALTH & SLEEP

080 Zolpidem

Generic medicine: Zolpidem

MEMORY HOOK “Zolpidem: asleep actions, awake consequences.” This helps remember that forgotten nighttime behavior can still cause real harm.

WHAT IT DOES Zolpidem is a sedative-hypnotic for insomnia; immediate-release, extended-release, and other formulations have different sleep-time and administration instructions.

ASSESS Assess available sleep time, falls, respiratory disease, alcohol or opioid use, next-day alertness, and any previous complex sleep behavior with insomnia medicines.

WATCH & RESPOND Stop treatment and contact the prescriber immediately after sleepwalking, sleep-driving, or other activities performed while not fully awake; serious injury or impaired breathing needs emergency care.

TEACH Use only the prescribed formulation and bedtime instructions, avoid alcohol, and do not drive when alertness is impaired the next morning.

AVOID THE TRAP Feeling awake does not guarantee unimpaired driving; a previous complex sleep behavior with zolpidem contraindicates reuse, even if no injury occurred.

RECALL A partner reports that the patient cooked while asleep and remembers nothing. Is this merely evidence that the medicine worked?

CHECK YOUR REASONING No. It is a serious adverse behavior requiring discontinuation and prompt prescriber contact, not reassurance or an unsupervised rechallenge.

Sources: [253], [264]

SEIZURE CONTROL

081 Phenytoin

Generic medicine: Phenytoin

MEMORY HOOK Phenytoin: follow the firing, feet, and gums - seizures, coordination, and oral care are useful study connections.

WHAT IT DOES An antiseizure medicine that limits abnormal electrical activity in the brain; oral maintenance and IV treatment have different administration requirements.

ASSESS Review seizure control, adherence, interactions, prescribed drug levels, and neurologic findings; IV therapy also requires cardiac, blood-pressure, respiratory, and site monitoring.

WATCH & RESPOND Escalate new unsteadiness or slurred speech, blistering rash, or systemic illness; IV hypotension, arrhythmia, or painful swollen discoloration needs immediate assessment.

TEACH Maintain dental care, keep laboratory visits, and obtain advice before changing brands, supplements, or other medicines; do not stop abruptly.

AVOID THE TRAP Phenytoin and fosphenytoin have different preparation and administration rules; a familiar name does not make them interchangeable.

RECALL Why investigate a new staggering gait even when seizures are controlled?

CHECK YOUR REASONING A change in coordination may signal excessive drug effect; seizure improvement does not establish safe exposure or exclude toxicity.

Sources: [279], [280], [314]

INDIVIDUAL MEDICINE ENTRIES

SEIZURE CONTROL

082 Carbamazepine

Generic medicine: Carbamazepine

MEMORY HOOK Carbamazepine: count the cells and check the skin - two safety checks that accompany seizure control.

WHAT IT DOES An antiseizure medicine also used for trigeminal neuralgia and, with selected products, bipolar disorder; the prescribed indication guides response assessment.

ASSESS Review baseline blood counts, liver status, medication interactions, and the prescriber's genetic-risk assessment before treatment; follow scheduled laboratory monitoring.

WATCH & RESPOND A painful or blistering rash, mouth sores, fever, repeated infections, or unusual bleeding requires urgent evaluation for serious skin or blood-cell reactions.

TEACH Keep the prescribed schedule, avoid abrupt withdrawal, and discuss contraceptive reliability and all new medicines with the pharmacist.

AVOID THE TRAP A genetic-risk assessment does not guarantee that a severe skin reaction cannot occur; new symptoms still matter.

RECALL A student dismisses new fever and bruising as unrelated because seizures improved. What is missing?

CHECK YOUR REASONING Treatment benefit and toxicity can coexist; fever and bruising warrant prompt assessment for blood-cell suppression rather than routine reassurance.

Sources: [281]

SEIZURE CONTROL

083 Valproic acid

Generic medicine: Valproic acid

MEMORY HOOK Valproate: protect the liver, pancreas, and pregnancy plan - three connections beyond seizure frequency.

WHAT IT DOES A valproate antiseizure medicine; related formulations also treat bipolar mania or prevent migraine, with product-specific indications and schedules.

ASSESS Review liver disease, relevant metabolic disorders, pregnancy potential, seizure pattern, and ordered laboratory follow-up before and during therapy.

WATCH & RESPOND Urgently report jaundice, marked lethargy, worsening seizures, or persistent severe abdominal pain with vomiting; liver injury and pancreatitis can be life-threatening.

TEACH Discuss pregnancy prevention and safer alternatives with the prescriber; report pregnancy promptly but do not stop seizure treatment independently.

AVOID THE TRAP Valproic acid, divalproex, and valproate products are related, but release forms and prescribed schedules must not be substituted casually.

RECALL Why is suddenly stopping after a positive pregnancy test unsafe?

CHECK YOUR REASONING Fetal risk requires urgent specialist review, while abrupt withdrawal can provoke dangerous prolonged seizures; the treatment plan needs coordinated change.

Sources: [282]

INDIVIDUAL MEDICINE ENTRIES

SEIZURE CONTROL

084 Levetiracetam

Generic medicine: Levetiracetam

MEMORY HOOK Levetiracetam: log seizures and listen to the family - behavior changes can be as important as the seizure diary.

WHAT IT DOES An antiseizure medicine used for selected focal and generalized seizure types; it reduces abnormal brain activity without curing epilepsy.

ASSESS Document seizure frequency, kidney history, alertness, mood, behavior, and the exact immediate- or extended-release formulation.

WATCH & RESPOND Promptly report new aggression, depression, suicidal thoughts, major behavior changes, severe rash, or excessive sedation; protect safety while arranging assessment.

TEACH Take consistently, use a calibrated device for oral liquid, avoid driving until effects are known, and do not stop treatment abruptly.

AVOID THE TRAP Fewer seizures do not mean mood changes are harmless or unrelated; caregivers may notice changes before the patient does.

RECALL Why ask a caregiver about irritability at a seizure follow-up?

CHECK YOUR REASONING Behavioral adverse effects can emerge during treatment and require review even when the intended seizure-control effect is good.

Sources: [283]

MOVEMENT & MEMORY

085 Carbidopa/levodopa

Generic medicine: Carbidopa/levodopa

MEMORY HOOK Carbidopa is the travel partner; levodopa brings the building block. Timing helps explain changing movement.

WHAT IT DOES Levodopa supplies a dopamine precursor for Parkinson symptoms; carbidopa reduces its breakdown before it reaches the brain.

ASSESS Track mobility around dose times, swallowing, blood pressure with position changes, involuntary movements, and the prescribed formulation or pump schedule.

WATCH & RESPOND Report hallucinations, new compulsive behavior, sudden sleep episodes, or troublesome movements; fever and rigidity after abrupt interruption need urgent assessment.

TEACH Take on schedule, rise carefully, and discuss iron products, dietary changes, and wearing-off symptoms with the care team; do not stop suddenly.

AVOID THE TRAP Improved movement does not mean Parkinson disease is cured; formulations and delivery systems have different instructions.

RECALL Why record when stiffness returns in relation to each dose?

CHECK YOUR REASONING The timing can reveal wearing-off patterns and help the prescriber adjust therapy safely instead of the patient taking unscheduled extra doses.

Sources: [284]

INDIVIDUAL MEDICINE ENTRIES

MOVEMENT & MEMORY

086 Benztropine

Generic medicine: Benztropine

MEMORY HOOK Benztropine can dry the mouth and slow the gut - connect movement relief with the rest of the anticholinergic picture.

WHAT IT DOES An anticholinergic used for selected Parkinson symptoms and certain medication-induced movement symptoms, including acute dystonic reactions.

ASSESS Identify the movement disorder first; review cognition, bowel and urinary function, glaucoma history, and other medicines with anticholinergic effects.

WATCH & RESPOND Urgently evaluate overheating with reduced sweating, severe confusion, inability to urinate, or abdominal distension; anticholinergic toxicity can become serious.

TEACH Avoid overheating, use caution with driving, report troublesome dry mouth or constipation, and check before adding sedating allergy medicines.

AVOID THE TRAP It does not treat tardive dyskinesia and may aggravate it; all medication-related abnormal movements are not the same problem.

RECALL Why should new repetitive lip and tongue movements be assessed before giving benztropine?

CHECK YOUR REASONING The pattern may represent tardive dyskinesia rather than acute dystonia, so assuming the same treatment could worsen symptoms.

Sources: [285], [286]

MOVEMENT & MEMORY

087 Donepezil

Generic medicine: Donepezil

MEMORY HOOK Donepezil: follow function, food, and fainting - benefit and tolerability need separate checks.

WHAT IT DOES A cholinesterase inhibitor used to support cognitive symptoms in Alzheimer disease by increasing available acetylcholine.

ASSESS Establish cognition and daily-function baselines with caregivers; review pulse, fainting history, appetite, weight, gastrointestinal symptoms, and interacting medicines.

WATCH & RESPOND Fainting, a slow pulse with symptoms, bloody vomit, or black stools needs prompt assessment; persistent vomiting or weight loss also warrants review.

TEACH Use the prescribed formulation correctly, involve caregivers in medication routines, and contact the prescriber before restarting after a prolonged interruption.

AVOID THE TRAP Symptom support is not a cure or proof that Alzheimer disease progression has stopped; reassess practical benefit over time.

RECALL Why investigate a new fainting episode instead of labeling it another dementia-related fall?

CHECK YOUR REASONING Donepezil can cause clinically important slowing of the heart; assess vital signs and the episode rather than attributing every change to dementia.

Sources: [287]

INDIVIDUAL MEDICINE ENTRIES

OSMOTIC THERAPY

088 Mannitol

Generic medicine: Mannitol

MEMORY HOOK Mannitol moves water; follow where it moves - brain, circulation, lungs, and kidneys all matter.

WHAT IT DOES An IV osmotic diuretic used to lower selected elevations in intracranial or intraocular pressure by shifting water and promoting urinary water loss.

ASSESS Review kidney, heart, and lung status; monitor neurologic findings, urine output, fluid balance, electrolytes, and prescribed serum osmolality measurements.

WATCH & RESPOND New breathlessness, pulmonary congestion, declining urine output, or neurologic deterioration requires immediate reassessment and stopping the infusion as directed by protocol.

TEACH Explain why urine output and laboratory checks are frequent, and ask the patient to report breathing difficulty or pain at the infusion site.

AVOID THE TRAP A diuretic can worsen fluid overload when kidney clearance fails; inspect for crystals and use the product-specified filtered administration set.

RECALL Why is falling urine output concerning during treatment?

CHECK YOUR REASONING Reduced clearance can allow mannitol and fluid to accumulate, increasing pulmonary and renal risk rather than ensuring useful diuresis.

Sources: [288], [289]

MATERNITY & REPRODUCTIVE HEALTH

089 Oxytocin

Generic medicine: Oxytocin

MEMORY HOOK Oxytocin: contraction plus recovery - more contraction is not automatically better progress.

WHAT IT DOES Stimulates uterine contractions for appropriate labor induction or augmentation and helps contract the uterus to control postpartum bleeding.

ASSESS Confirm the indication and obstetric plan; during labor monitor contraction pattern, resting uterine tone, fetal heart rate, maternal vital signs, and fluid balance.

WATCH & RESPOND Excessive uterine activity or a concerning fetal response requires stopping oxytocin and immediate obstetric evaluation under the unit protocol.

TEACH Explain monitoring and dose adjustment; encourage the patient to report persistent severe pain, unusual breathlessness, or a change in how contractions feel.

AVOID THE TRAP Labor induction and postpartum hemorrhage are different contexts; the same medicine does not mean the same route or infusion plan.

RECALL Why is uterine relaxation between contractions important?

CHECK YOUR REASONING Excessive or sustained contractions can impair fetal oxygen delivery; interpret the contraction pattern together with fetal monitoring and the clinical situation.

Sources: [290], [291]

INDIVIDUAL MEDICINE ENTRIES

MATERNITY & REPRODUCTIVE HEALTH

090 Magnesium sulfate

Generic medicine: Magnesium sulfate

MEMORY HOOK Magnesium monitoring: breathe, bend, and pass urine - respiration, reflexes, and renal clearance belong together.

WHAT IT DOES In obstetric care, parenteral magnesium sulfate prevents or controls seizures associated with severe preeclampsia or eclampsia.

ASSESS Monitor respiratory status, deep-tendon reflexes, urine output, renal function, mental status, and ordered magnesium concentrations during infusion.

WATCH & RESPOND Respiratory depression, markedly diminished reflexes, or worsening weakness may indicate toxicity; stop the infusion, summon urgent help, and support breathing per protocol.

TEACH Explain frequent checks and ask the patient to report breathing difficulty, profound weakness, or increasing drowsiness rather than dismissing these as fatigue.

AVOID THE TRAP It is not a substitute for indicated blood-pressure treatment; an injectable calcium antidote must be available under the treatment protocol.

RECALL Why does reduced urine output increase concern even before a laboratory result returns?

CHECK YOUR REASONING Magnesium depends on renal elimination, so reduced clearance can increase exposure and toxicity; bedside assessment remains essential while laboratory testing proceeds.

Sources: [292], [293]

MATERNITY & REPRODUCTIVE HEALTH

091 Terbutaline

Generic medicine: Terbutaline

MEMORY HOOK Terbutaline relaxes muscle, but the heart still needs attention - uterine relaxation is only part of the story.

WHAT IT DOES A beta-adrenergic bronchodilator that also relaxes uterine muscle; selected urgent obstetric use is off-label and requires supervised, individualized assessment.

ASSESS Confirm indication, route, and duration; review maternal pulse, blood pressure, respiratory status, glucose, potassium, and fetal monitoring when used in pregnancy.

WATCH & RESPOND Chest pain, substantial tachycardia, arrhythmia, or new breathlessness requires immediate evaluation for serious cardiovascular or pulmonary effects.

TEACH Explain that an urgent monitored use does not establish a safe home regimen for preventing preterm birth; report palpitations or breathing changes.

AVOID THE TRAP Injectable terbutaline must not be used for prolonged tocolysis beyond 48-72 hours or for outpatient/home maintenance tocolysis.

RECALL Does improvement in contractions justify continuing injections at home?

CHECK YOUR REASONING No. Prolonged or home maintenance use carries serious maternal risks; the short-term response does not override the boxed warning.

Sources: [294], [315]

INDIVIDUAL MEDICINE ENTRIES

MATERNITY & REPRODUCTIVE HEALTH

092 Rho(D) immune globulin

Generic medicine: Rho(D) immune globulin

MEMORY HOOK Rh prevention: check the recipient, exposure, and product - three checks before the injection.

WHAT IT DOES Provides anti-D antibodies to prevent Rh sensitization in eligible, previously unsensitized Rh-negative patients exposed to Rh-positive red cells.

ASSESS Verify maternal Rh type, antibody-screen interpretation, infant or fetal status when relevant, exposure timing, ordered product, and any fetomaternal-hemorrhage testing.

WATCH & RESPOND Monitor for hypersensitivity; breathing difficulty, generalized hives, or circulatory symptoms require emergency assessment and the appropriate reaction protocol.

TEACH Explain that postpartum prophylaxis is administered to the eligible mother, not the newborn, and follow-up depends on exposure and clinical guidance.

AVOID THE TRAP Prevention cannot reverse established sensitization; products differ in routes, and certain IV products have a separate ITP indication with different risks.

RECALL Why does the newborn's Rh-positive result not mean the newborn should receive postpartum RhoGAM?

CHECK YOUR REASONING The purpose is to prevent the mother's immune response to fetal red cells; the maternal eligibility assessment determines prophylaxis.

Sources: [295], [296]

MATERNITY & REPRODUCTIVE HEALTH

093 Tamoxifen

Generic medicine: Tamoxifen

MEMORY HOOK Tamoxifen: breast benefit, clot vigilance, uterine follow-up - tissue effects differ.

WHAT IT DOES A selective estrogen-receptor modulator used to treat hormone-sensitive breast cancer and reduce breast-cancer risk in selected patients.

ASSESS Review the treatment indication, clotting history, uterine symptoms, pregnancy possibility, and interactions, including anticoagulants; maintain scheduled oncology and gynecologic follow-up.

WATCH & RESPOND New unilateral leg swelling, chest pain, breathlessness, or stroke symptoms requires urgent care; abnormal vaginal bleeding needs prompt investigation.

TEACH Discuss effective nonhormonal contraception and report new vaginal bleeding or discharge, including after treatment; do not assume amenorrhea means pregnancy is impossible.

AVOID THE TRAP Blocking estrogen effects in breast tissue does not mean every tissue experiences the same effect; endometrial malignancy and thromboembolism remain important risks.

RECALL Why should new postmenopausal spotting be reported rather than treated as a routine nuisance?

CHECK YOUR REASONING Tamoxifen can increase uterine-cancer risk, so abnormal bleeding deserves assessment even when breast-cancer treatment is going well.

Sources: [297]

INDIVIDUAL MEDICINE ENTRIES

MATERNITY & REPRODUCTIVE HEALTH

094 Ethinyl estradiol/norgestimate

Generic medicine: Ethinyl estradiol/norgestimate

MEMORY HOOK The pill needs a schedule and a safety screen - preventing ovulation does not prevent every risk.

WHAT IT DOES An estrogen-progestin oral contraceptive that primarily prevents ovulation; some products also have selected acne indications.

ASSESS Review blood pressure, smoking, migraine with aura, clotting and liver history, pregnancy possibility, and medicines that may reduce contraceptive effectiveness.

WATCH & RESPOND Sudden chest pain, breathlessness, one-sided leg pain, focal weakness, or major visual change requires urgent assessment for vascular complications.

TEACH Follow the specific pack schedule and missed-pill instructions; discuss backup protection after missed doses or vomiting, and use condoms for infection prevention.

AVOID THE TRAP Combined pills are contraindicated in people over 35 who smoke and in those with migraine with aura; they do not protect against sexually transmitted infections.

RECALL Why check a new seizure medicine before reassuring the patient that contraceptive protection is unchanged?

CHECK YOUR REASONING Some medicines reduce contraceptive effectiveness; the pharmacist or prescriber must assess the interaction and an appropriate alternative or backup plan.

Sources: [298], [299]

PAIN & ANESTHESIA

095 Morphine

Generic medicine: Morphine

MEMORY HOOK Morphine: comfort plus consciousness - pain relief is incomplete evidence without alertness and breathing checks.

WHAT IT DOES An opioid analgesic for pain severe enough to require opioid treatment; formulation and route influence onset, duration, and monitoring.

ASSESS Evaluate pain and function together with sedation, breathing, blood pressure, kidney history, bowel function, other sedatives, and prior opioid exposure.

WATCH & RESPOND Increasing difficulty waking, slow or shallow breathing, or major hypotension requires immediate assessment and the opioid emergency-response protocol.

TEACH Avoid alcohol and unapproved sedatives, secure storage, follow constipation prevention advice, and learn how to obtain and use a rescue reversal medicine.

AVOID THE TRAP Extended-release oral products must not be crushed; a damaged release system can deliver too much medicine rapidly.

RECALL Why is a sleeping patient not automatically a safely comfortable patient after morphine?

CHECK YOUR REASONING Sleepiness may progress to dangerous respiratory depression; assess arousability and ventilation rather than assuming the absence of a pain complaint means success.

Sources: [300], [301]

INDIVIDUAL MEDICINE ENTRIES

PAIN & ANESTHESIA

096 Hydromorphone

Generic medicine: Hydromorphone

MEMORY HOOK Hydromorphone: read every label, then reassess every response - familiar opioid effects do not make products equivalent.

WHAT IT DOES A potent opioid analgesic for severe pain, available in oral and injectable forms with different administration and monitoring requirements.

ASSESS Check the exact product, route, prescribed amount, prior opioid exposure, pain response, sedation, breathing, blood pressure, and concurrent depressants.

WATCH & RESPOND Marked sedation, difficult arousal, or slowed breathing is an urgent safety problem; activate the appropriate response and support ventilation according to protocol.

TEACH Avoid alcohol and unsupervised sedative combinations, keep the medicine secured, and learn the rescue-medication plan with a caregiver.

AVOID THE TRAP Do not transfer a morphine order or volume directly to hydromorphone; opioid conversion and formulation selection require a verified prescribing plan.

RECALL Why recheck an unexpectedly large injectable volume before administration?

CHECK YOUR REASONING A concentration, unit, or product-selection error can cause overdose; resolve the discrepancy before giving the medicine rather than relying on a familiar name.

Sources: [302], [303], [316]

PAIN & ANESTHESIA

097 Oxycodone

Generic medicine: Oxycodone

MEMORY HOOK Oxycodone: read the release and the recipe - how it releases and what else it contains both matter.

WHAT IT DOES An oral opioid analgesic for severe pain; immediate-release, extended-release, and combination products require distinct instructions.

ASSESS Review pain and function, alertness, respiratory status, bowel function, other sedatives, and every ingredient in the prescribed product.

WATCH & RESPOND Slow or shallow breathing, long breathing pauses, or inability to awaken requires emergency assessment and the opioid-overdose response plan.

TEACH Do not crush extended-release tablets; measure liquids with the supplied device and avoid alcohol or unapproved sedating medicines.

AVOID THE TRAP A combination tablet may also contain acetaminophen or another analgesic; counting only the opioid can miss duplicate ingredient exposure.

RECALL Why review over-the-counter pain medicines when a patient uses an oxycodone combination product?

CHECK YOUR REASONING The additional ingredient may already be present; reconciling all products helps prevent unintentional duplication while the opioid's separate respiratory risks still require monitoring.

Sources: [304], [305]

INDIVIDUAL MEDICINE ENTRIES

PAIN & ANESTHESIA

098 Fentanyl

Generic medicine: Fentanyl

MEMORY HOOK Fentanyl patch: check the past opioid, the present patch, and the heat source.

WHAT IT DOES A potent opioid with route-specific uses; transdermal patches provide prolonged analgesia for eligible opioid-tolerant patients rather than rapid relief of acute pain.

ASSESS Verify formulation, opioid tolerance when a patch is prescribed, breathing, alertness, interacting sedatives, patch location, and removal of the previous patch.

WATCH & RESPOND Difficult arousal or slow breathing is an emergency; monitor for toxicity with heat exposure or fever and follow the overdose-response protocol.

TEACH Never cut patches or apply external heat; prevent transfer to children or others and follow the product's secure storage and disposal instructions.

AVOID THE TRAP Patch eligibility and slow delivery do not apply to every fentanyl formulation; an injection and a patch are not interchangeable routes.

RECALL Why is a heating pad over a fentanyl patch unsafe?

CHECK YOUR REASONING Heat can increase drug delivery and cause dangerous opioid exposure; apparently routine comfort measures can change medication safety.

Sources: [306], [307]

PAIN & ANESTHESIA

099 Naloxone

Generic medicine: Naloxone

MEMORY HOOK Naloxone opens a rescue window; keep watching the breathing after the window opens.

WHAT IT DOES An opioid antagonist used with emergency care to reverse dangerous opioid effects, particularly impaired breathing.

ASSESS Evaluate responsiveness and breathing immediately; activate emergency help and continue respiratory support and monitoring according to training and the clinical setting.

WATCH & RESPOND Breathing depression can return after initial improvement; continue observation, repeat treatment as the product or protocol directs, and watch for acute withdrawal.

TEACH Caregivers should know where naloxone is, recognize overdose, follow the device instructions, call emergency services, and remain with the person.

AVOID THE TRAP Waking up is not an all-clear signal, and naloxone does not replace airway support or treat every cause of unconsciousness.

RECALL Why does the patient still need emergency care after becoming responsive?

CHECK YOUR REASONING The opioid can outlast naloxone, allowing recurrent respiratory depression; response to the first dose does not establish sustained recovery.

Sources: [308], [309]

INDIVIDUAL MEDICINE ENTRIES

PAIN & ANESTHESIA

100 Succinylcholine

Generic medicine: Succinylcholine

MEMORY HOOK Still muscles do not prove a sleeping mind - paralysis provides neither unconsciousness nor pain relief.

WHAT IT DOES A depolarizing neuromuscular blocker that produces skeletal-muscle paralysis for selected intubation or anesthesia procedures, including paralysis of breathing muscles.

ASSESS Confirm airway expertise, ventilation equipment, anesthesia plan, potassium risks, neuromuscular disease, and personal or family malignant-hyperthermia history.

WATCH & RESPOND Unexpected arrhythmia, prolonged paralysis, jaw rigidity, or rising exhaled carbon dioxide requires immediate anesthesia-team assessment for serious complications.

TEACH Before a planned procedure, explain the separate roles of anesthesia and paralysis; document and communicate any suspected malignant-hyperthermia event for future care.

AVOID THE TRAP Major burns, denervation, and certain muscle disorders can create dangerous hyperkalemia risk; eligibility depends on the condition and its timing.

RECALL Why must sedation and analgesia be considered separately when the patient cannot move?

CHECK YOUR REASONING Succinylcholine does not suppress awareness or pain; inability to move cannot demonstrate comfort, while ventilation must be supported throughout paralysis.

Sources: [310], [311]

PAIN & ANESTHESIA

101 Dantrolene

Generic medicine: Dantrolene

MEMORY HOOK Dantrolene calms the muscle's calcium surge; the emergency team still treats the whole crisis.

WHAT IT DOES Acts within skeletal muscle to limit calcium release; IV formulations treat malignant hyperthermia, while oral therapy has selected spasticity uses.

ASSESS During a malignant-hyperthermia response, track ventilation, exhaled carbon dioxide, temperature, rigidity, and laboratory abnormalities; oral therapy requires liver-risk assessment and monitoring.

WATCH & RESPOND Watch for muscle weakness and breathing or swallowing difficulty after IV treatment; jaundice or dark urine during oral therapy requires prompt review.

TEACH Explain future anesthesia precautions after suspected malignant hyperthermia, and reinforce laboratory follow-up and symptom reporting for long-term oral treatment.

AVOID THE TRAP Injectable brands have different preparation requirements; oral capsules cannot replace IV emergency therapy, and calcium-channel-blocker interactions require attention.

RECALL Why continue supportive care after dantrolene is given for malignant hyperthermia?

CHECK YOUR REASONING Removing triggers, supporting ventilation, correcting metabolic complications, and monitoring for recurrence remain essential; one drug does not complete resuscitation.

Sources: [312], [313], [311]

FAMILY COMPARISONS: HEART, CIRCULATION & CLOTTING

HEART, CIRCULATION & CLOTTING

F01 Angiotensin-converting enzyme (ACE) inhibitors

Generic examples: lisinopril, enalapril, ramipril

MEMORY HOOK Picture a wider road with a potassium checkpoint: lower pressure still needs laboratory surveillance.

WHAT IT DOES Reduce angiotensin II formation, relaxing vessels and reducing aldosterone effects; selected agents treat hypertension, heart failure, and post-infarction risk.

ASSESS Review blood pressure, volume status, potassium, renal function, pregnancy status, and the medication list before administration and during follow-up.

WATCH & RESPOND New tongue or throat swelling, hoarseness, or breathing difficulty suggests angioedema: stop administration and activate urgent airway assessment and emergency help.

TEACH Report persistent dry cough; check before adding potassium supplements, salt substitutes, or anti-inflammatory pain medicines, and report pregnancy promptly.

AVOID THE TRAP A cough needs evaluation, but airway swelling is a different emergency; an ACE inhibitor must not overlap with sacubitril/valsartan without the required washout.

RECALL Why investigate a new potassium-containing salt substitute in a patient taking lisinopril?

CHECK YOUR REASONING Reduced aldosterone effects can raise potassium; extra potassium increases the risk, especially with impaired kidney function.

Sources: [1], [2]

HEART, CIRCULATION & CLOTTING

F02 Angiotensin receptor blockers (ARBs)

Generic examples: losartan, valsartan

MEMORY HOOK The receptor door is closed, but the potassium window stays open for checking.

WHAT IT DOES Block angiotensin II at its receptor, easing vessel constriction; indications vary by agent and include hypertension and selected heart or kidney conditions.

ASSESS Trend blood pressure, potassium, and renal function; check dehydration, pregnancy, interacting medicines, and any history of angioedema.

WATCH & RESPOND Escalate severe dizziness, fainting, markedly reduced urine, or concerning potassium changes; tongue swelling or breathing difficulty requires emergency assessment.

TEACH Check before adding potassium supplements, potassium salt substitutes, or nonsteroidal anti-inflammatory (NSAID) pain medicines; report pregnancy immediately because fetal injury can occur.

AVOID THE TRAP Less cough than with ACE inhibitors does not mean no angioedema or kidney risk; combining the two classes is generally avoided.

RECALL Does replacing an ACE inhibitor with losartan remove the need for potassium checks?

CHECK YOUR REASONING No. Both affect the renin-angiotensin system, so potassium and renal function still need monitoring; use the prescribed follow-up plan.

Sources: [3], [4]

FAMILY COMPARISONS: HEART, CIRCULATION & CLOTTING

HEART, CIRCULATION & CLOTTING

F03 Beta blockers

Generic examples: metoprolol, propranolol

MEMORY HOOK Turn down the adrenaline volume, then check the pulse and the person.

WHAT IT DOES Reduce beta-adrenergic stimulation, often slowing heart rate and lowering pressure; agent selection depends on the cardiac or noncardiac indication.

ASSESS Check pulse, blood pressure, prescribed parameters, heart-failure symptoms, lung disease, and diabetes treatment; confirm the exact immediate- or extended-release product.

WATCH & RESPOND Promptly assess symptomatic bradycardia, fainting, worsening breathlessness, or wheezing and escalate deterioration; do not dismiss these as ordinary tiredness.

TEACH Do not stop abruptly; follow the clinician's taper plan and check glucose as instructed because familiar low-glucose warning signs may be less obvious.

AVOID THE TRAP A normal pulse does not exclude hypoglycemia, and all beta blockers are not interchangeable in airway disease or heart failure.

RECALL A patient taking metoprolol becomes confused after missing a meal; should a normal pulse reassure the nurse?

CHECK YOUR REASONING No. Assess glucose promptly according to protocol; beta blockade can conceal warning signs such as a racing heart.

Sources: [5], [6]

HEART, CIRCULATION & CLOTTING

F04 Calcium channel blockers

Generic examples: amlodipine, diltiazem, verapamil

MEMORY HOOK One family, two jobs: vessel relaxation for all; an extra rhythm brake for diltiazem and verapamil.

WHAT IT DOES Relax vascular smooth muscle; diltiazem and verapamil also slow conduction through the atrioventricular node, unlike the mainly vascular action of amlodipine.

ASSESS Check pressure, edema, and dizziness; for diltiazem or verapamil also review pulse, rhythm, conduction disease, and other rate-slowing medicines.

WATCH & RESPOND Escalate fainting, symptomatic slow pulse, worsening chest pain, or breathing difficulty; new swelling needs assessment rather than automatic reassurance.

TEACH Rise carefully, report troubling edema or constipation, and check product instructions before crushing or opening any extended-release preparation.

AVOID THE TRAP Do not assume every calcium channel blocker treats a rapid rhythm; combining a nodal blocker with a beta blocker can excessively slow conduction.

RECALL Why review the pulse especially carefully when diltiazem is added to metoprolol?

CHECK YOUR REASONING Both can slow cardiac conduction, increasing the risk of clinically important bradycardia or heart block.

Sources: [7], [8], [9]

FAMILY COMPARISONS: HEART, CIRCULATION & CLOTTING

HEART, CIRCULATION & CLOTTING

F05 Digoxin

Generic examples: digoxin

MEMORY HOOK Before the next beat, check the kidneys, electrolytes, and the patient's new symptoms.

WHAT IT DOES Increases cardiac contractile force and slows atrioventricular conduction; used for selected heart-failure and ventricular rate-control situations, not every dysrhythmia.

ASSESS Assess pulse and rhythm against prescribed parameters; review renal function, potassium, magnesium, interacting medicines, and correctly timed drug levels when ordered.

WATCH & RESPOND New nausea, poor appetite, visual changes, or rhythm disturbance can signal toxicity; withhold a suspected unsafe dose and obtain prompt clinical review.

TEACH Report new gastrointestinal or visual symptoms, follow monitoring appointments, and consult the pharmacist before adding medicines or changing the preparation.

AVOID THE TRAP A laboratory result inside a stated range does not rule out toxicity; low potassium and reduced renal clearance increase susceptibility.

RECALL Why is new nausea more concerning when a digoxin patient also has low potassium after diuresis?

CHECK YOUR REASONING Potassium depletion increases sensitivity to digoxin, so a new symptom cluster warrants assessment for toxicity rather than routine anti-nausea treatment alone.

Sources: [10], [11]

HEART, CIRCULATION & CLOTTING

F06 Nitrates

Generic examples: nitroglycerin, isosorbide mononitrate

MEMORY HOOK Match the nitrate to its mission: rescue route or prevention plan.

WHAT IT DOES Relax vessels and reduce cardiac workload; sublingual nitroglycerin can relieve an angina episode, while long-acting products are used for prevention.

ASSESS Check pressure, chest-pain characteristics, exact formulation, and recent medicines, specifically sildenafil, tadalafil, other phosphodiesterase-5 (PDE-5) inhibitors, and riociguat.

WATCH & RESPOND Profound hypotension, fainting, or persistent or worsening chest pain requires urgent assessment; follow the chest-pain emergency plan rather than delaying help.

TEACH Sit down for prescribed sublingual use, let the tablet dissolve, and follow the emergency plan; long-acting nitrate schedules are designed to limit tolerance.

AVOID THE TRAP Nitrates with PDE-5 inhibitors or riociguat can cause dangerous hypotension; never guess a safe interval from the drug class alone.

RECALL What should the nurse do when a patient awaiting nitroglycerin reports recent tadalafil use?

CHECK YOUR REASONING Do not administer the nitrate pending urgent prescriber review; assess the chest pain and use the emergency pathway because the combination can dangerously lower pressure.

Sources: [12], [13], [14]

FAMILY COMPARISONS: HEART, CIRCULATION & CLOTTING

HEART, CIRCULATION & CLOTTING

F07 Loop diuretics

Generic examples: furosemide, bumetanide, torsemide

MEMORY HOOK Fluid leaves the loop; the electrolyte checklist comes with it.

WHAT IT DOES Increase renal salt and water excretion, relieving fluid overload; substantial diuresis can also remove electrolytes and circulating volume.

ASSESS Trend weight, intake/output, edema, breathing, pressure, renal function, and electrolytes, particularly potassium and magnesium; check other ototoxic medicines.

WATCH & RESPOND Escalate severe dizziness, new confusion, palpitations, markedly reduced urine, or hearing changes; these can indicate volume, electrolyte, renal, or hearing injury.

TEACH Follow the agreed weight and fluid plan, rise gradually, and use potassium supplements only when prescribed rather than adding them automatically.

AVOID THE TRAP More urine is not always better; rapid intravenous furosemide and other risk factors can contribute to ototoxicity, so verify the ordered administration rate.

RECALL Why pair a falling weight with blood pressure and electrolyte trends during diuresis?

CHECK YOUR REASONING Weight loss may reflect intended fluid removal, but hypotension or electrolyte depletion can show that the patient is losing more than they can safely tolerate.

Sources: [15], [16]

HEART, CIRCULATION & CLOTTING

F08 Thiazide and thiazide-like diuretics

Generic examples: hydrochlorothiazide, chlorthalidone

MEMORY HOOK The pressure may drop while glucose, uric acid, or calcium can rise.

WHAT IT DOES Increase sodium and water excretion to lower blood pressure and manage selected edema; electrolyte and metabolic effects accompany the benefit.

ASSESS Review pressure, hydration, sodium, potassium, renal function, glucose when relevant, and a history of gout; trend findings after treatment changes.

WATCH & RESPOND New marked weakness, confusion, palpitations, or fainting warrants prompt assessment for electrolyte or volume disturbance; report a painful swollen joint.

TEACH Use the prescribed dosing schedule, stand up slowly, and follow individualized fluid and potassium advice; hydrochlorothiazide also requires sun-protection counseling.

AVOID THE TRAP Thiazides are not potassium-sparing; they may reduce urinary calcium loss, so do not assume all diuretics move every electrolyte in the same direction.

RECALL A hydrochlorothiazide patient develops muscle weakness after treatment begins; is that simply proof the medication is working?

CHECK YOUR REASONING No. Assess symptoms and ordered electrolytes because potassium or sodium depletion may require a change in the treatment plan.

Sources: [17], [18]

FAMILY COMPARISONS: HEART, CIRCULATION & CLOTTING

HEART, CIRCULATION & CLOTTING

F09 Potassium-sparing diuretics

Generic examples: spironolactone, eplerenone, amiloride

MEMORY HOOK Potassium stays on board, so check what else is boarding.

WHAT IT DOES Reduce renal potassium loss while promoting sodium excretion; spironolactone and eplerenone block aldosterone, whereas amiloride works through a different tubular mechanism.

ASSESS Check potassium, renal function, pressure, volume status, and concurrent ACE inhibitors, ARBs, supplements, or potassium-containing salt substitutes.

WATCH & RESPOND Promptly escalate concerning potassium results, new muscle weakness, palpitations, or marked reduction in urine; severe hyperkalemia can threaten cardiac conduction.

TEACH Do not add potassium products without the prescriber's approval; keep laboratory appointments and report troublesome breast tenderness or enlargement with spironolactone.

AVOID THE TRAP Combining a potassium-sparing drug with another diuretic does not guarantee a normal potassium level; renal function and the entire regimen still matter.

RECALL Why investigate a salt substitute even when a patient says they take no supplements?

CHECK YOUR REASONING Some salt substitutes contain substantial potassium and can increase hyperkalemia risk; the product label belongs in the medication and diet review.

Sources: [19], [20]

HEART, CIRCULATION & CLOTTING

F10 Statins

Generic examples: atorvastatin, rosuvastatin, simvastatin

MEMORY HOOK A quieter cholesterol factory still needs a muscle-and-liver safety check.

WHAT IT DOES Reduce hepatic cholesterol synthesis and lower low-density lipoprotein (LDL) cholesterol; appropriate use reduces cardiovascular events, even without an immediately noticeable change.

ASSESS Review lipid response, liver history and ordered tests, unexplained muscle symptoms, interacting medicines, pregnancy, and breastfeeding plans.

WATCH & RESPOND Promptly assess unexplained muscle pain or weakness, especially with dark urine or systemic illness; jaundice also needs clinical review.

TEACH Take the prescribed product consistently, report new muscle symptoms, and check before adding medicines or grapefruit products because interactions differ among statins.

AVOID THE TRAP Not every statin must be taken at bedtime; most pregnant patients stop therapy, but the FDA removed the blanket pregnancy contraindication for selected exceptional situations.

RECALL How should a nurse respond when a patient taking a statin reports a new pregnancy?

CHECK YOUR REASONING Arrange prompt prescriber review of therapy and risk; do not falsely teach either that statins are routinely continued or that no exception is possible.

Sources: [21], [22]

FAMILY COMPARISONS: HEART, CIRCULATION & CLOTTING

HEART, CIRCULATION & CLOTTING

F11 Heparin and low-molecular-weight heparin (LMWH)

Generic examples: heparin, enoxaparin

MEMORY HOOK Check the clot, the count, and the container: indication, platelets, and correct strength.

WHAT IT DOES Enhance anticoagulant activity to prevent clot formation or extension; they do not directly dissolve an established clot.

ASSESS Check bleeding, blood count and platelets, renal function for enoxaparin, heparin-induced thrombocytopenia history, and the exact product, concentration, route, and monitoring orders.

WATCH & RESPOND Escalate bleeding, an unexplained platelet fall, or new thrombosis promptly; suspected heparin-induced thrombocytopenia requires stopping heparin exposure and urgent prescriber assessment.

TEACH Report unusual bleeding and planned procedures; with prescribed enoxaparin injections, use the taught technique and avoid rubbing the site afterward.

AVOID THE TRAP Unfractionated heparin treatment may use activated partial thromboplastin time (aPTT) or anti-Xa monitoring per protocol; aPTT inadequately measures enoxaparin effect.

RECALL Why is a platelet drop with new leg pain concerning even without bleeding?

CHECK YOUR REASONING Heparin-induced thrombocytopenia can promote dangerous thrombosis; a low platelet count does not mean the patient is protected from clots.

Sources: [23], [24], [25], [26]

HEART, CIRCULATION & CLOTTING

F12 Warfarin

Generic examples: warfarin

MEMORY HOOK Keep the vitamin K pattern steady and let the INR guide the prescribed plan.

WHAT IT DOES Reduces production of functional vitamin K-dependent clotting factors; onset and offset are delayed because circulating clotting factors must change.

ASSESS Review the international normalized ratio (INR) against the patient's prescribed target, bleeding, diet changes, new medicines, liver disease, and pregnancy considerations.

WATCH & RESPOND Urgently evaluate significant bleeding, black tarry stool, severe new headache, or injury involving the head, even when external bleeding is absent.

TEACH Keep vitamin K intake consistent rather than eliminating vegetables; check new prescriptions, nonprescription medicines, and herbal products with the care team.

AVOID THE TRAP There is no single INR target for every indication; starting or stopping interacting medicines can change anticoagulation, and peri-procedure interruption requires an individualized plan.

RECALL Why report a new antibiotic even if the warfarin dose has not changed?

CHECK YOUR REASONING Drug interactions can alter the anticoagulant response; the clinician may need additional INR assessment or a regimen adjustment.

Sources: [27], [28]

FAMILY COMPARISONS: HEART, CIRCULATION & CLOTTING

HEART, CIRCULATION & CLOTTING

F13 Direct oral anticoagulants

Generic examples: apixaban, rivaroxaban, dabigatran

MEMORY HOOK No routine INR target does not mean no monitoring: kidneys, bleeding, and adherence still count.

WHAT IT DOES Apixaban and rivaroxaban inhibit factor Xa; dabigatran inhibits thrombin, reducing clot formation for their approved indications.

ASSESS Review bleeding, renal and hepatic function, the indication, interacting medicines, adherence, last dose, and upcoming procedures or spinal interventions.

WATCH & RESPOND Significant bleeding, a head injury, or a new severe headache needs urgent assessment. After a spinal procedure, urgently escalate new back pain, leg weakness or numbness, or bladder/bowel dysfunction.

TEACH Avoid unplanned interruptions and extra doses; obtain drug-specific missed-dose and procedure instructions, and report all nonprescription pain medicines.

AVOID THE TRAP These drugs are not interchangeable with warfarin for mechanical valves; formulations also differ, and dabigatran capsules must not be opened or crushed.

RECALL Does a routine INR in the normal range prove that apixaban has no anticoagulant effect?

CHECK YOUR REASONING No. Routine INR cannot reliably quantify apixaban activity; clinical assessment and the appropriate drug-specific evaluation are needed when bleeding or urgent procedures arise.

Sources: [29], [30], [31], [32]

HEART, CIRCULATION & CLOTTING

F14 Antiplatelet medicines

Generic examples: aspirin, clopidogrel, ticagrelor

MEMORY HOOK Platelets make the first plug; these medicines change how that plug forms.

WHAT IT DOES Reduce platelet activation or aggregation; they help prevent arterial events in selected patients and may be combined after coronary stent placement.

ASSESS Review bleeding, gastrointestinal history, blood counts when ordered, other antithrombotic medicines, planned procedures, and the reason and intended duration of combination treatment.

WATCH & RESPOND Escalate black stools, vomiting blood, uncontrolled bleeding, or new neurologic symptoms; distinguish minor bruising from signs of clinically important hemorrhage.

TEACH Do not independently stop a prescribed antiplatelet after a stent; notify the prescriber and dentist before procedures and check nonprescription pain or acid-suppression medicines.

AVOID THE TRAP Antiplatelets are not warfarin and are not titrated to an INR; clopidogrel also has important interactions, including omeprazole and esomeprazole.

RECALL Why is stopping clopidogrel before a dental visit without advice unsafe after a recent coronary stent?

CHECK YOUR REASONING Premature interruption can permit stent thrombosis; the procedural and cardiovascular teams should coordinate the bleeding and clotting plan.

Sources: [33], [34], [35]

FAMILY COMPARISONS: HORMONES, GLUCOSE & BREATHING

HORMONES, GLUCOSE & BREATHING

F15 Mealtime insulin: match the product to the meal

Generic examples: insulin lispro, regular human insulin

MEMORY HOOK Picture a meal ticket attached to the insulin label: food, formulation, and timing must match.

WHAT IT DOES Insulin moves glucose into cells and reduces liver glucose output; rapid-acting lispro and short-acting regular insulin have different timing profiles.

ASSESS Check glucose, the exact insulin name and concentration, prescribed route, recent intake, and whether the planned meal is actually available.

WATCH & RESPOND Sweating, shakiness, confusion, or reduced responsiveness can signal hypoglycemia; assess immediately and follow the hypoglycemia protocol, escalating severe symptoms urgently.

TEACH Demonstrate the correct device, rotate injection sites, never share pens, and carry the individualized low-glucose treatment plan.

AVOID THE TRAP Do not assign every insulin the same mealtime window, mixing rule, or intravenous route; verify the specific product and order.

RECALL The meal is delayed before a scheduled mealtime dose. What needs checking?

CHECK YOUR REASONING Recheck glucose and coordinate the ordered insulin with actual intake; clarify the plan rather than giving a meal-linked dose automatically.

Sources: [36], [37], [39]

FAMILY COMPARISONS: HORMONES, GLUCOSE & BREATHING

HORMONES, GLUCOSE & BREATHING

F16 Basal and intermediate insulin: background is not identical

Generic examples: insulin glargine, NPH insulin

MEMORY HOOK Background coverage still needs a safety spotlight: look for lows beyond the meal tray.

WHAT IT DOES Glargine supplies long-acting background insulin; NPH is intermediate-acting and has a more pronounced glucose-lowering peak.

ASSESS Review glucose trends, overnight symptoms, renal function, nutrition changes, and the exact product, concentration, device, and administration schedule.

WATCH & RESPOND Nocturnal confusion or sweating may reflect hypoglycemia; check glucose promptly and respond using the prescribed protocol, even with a background insulin.

TEACH Glargine must not be mixed or diluted; follow product instructions for NPH suspension preparation and keep an individualized sick-day plan.

AVOID THE TRAP Being unable to eat does not automatically mean omitting every insulin; patients with type 1 diabetes need a clinician-directed basal plan.

RECALL Why is a single shared mixing instruction unsafe for glargine and NPH?

CHECK YOUR REASONING Their formulations differ; glargine is not mixed with another insulin, while any NPH combination requires verification of the other product and order.

Sources: [38], [39], [37], [69]

HORMONES, GLUCOSE & BREATHING

F17 Metformin: think liver glucose and kidney clearance

Generic examples: metformin

MEMORY HOOK Metformin turns down the liver's glucose tap; the kidneys still need to clear the medicine.

WHAT IT DOES This biguanide reduces liver glucose production and improves insulin response without directly forcing the pancreas to release insulin.

ASSESS Review kidney function, hydration, serious acute illness, alcohol use, and planned contrast procedures; long-term treatment also warrants attention to vitamin B12.

WATCH & RESPOND Marked weakness with unusual breathing, abdominal symptoms, or feeling very cold needs urgent assessment for possible lactic acidosis.

TEACH Take with the prescribed meal schedule to reduce stomach upset, and swallow extended-release tablets whole rather than crushing them.

AVOID THE TRAP There is no universal 'stop for every scan' rule; contrast-related interruption depends on renal function, contrast route, other risks, and the ordered plan.

RECALL Why should severe vomiting trigger a medication review?

CHECK YOUR REASONING Dehydration and acute illness can change renal clearance and safety; promptly contact the team for a temporary treatment plan.

Sources: [40], [41]

FAMILY COMPARISONS: HORMONES, GLUCOSE & BREATHING

HORMONES, GLUCOSE & BREATHING

F18 Sulfonylureas: an insulin-release signal

Generic examples: glipizide, glimepiride, glyburide

MEMORY HOOK The pancreas hears 'release'; the nurse checks whether food and glucose support that signal.

WHAT IT DOES Sulfonylureas stimulate pancreatic insulin release to lower glucose in type 2 diabetes; they do not replace missing insulin in type 1 diabetes.

ASSESS Check glucose trends, meal reliability, kidney and liver problems, other glucose-lowering medicines, and previous episodes of low glucose.

WATCH & RESPOND New sweating, hunger, confusion, or reduced consciousness requires prompt glucose assessment and treatment under the hypoglycemia protocol.

TEACH Keep meals consistent, know the low-glucose plan, and follow the specific tablet's meal instructions; extended-release glipizide must remain intact.

AVOID THE TRAP Immediate-release and extended-release glipizide have different meal instructions; sharing a generic ingredient does not make their administration identical.

RECALL A patient skips breakfast after taking a sulfonylurea and becomes shaky. What risk fits?

CHECK YOUR REASONING Hypoglycemia is a concern because insulin release can outlast the missed meal; assess glucose and act promptly rather than waiting for lunch.

Sources: [42], [43]

FAMILY COMPARISONS: HORMONES, GLUCOSE & BREATHING

HORMONES, GLUCOSE & BREATHING

F19 GLP-1 receptor agonists: glucose signals and slower stomach emptying

Generic examples: semaglutide

MEMORY HOOK The stomach's conveyor belt slows; remember both appetite changes and procedural planning.

WHAT IT DOES GLP-1 receptor activation increases glucose-dependent insulin release and slows stomach emptying; benefits and indications depend on the selected product.

ASSESS Review gastrointestinal tolerance, hydration, other diabetes medicines, and relevant history; semaglutide is contraindicated with personal or family medullary thyroid carcinoma or multiple endocrine neoplasia type 2 (MEN2).

WATCH & RESPOND Persistent severe abdominal pain, especially toward the back, or repeated vomiting with dehydration needs urgent assessment rather than routine reassurance.

TEACH Confirm the exact formulation and schedule, avoid duplicate semaglutide products, and tell the anesthesia team before any procedure requiring sedation.

AVOID THE TRAP These medicines are not insulin, and oral and injectable formulations are not interchangeable without a new prescribing plan.

RECALL Why mention semaglutide before anesthesia even when glucose is controlled?

CHECK YOUR REASONING Delayed stomach emptying can leave retained contents and increase aspiration concerns; the procedural team needs an individualized plan.

Sources: [\[44\]](#), [\[45\]](#)

FAMILY COMPARISONS: HORMONES, GLUCOSE & BREATHING

HORMONES, GLUCOSE & BREATHING

F20 SGLT2 inhibitors: glucose exits through urine

Generic examples: empagliflozin, dapagliflozin

MEMORY HOOK Sugar leaves by the urine door; check the fluid tank and do not overlook ketones.

WHAT IT DOES These medicines reduce renal glucose reabsorption; selected products also have heart-failure and kidney-disease indications beyond glucose lowering.

ASSESS Review renal function, fluid status, blood pressure, genital or urinary symptoms, reduced intake, acute illness, and upcoming surgery.

WATCH & RESPOND Nausea, abdominal pain, unusual fatigue, or difficult breathing needs urgent evaluation for ketoacidosis even when glucose is not markedly elevated.

TEACH Discuss hydration and infection symptoms, obtain a written sick-day plan, and arrange product-specific interruption instructions before surgery or prolonged fasting.

AVOID THE TRAP A near-normal glucose reading does not rule out SGLT2-associated ketoacidosis; feeling ill matters more than one reassuring number.

RECALL Should a postoperative patient with abdominal pain be reassured solely because glucose is modest?

CHECK YOUR REASONING No; report the symptoms and medication exposure promptly so the team can assess acid-base status and ketones when indicated.

Sources: [46], [47], [48]

HORMONES, GLUCOSE & BREATHING

F21 Levothyroxine: replace, then reassess

Generic examples: levothyroxine

MEMORY HOOK Give thyroid replacement a quiet appointment before breakfast, away from the calcium and iron crowd.

WHAT IT DOES Synthetic thyroxine replaces deficient thyroid hormone; treatment is adjusted using symptoms and appropriate thyroid laboratory tests over time.

ASSESS Check the thyroid testing plan, cardiac history, symptoms of overreplacement, and medicines or supplements that interfere with absorption.

WATCH & RESPOND Chest pain, new rapid or irregular heartbeat, or significant shortness of breath needs prompt assessment and escalation.

TEACH Take consistently as directed on an empty stomach; separate calcium carbonate and ferrous sulfate by at least four hours.

AVOID THE TRAP Levothyroxine is not a weight-loss medicine, and feeling better does not mean the underlying hormone deficiency has disappeared.

RECALL A patient takes levothyroxine and iron together each morning. What teaching helps?

CHECK YOUR REASONING Create a separated schedule with the pharmacist; iron can reduce levothyroxine absorption, making a consistent dose less reliable.

Sources: [49], [50]

FAMILY COMPARISONS: HORMONES, GLUCOSE & BREATHING

HORMONES, GLUCOSE & BREATHING

F22 Antithyroid medicines: slow production, notice infection cues

Generic examples: methimazole, propylthiouracil

MEMORY HOOK When the thyroid factory slows, keep the infection alarm switched on.

WHAT IT DOES These medicines reduce new thyroid-hormone production in hyperthyroidism; propylthiouracil also reduces conversion of thyroxine to active triiodothyronine.

ASSESS Review thyroid tests, pregnancy status, liver history, and the planned blood-count and symptom monitoring; drug selection depends on the clinical setting.

WATCH & RESPOND Fever or a severe sore throat requires withholding further doses and immediate clinical evaluation with a blood count; jaundice or dark urine also needs prompt liver assessment.

TEACH Report infection or liver-warning symptoms immediately rather than waiting for the next appointment; keep thyroid follow-up even when symptoms improve.

AVOID THE TRAP Propylthiouracil carries a serious liver-injury warning; pregnancy timing can affect selection, so the two medicines are not automatically interchangeable.

RECALL Why is a new fever during methimazole therapy different from a routine study-list side effect?

CHECK YOUR REASONING It can signal agranulocytosis, a dangerous reduction in infection-fighting neutrophils, and requires timely evaluation rather than simple symptom masking.

Sources: [51], [52], [53], [68], [71]

HORMONES, GLUCOSE & BREATHING

F23 Systemic corticosteroids: powerful inflammation control

Generic examples: prednisone

MEMORY HOOK A strong inflammation dimmer also dims defenses; watch glucose, infection, and the exit plan.

WHAT IT DOES Systemic corticosteroids suppress inflammation and immune activity; some regimens also replace inadequate adrenal hormone production.

ASSESS Review infection exposure, glucose, blood pressure, mood, gastrointestinal symptoms, treatment duration, and the prescribed discontinuation or taper plan.

WATCH & RESPOND Report infection signs promptly; severe weakness or faintness after abrupt withdrawal requires urgent assessment for inadequate adrenal hormone effect.

TEACH Take oral prednisone with food as directed, discuss vaccines and illness exposure, and follow the prescribed stopping plan instead of improvising one.

AVOID THE TRAP Tapering depends on exposure and indication; not every brief course needs a taper, but long-term therapy must not be stopped casually.

RECALL Why can a patient feel worse after suddenly stopping prolonged treatment?

CHECK YOUR REASONING The adrenal response may be suppressed and unable to meet current needs; this calls for medical assessment, not self-directed restarting or dose doubling.

Sources: [54], [67]

FAMILY COMPARISONS: HORMONES, GLUCOSE & BREATHING

HORMONES, GLUCOSE & BREATHING

F24 Beta-agonist inhalers: identify the reliever plan

Generic examples: albuterol, salmeterol, formoterol

MEMORY HOOK Read the inhaler's job badge: ingredient, device, and action plan beat color or brand familiarity.

WHAT IT DOES Beta-2 stimulation relaxes airway smooth muscle; onset, duration, and the role of each inhaler depend on the drug and combination.

ASSESS Check breathing effort, oxygenation, pulse, inhaler technique, symptom frequency, and whether relief is lasting under the written action plan.

WATCH & RESPOND Worsening breathing immediately after inhalation or persistent severe symptoms requires urgent assessment; pronounced palpitations also need review.

TEACH Albuterol is a short-acting bronchodilator; demonstrate the prescribed device and report needing reliever treatment more often than the plan allows.

AVOID THE TRAP Salmeterol is not an acute reliever and must not be asthma monotherapy; prescribed corticosteroid-formoterol combinations can serve as both maintenance and reliever therapy.

RECALL Can every long-acting inhaler be used for sudden symptoms?

CHECK YOUR REASONING No; the formoterol combination exception belongs to a specific prescribed regimen, not to all long-acting bronchodilators.

Sources: [55], [56], [57], [58]

HORMONES, GLUCOSE & BREATHING

F25 Inhaled antimuscarinics: open airways, protect eyes

Generic examples: ipratropium, tiotropium

MEMORY HOOK Aim for the airway, not the eye; a capsule-shaped medicine may still belong in an inhaler.

WHAT IT DOES Blocking muscarinic effects helps relax airway smooth muscle; ipratropium and longer-acting tiotropium have different schedules and treatment roles.

ASSESS Review breathing, device technique, other anticholinergic medicines, glaucoma, urinary retention, and the patient's ability to use the prescribed inhaler.

WATCH & RESPOND New eye pain with visual changes, inability to urinate, or worsening breathing immediately after inhalation warrants prompt assessment.

TEACH Keep spray or mist out of the eyes; tiotropium capsules designed for an inhalation device are inhaled through that device, never swallowed.

AVOID THE TRAP Tiotropium is maintenance treatment, not a substitute for the prescribed sudden-symptom reliever; inhalation solutions and devices are not freely interchangeable.

RECALL A patient plans to swallow a tiotropium inhalation capsule. What needs correction?

CHECK YOUR REASONING The capsule supplies powder to its designated inhaler; swallowing it does not deliver the intended treatment to the lungs.

Sources: [59], [60]

FAMILY COMPARISONS: HORMONES, GLUCOSE & BREATHING

HORMONES, GLUCOSE & BREATHING

F26 Inhaled corticosteroids: control the airway inflammation

Generic examples: budesonide

MEMORY HOOK Calm the airway, then clear the mouth: the rinse belongs to the treatment routine.

WHAT IT DOES Inhaled corticosteroids reduce airway inflammation; regular use of a steroid-only maintenance inhaler lowers symptoms over time rather than instantly relaxing airways.

ASSESS Check symptom control, inhaler technique, adherence, oral soreness or white patches, and whether the patient understands the complete action plan.

WATCH & RESPOND Escalate sudden breathing deterioration immediately; persistent oral patches or hoarseness needs review for local adverse effects such as candidiasis.

TEACH After inhaling the prescribed dose, rinse the mouth with water and spit it out; use a spacer only with devices for which it is appropriate.

AVOID THE TRAP Steroid-only budesonide is not a rescue bronchodilator; a prescribed corticosteroid-formoterol reliever regimen is a distinct combination and plan.

RECALL Why keep taking the controller when breathing feels comfortable?

CHECK YOUR REASONING Improved symptoms may reflect effective inflammation control; stopping it independently can remove that protection, so follow the agreed maintenance plan.

Sources: [61], [58], [57], [70]

HORMONES, GLUCOSE & BREATHING

F27 Montelukast: airway prevention with a mood warning

Generic examples: montelukast

MEMORY HOOK An airway medicine can send a brain alarm; ask about sleep and mood as well as wheeze.

WHAT IT DOES This leukotriene-receptor blocker helps prevent asthma symptoms and has selected allergy indications; it does not rapidly reverse an asthma attack.

ASSESS Review the reason for treatment, other allergy options, sleep and behavior changes, psychiatric history, and the patient's understanding of the boxed warning.

WATCH & RESPOND New nightmares, agitation, depression, or suicidal thoughts requires stopping the medicine and contacting the prescriber promptly; immediate danger requires emergency help.

TEACH Tell both patients and caregivers to notice behavior changes, including after discontinuation, and keep the prescribed acute-asthma plan available.

AVOID THE TRAP For allergic rhinitis, FDA recommends reserving montelukast for inadequate response or intolerance to alternatives; the warning applies even without psychiatric history.

RECALL Do new disturbing dreams matter if asthma symptoms improve?

CHECK YOUR REASONING Yes; improvement in breathing does not cancel a potentially serious neuropsychiatric reaction, and the medication needs prompt reassessment.

Sources: [62], [63]

FAMILY COMPARISONS: HORMONES, GLUCOSE & BREATHING

HORMONES, GLUCOSE & BREATHING

F28 Glucagon rescue: release stored glucose and call for help

Generic examples: glucagon

MEMORY HOOK The rescue kit needs two ready parts: the medicine and a person who knows the device.

WHAT IT DOES Glucagon prompts the liver to release stored glucose and is used for severe hypoglycemia when the person needs another person's help.

ASSESS Assess responsiveness and breathing, check glucose when feasible without delaying emergency care, and identify the prescribed rescue product and device.

WATCH & RESPOND Severe hypoglycemia remains an emergency after rescue treatment; activate help, protect the airway, and reassess because vomiting or recurrent low glucose can occur.

TEACH Train caregivers before an emergency; injectable and nasal products have different instructions, and nasal glucagon does not require the patient to inhale.

AVOID THE TRAP Never give oral food or drink to an unconscious person; oral carbohydrate is appropriate only after the person can swallow safely.

RECALL Is a successful rescue dose the end of care?

CHECK YOUR REASONING No; emergency help, repeat assessment, and the product-specific follow-up plan remain necessary even after the person becomes more responsive.

Sources: [64], [65], [66]

FAMILY COMPARISONS: BRAIN, MOOD & PAIN

BRAIN, MOOD & PAIN

F29 Opioid analgesics

Generic examples: morphine, oxycodone, hydromorphone, fentanyl

MEMORY HOOK Pain down; keep the breathing check up. Analgesia and sedation must be assessed separately.

WHAT IT DOES These medicines change opioid-receptor signaling to reduce pain; the same central effects can reduce alertness and breathing.

ASSESS Assess pain, ability to stay awake, breathing depth and rate, blood pressure, bowel function, and other sedating medicines before and after administration.

WATCH & RESPOND Difficulty awakening, shallow breathing, or respiratory pauses require immediate assessment, emergency escalation, and airway support with reversal treatment according to protocol.

TEACH Avoid alcohol and unapproved sedatives; discuss constipation prevention, secure storage, and access to an overdose-reversal medicine with the care team.

AVOID THE TRAP Formulation matters: do not crush extended-release products or cut fentanyl patches; external heat can dangerously increase fentanyl absorption.

RECALL Pain has improved, but the patient is newly difficult to awaken after an opioid. Is pain relief enough to call treatment successful?

CHECK YOUR REASONING No. New reduced alertness can accompany dangerous respiratory depression and needs an immediate breathing and safety assessment.

Sources: [72], [73]

BRAIN, MOOD & PAIN

F30 Naloxone: opioid reversal

Generic examples: naloxone

MEMORY HOOK Wake-up is a checkpoint, not the finish line: keep watching breathing and keep emergency help coming.

WHAT IT DOES Naloxone blocks opioid effects and can restore breathing during a suspected opioid overdose; it is an emergency rescue medicine.

ASSESS Assess responsiveness and breathing, activate emergency help, and reassess continuously after administration while providing indicated resuscitation support.

WATCH & RESPOND Breathing depression can recur after improvement; additional naloxone and continued support may be needed under the product instructions or clinical protocol.

TEACH Teach caregivers where the rescue product is kept, how to use that exact device, and why emergency care is still necessary after awakening.

AVOID THE TRAP Naloxone reverses opioid effects, not every cause of unconsciousness; sudden withdrawal can occur in a person physically dependent on opioids.

RECALL Why must a patient remain under observation after naloxone appears to work?

CHECK YOUR REASONING The opioid effect may persist or return as naloxone wears off; an initially awake patient can develop recurrent breathing depression.

Sources: [74], [75]

FAMILY COMPARISONS: BRAIN, MOOD & PAIN

BRAIN, MOOD & PAIN

F31 Acetaminophen: count every source

Generic examples: acetaminophen

MEMORY HOOK One liver, many labels: add the ingredient across products rather than counting separate brand names.

WHAT IT DOES Acetaminophen treats pain and fever; it does not provide the same peripheral anti-inflammatory effect as a nonsteroidal anti-inflammatory drug.

ASSESS Check all prescription, cold-and-flu, and over-the-counter products for duplicate acetaminophen; review liver disease, alcohol use, and the prescribed total limit.

WATCH & RESPOND Suspected excess ingestion needs immediate poison-management evaluation even before symptoms; jaundice or a blistering skin reaction also requires urgent assessment.

TEACH Read the active-ingredient panel, recognize APAP as an acetaminophen abbreviation, and measure liquids with the correct supplied device.

AVOID THE TRAP Over-the-counter availability does not mean unlimited safety; the appropriate daily limit depends on the patient and product instructions.

RECALL A patient adds a cold remedy to an acetaminophen-containing pain prescription. What must be checked first?

CHECK YOUR REASONING Check whether the cold product also contains acetaminophen and reconcile the combined exposure before giving another dose.

Sources: [76], [77]

BRAIN, MOOD & PAIN

F32 Nonsteroidal anti-inflammatory drugs

Generic examples: ibuprofen, naproxen, celecoxib

MEMORY HOOK Relief has three watch posts: stomach, kidneys, and circulation. Check the patient, not just the pain score.

WHAT IT DOES NSAIDs reduce prostaglandin production to relieve pain, fever, and inflammation; protective effects in the stomach and kidneys can also be reduced.

ASSESS Review gastrointestinal bleeding history, kidney function, hydration, cardiovascular disease, and concurrent anticoagulants, antiplatelets, steroids, or other NSAIDs.

WATCH & RESPOND Black tarry stool, bloody emesis, new chest pain, focal weakness, or markedly reduced urine output needs prompt assessment and escalation.

TEACH Use the prescribed amount and duration, avoid unapproved duplicate pain products, and ask before combining an NSAID with a blood thinner.

AVOID THE TRAP Taking a dose with food may reduce stomach upset, but it does not eliminate gastrointestinal bleeding or cardiovascular risk.

RECALL A patient says taking ibuprofen with a meal makes it safe to combine with anticoagulation. What is the correction?

CHECK YOUR REASONING Food does not remove the interaction or bleeding risk; the proposed combination needs review by the prescribing team.

Sources: [78], [77]

FAMILY COMPARISONS: BRAIN, MOOD & PAIN

BRAIN, MOOD & PAIN

F33 Benzodiazepines and flumazenil

Generic examples: lorazepam, diazepam, midazolam, flumazenil

MEMORY HOOK Calming the brain can slow breathing; reversing the calm can uncover seizures. Neither direction is risk-free.

WHAT IT DOES Benzodiazepines enhance inhibitory signaling to provide sedation or treat selected anxiety, withdrawal, or seizure conditions; flumazenil can reverse their sedative effects.

ASSESS Check alertness, breathing, fall risk, other sedatives, and the indication; before reversal, establish benzodiazepine dependence and possible mixed-drug ingestion.

WATCH & RESPOND Respiratory depression or unresponsiveness requires emergency airway assessment and support; abrupt withdrawal or flumazenil can provoke seizures in susceptible patients.

TEACH Avoid alcohol and unapproved opioid combinations, and follow a clinician-directed taper rather than abruptly stopping regular benzodiazepine treatment.

AVOID THE TRAP Flumazenil is not an automatic antidote for every sedated patient, especially with dependence, seizure treatment, or suspected cyclic-antidepressant poisoning.

RECALL Why does a history of long-term benzodiazepine use matter before flumazenil?

CHECK YOUR REASONING Receptor blockade can precipitate withdrawal seizures; airway support and specialist assessment remain essential rather than reflexively administering reversal.

Sources: [79], [80]

BRAIN, MOOD & PAIN

F34 Selective serotonin reuptake inhibitors

Generic examples: sertraline, fluoxetine, escitalopram

MEMORY HOOK More serotonin is not always more benefit: a hot, agitated, twitching patient needs a safety assessment.

WHAT IT DOES SSRIs increase serotonin signaling and treat depression and selected anxiety-related disorders; the therapeutic benefit usually develops gradually.

ASSESS Assess mood, suicidal thinking, agitation, adherence, and interacting drugs, including other serotonergic agents, monoamine oxidase inhibitors, and bleeding-risk medicines.

WATCH & RESPOND Fever with agitation, sweating, diarrhea, and overactive reflexes or clonus suggests serotonin toxicity and requires urgent evaluation; new suicidal thinking also needs immediate assessment.

TEACH Explain the delayed benefit, report major mood changes, and consult the prescriber before stopping treatment or adding herbs such as St. John's wort.

AVOID THE TRAP A memory pattern cannot diagnose serotonin syndrome; medication exposure and alternative causes must be assessed, and switching washout periods vary by drug.

RECALL Why is new fever plus clonus after adding a serotonergic medicine more concerning than mild isolated nausea?

CHECK YOUR REASONING The combined autonomic, mental-status, and neuromuscular changes can signal serotonin toxicity rather than a routine transient adverse effect.

Sources: [81], [82]

FAMILY COMPARISONS: BRAIN, MOOD & PAIN

BRAIN, MOOD & PAIN

F35 Serotonin-norepinephrine reuptake inhibitors

Generic examples: venlafaxine, duloxetine

MEMORY HOOK Two transmitters, two reminders: mood follow-up and pressure follow-up. Keep checking the whole response.

WHAT IT DOES SNRIs increase serotonin and norepinephrine signaling; indications vary by drug and include mood or anxiety disorders and some pain conditions.

ASSESS Assess mood, suicidal thinking, blood pressure, adherence, renal or hepatic concerns, and interacting serotonergic medicines before and during therapy.

WATCH & RESPOND Escalate a substantial blood-pressure rise, new suicidal thinking, or fever with confusion and muscle twitching; the latter pattern may indicate serotonin toxicity.

TEACH Benefit is gradual; report troublesome effects and follow an individualized taper instead of abruptly stopping, particularly with venlafaxine.

AVOID THE TRAP A medicine used for both mood and pain still requires psychiatric safety monitoring; indications and organ-function precautions are not identical across SNRIs.

RECALL A patient feels better on venlafaxine and plans to stop today. What should the nurse explain?

CHECK YOUR REASONING Abrupt cessation can produce discontinuation symptoms; discuss a prescriber-directed plan rather than stopping because symptoms improved.

Sources: [83], [84], [85]

BRAIN, MOOD & PAIN

F36 Monoamine oxidase inhibitors

Generic examples: phenelzine, tranylcypromine

MEMORY HOOK MAOI means check the menu and the medicine list; the interaction review includes nonprescription products.

WHAT IT DOES These antidepressants reduce monoamine breakdown; interactions with tyramine and certain other medicines can produce dangerous physiologic responses.

ASSESS Review blood pressure, orthostatic symptoms, mood, the full medicine and supplement list, and the patient's understanding of food restrictions.

WATCH & RESPOND Sudden severe headache, chest pain, palpitations, or a marked blood-pressure rise requires urgent assessment for a hypertensive reaction.

TEACH Follow the specific tyramine-avoidance instructions and obtain pharmacist approval before using decongestants, cough products, supplements, or another antidepressant.

AVOID THE TRAP Interaction precautions do not disappear with the last tablet; prescribed washout periods are medicine-specific and must be respected when switching treatments.

RECALL Why is an over-the-counter cold remedy worth checking in a patient taking phenelzine?

CHECK YOUR REASONING Some cold-product ingredients can interact dangerously; an ordinary retail purchase is not evidence that the combination is safe.

Sources: [86], [82]

FAMILY COMPARISONS: BRAIN, MOOD & PAIN

BRAIN, MOOD & PAIN

F37 Lithium: watch the balance

Generic examples: lithium carbonate, lithium citrate

MEMORY HOOK Steady salt, steady fluids, steady checks: sudden changes can disturb lithium balance, even on an unchanged prescription.

WHAT IT DOES Lithium is a mood stabilizer used in bipolar disorder; its narrow safety margin makes clinical assessment and serum monitoring important.

ASSESS Review ordered lithium levels with collection timing, kidney and thyroid function, electrolytes, hydration, and medicines that change lithium clearance.

WATCH & RESPOND New vomiting, coarse tremor, unsteady gait, slurred speech, or confusion suggests toxicity; withhold further administration pending urgent clinical assessment and the treatment plan.

TEACH Keep salt and fluid intake consistent with the prescribed plan, report dehydration or diarrhea, and check before using NSAIDs or changing diuretics.

AVOID THE TRAP A laboratory number is not a permission slip; toxicity can occur at apparently therapeutic concentrations, and symptoms require evaluation.

RECALL Why does a diarrheal illness matter to a patient whose lithium dose has not changed?

CHECK YOUR REASONING Fluid and electrolyte changes can reduce safe lithium handling and increase toxicity risk despite the same dose.

Sources: [87], [88]

BRAIN, MOOD & PAIN

F38 First-generation antipsychotics

Generic examples: haloperidol, chlorpromazine

MEMORY HOOK Treat the thought, watch the movement: a changed motor pattern can be a medication clue, not simply worsening behavior.

WHAT IT DOES These medicines alter dopamine signaling to treat psychotic symptoms; motor pathways and other body systems may also be affected.

ASSESS Assess mental status, blood pressure, falls, new abnormal movements, and relevant electrocardiogram or electrolyte risks, especially with haloperidol.

WATCH & RESPOND Fever, severe rigidity, confusion, and unstable vital signs may indicate neuroleptic malignant syndrome; neck or throat spasm threatening breathing is also an emergency.

TEACH Report new restlessness, tremor, stiffness, or involuntary mouth movements promptly; avoid alcohol and use caution with activities requiring alertness.

AVOID THE TRAP Akathisia can look like agitation; tardive dyskinesia and acute dystonia are different problems and should not receive an assumed identical response.

RECALL A patient receiving haloperidol develops high fever and generalized rigidity. Should this be managed as ordinary restlessness?

CHECK YOUR REASONING No. The systemic pattern requires urgent evaluation for neuroleptic malignant syndrome and other causes, with medication review and supportive care.

Sources: [89], [90]

FAMILY COMPARISONS: BRAIN, MOOD & PAIN

BRAIN, MOOD & PAIN

F39 Second-generation antipsychotics

Generic examples: olanzapine, risperidone, quetiapine, clozapine

MEMORY HOOK Mind care includes body checks: track metabolism, movement, and the medicine's special monitoring requirements.

WHAT IT DOES These agents modify neurotransmitter signaling to treat psychotic or mood disorders; benefits and adverse-effect profiles differ between medicines.

ASSESS Monitor weight, glucose, lipids, blood pressure, movement changes, and bowel function; clozapine additionally requires absolute neutrophil count monitoring per its label.

WATCH & RESPOND Escalate severe hyperglycemia symptoms, fever with rigidity, or clozapine-associated infection symptoms; severe constipation with pain or vomiting needs urgent review.

TEACH Keep follow-up and laboratory appointments, report new thirst or frequent urination, and discuss troublesome effects rather than stopping independently.

AVOID THE TRAP The US clozapine REMS program ended in 2025, but the risk of severe neutropenia and the need for label-directed blood monitoring remain.

RECALL Does removal of the clozapine REMS program mean that blood monitoring can be stopped?

CHECK YOUR REASONING No. Enrollment and reporting requirements were removed; the FDA still recommends absolute neutrophil count monitoring according to prescribing information.

Sources: [91], [92], [93]

BRAIN, MOOD & PAIN

F40 Antiseizure medicines: learn the differences

Generic examples: phenytoin, valproic acid, levetiracetam

MEMORY HOOK Same goal, different guardrails: connect each drug to its own monitoring and teaching points.

WHAT IT DOES These medicines reduce seizure activity through different mechanisms; the chosen agent depends on seizure type and patient-specific risks.

ASSESS Track seizure pattern, alertness, mood, adherence, interactions, pregnancy considerations, and ordered drug-specific tests rather than assuming one monitoring plan fits all.

WATCH & RESPOND Escalate a new blistering rash, severe behavioral change, or worsening seizures; valproate-associated jaundice or severe abdominal pain also needs urgent evaluation.

TEACH Do not stop abruptly; discuss pregnancy planning early, maintain oral care with phenytoin, and report mood or behavior changes with levetiracetam.

AVOID THE TRAP Phenytoin formulations are not freely interchangeable; valproate has major fetal risks, and levetiracetam is not free of serious mood or hypersensitivity reactions.

RECALL Why should a nurse question an unreviewed substitution between phenytoin formulations?

CHECK YOUR REASONING Products can differ in absorption; dose and monitoring may need adjustment even when the generic drug name is unchanged.

Sources: [94], [95], [96]

FAMILY COMPARISONS: BRAIN, MOOD & PAIN

BRAIN, MOOD & PAIN

F41 Carbidopa and levodopa

Generic examples: carbidopa/levodopa

MEMORY HOOK Delivery plus destination: carbidopa protects the journey; levodopa supplies the brain's dopamine precursor.

WHAT IT DOES Levodopa becomes dopamine in the brain; carbidopa limits its breakdown outside the brain, helping treatment of Parkinson's motor symptoms.

ASSESS Assess mobility, dose timing, wearing-off symptoms, involuntary movements, orthostatic blood pressure, hallucinations, and sudden daytime sleepiness.

WATCH & RESPOND New severe confusion, fainting, or a fever-rigidity syndrome after abrupt interruption requires prompt clinical assessment and medication reconciliation.

TEACH Follow the individualized schedule, rise carefully, report sleep attacks, and discuss substantial dietary protein changes or iron supplements with the care team.

AVOID THE TRAP This treats symptoms rather than curing Parkinson's disease; formulations and meal effects differ, so a universal protein ban is inappropriate.

RECALL A hospitalized patient has missed several scheduled doses because of swallowing problems. What needs attention?

CHECK YOUR REASONING Promptly clarify a safe medication plan; unplanned interruption can worsen symptoms and, rarely, cause a dangerous fever-rigidity syndrome.

Sources: [97]

BRAIN, MOOD & PAIN

F42 Cholinesterase inhibitors

Generic examples: donepezil, rivastigmine

MEMORY HOOK More message, more monitoring: acetylcholine support in the brain can come with gut and heart effects.

WHAT IT DOES These medicines increase available acetylcholine to help selected dementia symptoms; they do not reverse the underlying neurodegenerative disease.

ASSESS Assess cognition and daily function against baseline, pulse, fainting or falls, appetite, weight, gastrointestinal symptoms, and caregiver ability to follow instructions.

WATCH & RESPOND Syncope, a symptomatic slow pulse, gastrointestinal bleeding, or persistent vomiting with dehydration requires prompt assessment and review of treatment.

TEACH Involve the caregiver, maintain the prescribed schedule, report weight loss, and ask the prescriber how to restart after a prolonged interruption.

AVOID THE TRAP Do not confuse cholinesterase inhibitors with memantine, which has a different mechanism; tablet and patch administration instructions also differ.

RECALL Why should a new fainting episode in a patient taking donepezil not be dismissed as part of dementia?

CHECK YOUR REASONING Donepezil can slow the heart rate; syncope needs assessment for medication-related and other causes rather than an assumption about cognition.

Sources: [98], [99], [100]

FAMILY COMPARISONS: INFECTION, GI & OTHER ESSENTIALS

INFECTION, GI & OTHER ESSENTIALS

F43 Beta-lactam antibiotics

Generic examples: amoxicillin, ceftriaxone

MEMORY HOOK Picture a damaged bacterial brick wall, with an allergy checkpoint at its gate.

WHAT IT DOES Penicillins and cephalosporins damage susceptible bacteria's cell walls; the chosen drug must match the organism and infection site.

ASSESS Clarify the exact allergy reaction and its timing; review kidney function, culture results when available, and the ordered route before administration.

WATCH & RESPOND New wheezing, facial swelling, or circulatory instability requires immediate emergency assessment; severe or persistent watery diarrhea also needs prompt evaluation.

TEACH Follow the current prescribed course, report adverse symptoms, and do not save doses for a future cold or share them with someone else.

AVOID THE TRAP A penicillin-allergy label does not automatically prohibit every cephalosporin; the reaction history and specific agent require clinical review.

RECALL A patient reports that penicillin once caused throat swelling. Is a quick reassurance enough before giving the next antibiotic?

CHECK YOUR REASONING No. Clarify and escalate the serious allergy history before administration so the prescribed agent and safety plan can be reviewed.

Sources: [101], [102], [103], [104], [133]

INFECTION, GI & OTHER ESSENTIALS

F44 Vancomycin: route matters

Generic examples: vancomycin

MEMORY HOOK The route is the road: the bowel road and the bloodstream road reach different destinations.

WHAT IT DOES Vancomycin damages susceptible bacterial cell walls; intravenous therapy treats systemic infections, while oral therapy acts mainly inside the bowel.

ASSESS Check the intended infection, formulation, infusion order, kidney function, and ordered drug-level monitoring; inspect the IV site during treatment.

WATCH & RESPOND Flushing with itching, breathing difficulty, or hypotension during infusion requires stopping the infusion, immediate assessment, and escalation under the reaction protocol.

TEACH Report hearing changes, reduced urine output, and infusion symptoms promptly; never speed up an infusion to make up for lost time.

AVOID THE TRAP An infusion reaction is not automatically an IgE allergy, but airway or circulatory compromise must never be dismissed as harmless flushing.

RECALL Can an oral vancomycin capsule simply replace an ordered IV dose for a bloodstream infection?

CHECK YOUR REASONING No. Oral vancomycin is not a substitute for systemic IV therapy; route and indication must be reconciled with the prescriber and pharmacist.

Sources: [105], [106], [107]

FAMILY COMPARISONS: INFECTION, GI & OTHER ESSENTIALS

INFECTION, GI & OTHER ESSENTIALS

F45 Aminoglycosides

Generic examples: gentamicin

MEMORY HOOK Two quiet alarms: ears and kidneys. Listen to both before the next dose.

WHAT IT DOES Aminoglycosides interfere with bacterial protein production and treat selected serious infections; gentamicin is a useful prototype for studying their toxicity risks.

ASSESS Trend kidney function and urine output, ask about hearing or balance problems, and obtain ordered concentrations at the correct time for the dosing regimen.

WATCH & RESPOND New ringing in the ears, hearing loss, vertigo, or declining urine output needs prompt assessment and prescriber notification before further dosing decisions.

TEACH Report these changes early rather than waiting for the antibiotic course to end; keep monitoring appointments and review other potentially kidney-toxic medicines.

AVOID THE TRAP A drug level without its collection time and dosing context can mislead; do not apply one peak/trough schedule to every regimen.

RECALL A gentamicin patient develops tinnitus but says the infection feels better. Which finding still demands attention?

CHECK YOUR REASONING The new tinnitus may indicate ototoxicity; improvement in infection symptoms does not make a potentially serious adverse effect safe to ignore.

Sources: [108], [109]

INFECTION, GI & OTHER ESSENTIALS

F46 Macrolide antibiotics

Generic examples: azithromycin, clarithromycin

MEMORY HOOK Put a rhythm strip beside the medicine list: the heartbeat and the combination both matter.

WHAT IT DOES Macrolides inhibit bacterial protein production; their uses and interaction profiles depend on the specific medicine and organism.

ASSESS Review rhythm history, QT-prolonging medicines, potassium and magnesium when indicated, liver history, and the complete medication list.

WATCH & RESPOND Fainting, sustained palpitations, or an irregular heartbeat warrants urgent assessment; jaundice or severe persistent diarrhea also needs prompt clinical review.

TEACH Follow formulation-specific food and antacid directions, and ask a pharmacist before adding a new prescription, supplement, or over-the-counter medicine.

AVOID THE TRAP These drugs are not interaction twins: clarithromycin has major metabolism-related interactions and is contraindicated with simvastatin or lovastatin.

RECALL A patient taking simvastatin receives a new clarithromycin order. What should the nurse do with that combination?

CHECK YOUR REASONING Flag it for prescriber/pharmacist review before coadministration; increased statin exposure can cause serious muscle injury, including rhabdomyolysis.

Sources: [110], [111]

FAMILY COMPARISONS: INFECTION, GI & OTHER ESSENTIALS

INFECTION, GI & OTHER ESSENTIALS

F47 Fluoroquinolones

Generic examples: ciprofloxacin

MEMORY HOOK A tendon warning is a stop sign, not a workout challenge.

WHAT IT DOES Fluoroquinolones disrupt bacterial DNA processes; ciprofloxacin treats selected infections when its benefits justify its important adverse-effect risks.

ASSESS Review kidney function, tendon problems, steroid use, neuropathy, myasthenia gravis, rhythm risk, and medicines or supplements that can interfere with treatment.

WATCH & RESPOND New tendon pain or sensory changes require stopping the drug and prompt prescriber contact; sudden severe chest, abdominal, or back pain requires emergency assessment.

TEACH Avoid exercising through tendon pain and ask for the product-specific spacing from mineral supplements and antacids, which can reduce absorption.

AVOID THE TRAP Do not label every antibiotic a fluoroquinolone because its name ends in a familiar sound; verify the actual class and product warnings.

RECALL A ciprofloxacin patient develops new Achilles tendon pain without an injury. Should the patient stretch and continue as usual?

CHECK YOUR REASONING No. Stop the medicine, rest the affected area, and contact the prescriber promptly; tendon injury can progress even when pain first seems mild.

Sources: [112]

INFECTION, GI & OTHER ESSENTIALS

F48 Tetracyclines

Generic examples: doxycycline, tetracycline

MEMORY HOOK Give the tablet a clear path: water down the throat, minerals out of its way.

WHAT IT DOES These antibiotics inhibit bacterial protein production; doxycycline is used for selected infections, including important tick-borne illnesses.

ASSESS Review pregnancy, age, swallowing problems, interacting antacids or mineral supplements, and the exact formulation's administration instructions.

WATCH & RESPOND Painful swallowing, severe headache with visual changes, or a blistering rash needs prompt evaluation; breathing difficulty requires emergency help.

TEACH Use the instructed amount of water, avoid lying down immediately after oral dosing, protect skin from sun, and separate interfering minerals as directed.

AVOID THE TRAP Never turn the age warning into an absolute ban: CDC recommends doxycycline for suspected rickettsial disease in children of all ages.

RECALL Does a young child's age alone justify delaying prescribed doxycycline for suspected ehrlichiosis?

CHECK YOUR REASONING No. This is a recognized indication-specific exception; confirm the treatment plan rather than applying a blanket rule about tooth staining.

Sources: [113], [114], [115], [134]

FAMILY COMPARISONS: INFECTION, GI & OTHER ESSENTIALS

INFECTION, GI & OTHER ESSENTIALS

F49 Trimethoprim-sulfamethoxazole

Generic examples: trimethoprim-sulfamethoxazole

MEMORY HOOK Two names, two checkpoints: skin changes and potassium risk deserve a second look.

WHAT IT DOES This two-drug antibiotic combination interrupts bacterial folate metabolism and is used for selected susceptible infections.

ASSESS Review sulfonamide or trimethoprim reactions, kidney function, blood counts when ordered, and potassium risk, especially with kidney disease or potassium-raising medicines.

WATCH & RESPOND A new rash with blisters or mouth sores, fever with unusual bruising, or significant weakness/palpitations needs urgent assessment for serious toxicity.

TEACH Follow the prescribed schedule and fluid advice, protect against excessive sun exposure, and check interactions before adding medicines or supplements.

AVOID THE TRAP A familiar antibiotic can still raise potassium; do not assume only potassium supplements or potassium-sparing diuretics cause hyperkalemia.

RECALL Why should an older patient with kidney impairment taking an ACE inhibitor receive special monitoring when this antibiotic is added?

CHECK YOUR REASONING Trimethoprim can reduce potassium elimination, and the patient's kidney disease and other medicine compound the risk; potassium and renal monitoring need review.

Sources: [116], [117]

INFECTION, GI & OTHER ESSENTIALS

F50 Tuberculosis medicines

Generic examples: isoniazid, rifampin, pyrazinamide, ethambutol

MEMORY HOOK Build four safety windows: liver, eyes, nerves, and the medicine list.

WHAT IT DOES Combination treatment attacks tuberculosis through multiple mechanisms and helps prevent resistance; regimen selection depends on susceptibility and patient eligibility.

ASSESS Review adherence barriers, interactions, liver risk and ordered tests, vision with ethambutol, and neuropathy risk with isoniazid.

WATCH & RESPOND Jaundice, persistent vomiting, new blurred or altered color vision, or numbness needs prompt treatment-team review; do not wait until the next routine visit.

TEACH Explain expected orange body fluids with rifampin, contraception interactions, and the importance of completing the coordinated regimen; pyridoxine may be prescribed with isoniazid.

AVOID THE TRAP The familiar four-drug combination is not the only modern TB regimen; shorter regimens exist for selected patients, and resistant disease needs specialist planning.

RECALL Which rifampin report differs from expected orange urine: yellow eyes with poor appetite or orange tears?

CHECK YOUR REASONING Yellow eyes with poor appetite suggests possible liver injury and needs prompt evaluation; orange body fluids alone are an expected rifampin effect.

Sources: [118], [119]

FAMILY COMPARISONS: INFECTION, GI & OTHER ESSENTIALS

INFECTION, GI & OTHER ESSENTIALS

F51 Acid suppression: PPIs and H2 blockers

Generic examples: omeprazole, famotidine

MEMORY HOOK Turn down the acid tap, but keep watching the patient behind the symptom.

WHAT IT DOES Proton pump inhibitors such as omeprazole and H2 blockers such as famotidine reduce acid production through different targets.

ASSESS Confirm the indication and duration, swallowing ability, possible gastrointestinal bleeding, kidney history for famotidine, and electrolyte concerns during prolonged PPI therapy.

WATCH & RESPOND Bloody vomit, black tarry stools, or chest pain needs urgent assessment; persistent severe watery diarrhea or symptomatic electrolyte disturbance also warrants prompt review.

TEACH Follow the product's meal timing and formulation instructions; do not crush delayed-release products without checking an approved administration method.

AVOID THE TRAP Relief of burning does not prove that chest pain or bleeding is harmless; acid suppression does not replace assessment of alarm symptoms.

RECALL A patient on long-term omeprazole reports muscle spasms and palpitations. Which monitoring concern belongs in the assessment?

CHECK YOUR REASONING Consider an electrolyte problem, including low magnesium, alongside other causes; symptoms require assessment rather than simply another dose for heartburn.

Sources: [120], [121], [136]

INFECTION, GI & OTHER ESSENTIALS

F52 Antiemetics: different targets, different risks

Generic examples: ondansetron, metoclopramide

MEMORY HOOK Settle the stomach; still check the rhythm and movement.

WHAT IT DOES Ondansetron blocks serotonin-mediated nausea signals; metoclopramide promotes upper gastrointestinal movement and also has antiemetic effects.

ASSESS For ondansetron, review QT risk and potassium/magnesium concerns; for metoclopramide, review movement disorders and possible bowel obstruction, bleeding, or perforation.

WATCH & RESPOND Syncope or an irregular heartbeat with ondansetron warrants urgent assessment; new abnormal movements or painful neck/jaw spasm with metoclopramide needs immediate clinical review.

TEACH Report these symptoms early and follow the prescribed duration; handle orally disintegrating products with dry hands and follow their specific packaging directions.

AVOID THE TRAP Antiemetics are not interchangeable: metoclopramide carries a potentially irreversible tardive dyskinesia risk and is not appropriate for mechanical bowel obstruction.

RECALL Why should new lip-smacking during metoclopramide therapy be reported rather than dismissed as a habit?

CHECK YOUR REASONING It can signal a drug-induced movement disorder; early assessment is important because tardive dyskinesia may persist after treatment stops.

Sources: [122], [123], [124]

FAMILY COMPARISONS: INFECTION, GI & OTHER ESSENTIALS

INFECTION, GI & OTHER ESSENTIALS

F53 Lactulose

Generic examples: lactulose

MEMORY HOOK Aim for a clearer mind and a gentle bowel response, not a race to the bathroom.

WHAT IT DOES Lactulose draws water into the bowel for constipation and reduces intestinal ammonia absorption when used for hepatic encephalopathy.

ASSESS Know the indication; track mental status, stool pattern, fluid balance, electrolytes when ordered, and the person's ability to swallow safely.

WATCH & RESPOND Profuse diarrhea, marked weakness, dehydration, or worsening confusion requires reassessment and prompt escalation; more bowel movements are not automatically better treatment.

TEACH For encephalopathy, follow the prescribed soft-stool target and adjustment plan; do not add other laxatives or change the dose independently.

AVOID THE TRAP The goal depends on the indication; a constipation plan and an encephalopathy plan should not be copied from each other.

RECALL An encephalopathy patient now has frequent watery stools and dizziness. Is this proof that lactulose is working perfectly?

CHECK YOUR REASONING No. Excessive losses can cause dehydration and electrolyte disturbance; assess the patient and seek review of the treatment plan.

Sources: [125], [126]

INFECTION, GI & OTHER ESSENTIALS

F54 Methotrexate

Generic examples: methotrexate

MEMORY HOOK Put a calendar beside the bottle: the schedule is part of the medicine.

WHAT IT DOES Methotrexate is an antimetabolite used in certain cancers and, in different regimens, to reduce inflammatory disease activity.

ASSESS Verify indication, exact dosing day, blood counts, liver and kidney monitoring, pregnancy precautions, and all interacting medicines before administration.

WATCH & RESPOND Fever, mouth sores, unusual bruising, jaundice, or a new dry cough/breathlessness requires prompt assessment for potentially serious toxicity.

TEACH For an inflammatory-disease weekly prescription, identify the exact weekly day and use teach-back; take prescribed folic acid as directed and discuss contraception and alcohol.

AVOID THE TRAP Weekly dosing is a critical rule for common inflammatory regimens, not a universal rule for every oncology protocol or other indication.

RECALL A rheumatoid arthritis patient says, 'I take my weekly methotrexate every morning.' What needs clarification now?

CHECK YOUR REASONING The patient may be taking a potentially fatal daily overdose; urgently clarify actual doses taken and contact the clinical team before further doses.

Sources: [127], [128]

FAMILY COMPARISONS: INFECTION, GI & OTHER ESSENTIALS

INFECTION, GI & OTHER ESSENTIALS

F55 Bisphosphonates: oral alendronate

Generic examples: alendronate

MEMORY HOOK A straight road to stronger bone: plain water, an upright body, and the right waiting interval.

WHAT IT DOES Alendronate slows osteoclast-mediated bone breakdown; it supports fracture-risk reduction rather than providing immediate pain relief.

ASSESS Review calcium status, kidney function, swallowing or esophageal problems, ability to remain upright, dental concerns, and the exact oral product.

WATCH & RESPOND New painful swallowing, chest pain, or worsening heartburn requires review before another dose; jaw problems or persistent thigh/groin pain also need assessment.

TEACH Swallow standard tablets whole with a full glass of plain water on rising; wait at least 30 minutes before food, drinks, or other medicines, and remain upright for at least 30 minutes and until after the first meal.

AVOID THE TRAP These instructions describe standard oral alendronate tablets; do not transfer them unchanged to every bisphosphonate formulation or route.

RECALL Why is taking oral alendronate in bed with breakfast an unsafe shortcut?

CHECK YOUR REASONING Food reduces absorption and lying down increases esophageal exposure; the correct administration technique protects both effectiveness and the esophagus.

Sources: [129], [130]

INFECTION, GI & OTHER ESSENTIALS

F56 Oral iron replacement

Generic examples: ferrous sulfate, ferrous gluconate, ferrous fumarate

MEMORY HOOK Build red cells; lock the bottle. A supplement can still cause a dangerous overdose.

WHAT IT DOES Iron replacement supplies material needed for hemoglobin and red-cell production when iron deficiency is the treatment target.

ASSESS Confirm the cause of anemia, ordered blood-count/iron studies, tolerance, bowel pattern, and the product's elemental-iron amount rather than only its salt weight.

WATCH & RESPOND Suspected overdose needs immediate poison/emergency assessment; tarry or bloody stools require prompt review, especially with pain, dizziness, or weakness, and must not be dismissed as routine discoloration.

TEACH Keep iron locked away from children, discuss constipation or stomach upset, and follow product-specific spacing from calcium, antacids, and interacting medicines.

AVOID THE TRAP Darker stools can be expected, but appearance alone cannot rule out bleeding; reassess accompanying symptoms and the patient's overall condition.

RECALL A patient says all black stools are harmless because iron darkens stool. What distinction should the nurse teach?

CHECK YOUR REASONING Routine darkening differs from tarry or bloody stool or symptoms of blood loss; those findings need prompt clinical assessment.

Sources: [131], [132], [135]

FAMILY COMPARISONS: URGENT CARE & MATERNITY

URGENT CARE & MATERNITY

F57 Amiodarone: rhythm plus organ monitoring

Generic examples: amiodarone

MEMORY HOOK A rhythm medicine with a three-organ reminder: lungs, liver, thyroid. The ECG is only part of the story.

WHAT IT DOES Changes cardiac electrical activity to treat selected serious arrhythmias under specialist supervision.

ASSESS Review rhythm, pulse, blood pressure, potassium, magnesium, interactions, and ordered lung, liver, thyroid, and eye assessments.

WATCH & RESPOND New breathlessness, persistent cough, jaundice, fainting, or worsening rhythm needs prompt evaluation; severe breathing or circulation problems need emergency response.

TEACH Keep monitoring appointments, use sun protection, avoid grapefruit as instructed, and check new medicines with the pharmacist.

AVOID THE TRAP Adverse effects and interactions may persist after stopping because the medicine remains in the body for a long time.

RECALL A patient taking amiodarone develops a new persistent cough. Is reassurance enough?

CHECK YOUR REASONING No. Assess and promptly escalate possible lung toxicity instead of assuming an ordinary cough.

Sources: [137], [138]

URGENT CARE & MATERNITY

F58 Adenosine: a brief AV-node interruption

Generic examples: adenosine

MEMORY HOOK Adenosine takes an AV-node timeout; it does not give every fast rhythm the same treatment.

WHAT IT DOES Briefly slows atrioventricular-node conduction and can interrupt selected re-entry supraventricular tachycardias.

ASSESS Confirm the identified rhythm, monitored setting, IV access, prescribed protocol, bronchospasm history, conduction disease, and interacting medicines. For the selected SVT indication, the rapid-bolus IV product is followed by a saline flush under the monitored protocol; verify the formulation.

WATCH & RESPOND Transient flushing or chest discomfort can occur; persistent severe breathing difficulty, prolonged block, or instability requires immediate team response.

TEACH Explain that a brief uncomfortable sensation may occur and that the team continuously watches the rhythm and response.

AVOID THE TRAP It does not convert atrial fibrillation or flutter to sinus rhythm. Rhythm selection and precautions matter; avoid use in bronchospasm such as asthma.

RECALL Why must the nurse verify the rhythm rather than give adenosine for any rapid pulse?

CHECK YOUR REASONING Its therapeutic target is specific AV-node-dependent rhythms, and other rhythms or conduction problems require a different plan.

Sources: [139]

FAMILY COMPARISONS: URGENT CARE & MATERNITY

URGENT CARE & MATERNITY

F59 Epinephrine: recognize the emergency and route

Generic examples: epinephrine

MEMORY HOOK Recognize, route, reassess: the right epinephrine product belongs to the right emergency plan.

WHAT IT DOES Stimulates adrenergic receptors, supporting blood pressure and opening airways during anaphylaxis; other indications use different protocols.

ASSESS Assess airway, breathing, circulation, exposure history, and the ordered product, concentration, route, and device.

WATCH & RESPOND Anaphylaxis is an emergency: activate emergency care and promptly give intramuscular epinephrine in the mid-outer thigh according to the emergency plan. Reassess because symptoms may recur.

TEACH Demonstrate the specific auto-injector with a trainer, review storage and expiration, and teach immediate emergency follow-up after use.

AVOID THE TRAP An auto-injector for anaphylaxis is not interchangeable with an IV infusion. Antihistamines do not replace epinephrine for life-threatening anaphylaxis.

RECALL A patient improves after using an epinephrine auto-injector. Is the emergency over?

CHECK YOUR REASONING No. Seek emergency assessment and continue observation because effects may wear off and the reaction can recur.

Sources: [140], [321]

URGENT CARE & MATERNITY

F60 Oxytocin: contractions need monitoring

Generic examples: oxytocin

MEMORY HOOK Contractions and circulation travel together: stronger contractions are not automatically safer contractions.

WHAT IT DOES Stimulates uterine contractions for selected labor indications and helps control postpartum bleeding from uterine atony.

ASSESS During labor, monitor fetal heart rate, contraction pattern, resting uterine tone, maternal status, fluid balance, and the prescribed infusion.

WATCH & RESPOND For uterine hyperactivity or concerning fetal response, stop the infusion and immediately initiate the obstetric escalation protocol.

TEACH Explain why the infusion and monitoring are adjusted together; report severe persistent pain or new symptoms promptly.

AVOID THE TRAP Labor induction and postpartum bleeding are different clinical contexts with different orders. Do not transfer a dose, route, or infusion plan between them.

RECALL During oxytocin induction, contractions become excessively frequent with a concerning fetal pattern. What needs action?

CHECK YOUR REASONING The infusion and maternal-fetal status require immediate assessment and protocol-based intervention, not continued automatic titration.

Sources: [141]

FAMILY COMPARISONS: URGENT CARE & MATERNITY

URGENT CARE & MATERNITY

F61 Magnesium sulfate: watch breathing and reflexes

Generic examples: magnesium sulfate

MEMORY HOOK Breaths, reflexes, kidneys: three windows into magnesium safety.

WHAT IT DOES Used for seizure prevention or treatment in selected preeclampsia/eclampsia situations and for other specific electrolyte or rhythm indications.

ASSESS Check respiratory status, deep tendon reflexes, consciousness, urine output, kidney function, and ordered magnesium measurements.

WATCH & RESPOND Absent reflexes, respiratory depression, marked weakness, or hypotension suggest toxicity: stop the infusion, summon urgent help, and support breathing under protocol.

TEACH Explain the monitoring and ask the patient to report increasing weakness or breathing difficulty rather than assuming every symptom is expected.

AVOID THE TRAP Magnesium seizure prophylaxis does not replace treatment of severe hypertension. Calcium may counter toxicity under an emergency order; airway support must not wait.

RECALL Why does falling urine output increase concern during magnesium therapy?

CHECK YOUR REASONING Magnesium is cleared through the kidneys; reduced clearance can allow accumulation and toxicity.

Sources: [142]

URGENT CARE & MATERNITY

F62 Postpartum uterotonics: different cautions

Generic examples: methylergonovine, carboprost

MEMORY HOOK Before choosing the uterine squeeze, check pressure and breathing.

WHAT IT DOES These medicines increase uterine activity to treat selected postpartum hemorrhage situations under an obstetric plan.

ASSESS Check bleeding, uterine tone, vital signs, and contraindications: hypertension matters for methylergonovine; asthma or pulmonary disease matters for carboprost.

WATCH & RESPOND Severe hypertension, chest pain, wheezing, or respiratory distress requires immediate assessment and escalation while hemorrhage care continues.

TEACH Explain the purpose and prompt reporting of breathing trouble, severe headache, or chest discomfort.

AVOID THE TRAP They are not interchangeable. Methylergonovine is contraindicated in hypertension; carboprost has pulmonary contraindications and requires caution with an asthma history.

RECALL A postpartum patient has marked hypertension and an order for methylergonovine. What is the safety concern?

CHECK YOUR REASONING Clarify the order urgently before administration because hypertension is a contraindication; continue the hemorrhage response with the team.

Sources: [143], [144]

FAMILY COMPARISONS: URGENT CARE & MATERNITY

URGENT CARE & MATERNITY

F63 IV potassium: concentration is a safety issue

Generic examples: potassium chloride

MEMORY HOOK Potassium belongs on a controlled path: verify, dilute when required, infuse, monitor.

WHAT IT DOES Replaces potassium when indicated; the IV formulation requires controlled administration because rapid delivery can cause fatal arrhythmias.

ASSESS Verify potassium trend, kidney function, urine output, ECG monitoring requirements, vascular access, product concentration, and prescribed infusion rate.

WATCH & RESPOND New arrhythmia, weakness, or infusion-site pain requires prompt assessment. Stop an unsafe administration and obtain immediate assistance.

TEACH Report burning or pain at the IV site; never independently add potassium supplements or salt substitutes to the treatment plan.

AVOID THE TRAP Potassium chloride concentrate must be diluted before use. Never give potassium chloride by IV push; a universal rate cannot be memorized for every patient or access type.

RECALL An order appears to request concentrated potassium by IV push. Should the nurse carry it out because it is written?

CHECK YOUR REASONING No. Stop and clarify the unsafe order. Undiluted or rapid administration can cause cardiac arrest.

Sources: [145], [318]

URGENT CARE & MATERNITY

F64 Cytotoxic therapy: agent-specific safety

Generic examples: doxorubicin, vincristine

MEMORY HOOK Same treatment goal, different danger map: heart, nerves, counts, and route all deserve a check.

WHAT IT DOES Different anticancer mechanisms disrupt cell growth; safety requirements depend on the exact agent and regimen.

ASSESS Verify the specialized protocol, route, blood counts, organ tests, access, and protective handling. Doxorubicin needs cardiac assessment; vincristine needs neurologic and bowel assessment.

WATCH & RESPOND Infusion-site burning or swelling requires immediate assessment; if extravasation is suspected, stop administration and activate the agent-specific protocol. Fever, unusual bleeding, or new severe symptoms also need prompt evaluation.

TEACH Report infection cues and infusion-site symptoms promptly; follow the team's exposure, reproductive, and home-care instructions.

AVOID THE TRAP Vincristine is IV only and can be fatal by the intrathecal route. Doxorubicin and vincristine do not share identical toxicities or monitoring.

RECALL Why is a generic 'chemotherapy checklist' insufficient for vincristine and doxorubicin?

CHECK YOUR REASONING Route and organ-specific hazards differ. The exact drug, protocol, and patient assessment determine safe care.

Sources: [146], [147]

ORIGINAL APPLICATION PRACTICE

Practice the judgment

Choose one answer. Write your reason before checking the answer key.

01. A patient taking lisinopril reports a new swollen tongue and difficulty breathing. Which response best addresses the immediate risk?

- A. Activate emergency assistance and assess the airway while stopping further administration.
- B. Record the symptom as the usual ACE-inhibitor cough.
- C. Offer water and reassess at the next scheduled observation.
- D. Give the next dose early to reduce the blood pressure.

My answer: _____ My reason: _____

02. A patient using a loop diuretic and digoxin develops nausea and new visual disturbance. The latest potassium result is below the laboratory range. What is the best nursing interpretation?

- A. These findings prove the heart failure is improving.
- B. Possible digoxin toxicity needs prompt assessment before another dose.
- C. Low potassium protects the heart from digoxin effects.
- D. Visual symptoms are unrelated because digoxin only affects the heart.

My answer: _____ My reason: _____

03. A patient taking warfarin says, 'I will stop eating green vegetables completely so my medicine works better.' Which teaching is most appropriate?

- A. Avoid every food that contains vitamin K.
- B. Change vitamin K intake daily to keep the body responsive.
- C. Keep vitamin K intake consistent and follow the prescribed INR monitoring plan.
- D. Skip warfarin whenever a meal includes vegetables.

My answer: _____ My reason: _____

04. A patient with chest pain has a nitroglycerin order but reports taking tadalafil earlier today. Which action is safest?

- A. Give nitroglycerin because the medicines work on different symptoms.
- B. Ask the patient to stand while taking nitroglycerin.
- C. Give an extra nitrate dose to overcome the interaction.
- D. Withhold the nitrate pending urgent prescriber review and continue the chest-pain emergency assessment.

My answer: _____ My reason: _____

ORIGINAL APPLICATION PRACTICE

Practice the judgment

Choose one answer. Write your reason before checking the answer key.

05. During heparin therapy, a patient's platelet count falls substantially and new unilateral leg pain develops. Which statement best explains the concern?

- A. Heparin-induced thrombocytopenia can cause thrombosis despite a low platelet count.
- B. A low platelet count eliminates the possibility of a new clot.
- C. Leg pain confirms that heparin has dissolved an old clot.
- D. The platelet count is irrelevant unless external bleeding is visible.

My answer: _____ My reason: _____

06. A patient taking apixaban asks why they still need follow-up if routine INR testing is unnecessary. Which explanation is best?

- A. No follow-up is needed because apixaban cannot cause serious bleeding.
- B. Bleeding, kidney function, interactions, and adherence still need review even without a warfarin-style INR target.
- C. A normal INR confirms that the apixaban dose should be doubled.
- D. Vitamin K food intake is the only issue that matters with apixaban.

My answer: _____ My reason: _____

07. Before giving a meal-linked insulin lispro dose, the nurse learns that the patient's meal has been delayed. Which response best supports safe care?

- A. Give the dose because the clock alone determines administration.
- B. Check the current glucose and coordinate the ordered dose with actual food availability.
- C. Substitute insulin glargine without obtaining an order.
- D. Cancel all insulin for the rest of the day.

My answer: _____ My reason: _____

08. A patient taking empagliflozin develops vomiting, abdominal pain, and rapid breathing after poor intake. Glucose is only mildly elevated. Which interpretation is safest?

- A. Ketoacidosis is excluded unless glucose is very high.
- B. These findings confirm ordinary hunger.
- C. The patient should simply take an extra tablet.
- D. Urgent evaluation is needed because ketoacidosis can occur without marked hyperglycemia.

My answer: _____ My reason: _____

ORIGINAL APPLICATION PRACTICE

Practice the judgment

Choose one answer. Write your reason before checking the answer key.

09. A patient taking methimazole reports a new sore throat and fever. Which nursing response is appropriate?

- A. Arrange prompt clinical evaluation for possible agranulocytosis.
- B. Reassure the patient that this proves thyroid control is improving.
- C. Recommend waiting until the next routine thyroid appointment.
- D. Tell the patient to double the next dose.

My answer: _____ My reason: _____

10. Which statement shows correct understanding of a steroid-only budesonide maintenance inhaler?

- A. I will use it only when sudden breathlessness starts.
- B. I should stop it whenever a symptom-free day occurs.
- C. I will follow the maintenance schedule and rinse and spit after each treatment.
- D. I can substitute any long-acting bronchodilator as my rescue medicine.

My answer: _____ My reason: _____

11. A caregiver reports that a patient started having disturbing dreams and marked agitation after beginning montelukast. Which response best reflects the drug warning?

- A. Ignore the changes if breathing has improved.
- B. Stop montelukast and contact the prescriber promptly for assessment.
- C. Take an extra dose to improve sleep.
- D. Assume the symptoms are unrelated because there is no psychiatric history.

My answer: _____ My reason: _____

12. A caregiver has used the patient's prescribed glucagon device for severe hypoglycemia. The patient remains unconscious but is breathing. Which action belongs in the follow-up plan?

- A. Pour juice into the patient's mouth immediately.
- B. Leave the patient alone because glucagon has already been given.
- C. Give a meal before checking whether swallowing is safe.
- D. Activate emergency help, protect the airway, and reassess the response.

My answer: _____ My reason: _____

ORIGINAL APPLICATION PRACTICE

Practice the judgment

Choose one answer. Write your reason before checking the answer key.

13. A patient becomes alert after naloxone for suspected opioid overdose. Which plan best addresses the continuing risk?

- A. Continue close breathing assessment and emergency care because respiratory depression can return.
- B. End observation because awakening proves the opioid has been eliminated.
- C. Give the next opioid dose immediately to prevent withdrawal.
- D. Replace breathing assessment with a pain score alone.

My answer: _____ My reason: _____

14. An unresponsive patient has suspected mixed-drug ingestion and a history of daily benzodiazepine use. Why should flumazenil not be administered automatically?

- A. It permanently prevents all future sedative effects.
- B. It is the same medicine as naloxone.
- C. It can provoke withdrawal seizures and may be unsafe in some mixed overdoses.
- D. It removes the need for airway support after administration.

My answer: _____ My reason: _____

15. After a serotonergic medicine is added to sertraline, a patient develops agitation, fever, diarrhea, and clonus. Which interpretation is most appropriate?

- A. This confirms the antidepressant is working quickly.
- B. This combination requires urgent evaluation for serotonin toxicity.
- C. This is expected mild nausea and needs no additional assessment.
- D. The drug name alone proves neuroleptic malignant syndrome.

My answer: _____ My reason: _____

16. A patient taking an unchanged lithium dose develops diarrhea, poor intake, coarse tremor, and an unsteady gait. Which nursing response is safest?

- A. Give the scheduled dose because the prescription has not changed.
- B. Encourage a new low-salt diet without contacting the care team.
- C. Wait for next month's routine appointment because tremor is always harmless.
- D. Withhold further administration pending urgent clinical assessment for possible toxicity.

My answer: _____ My reason: _____

ORIGINAL APPLICATION PRACTICE

Practice the judgment

Choose one answer. Write your reason before checking the answer key.

17. A patient receiving haloperidol develops high fever, generalized muscle rigidity, confusion, and unstable vital signs. Which action is most appropriate?

- A. Escalate immediately for assessment of neuroleptic malignant syndrome and other serious causes.
- B. Label the findings as ordinary akathisia and delay assessment.
- C. Assume the medicine is ineffective and give an extra dose independently.
- D. Treat only the fever and ignore the medication history.

My answer: _____ My reason: _____

18. A patient taking clozapine says, 'The REMS program ended, so I do not need blood tests anymore.' Which response is accurate?

- A. That is correct; severe neutropenia is no longer a risk.
- B. Only a weight measurement is needed now.
- C. The program requirements ended, but absolute neutrophil count monitoring still follows the prescribing information.
- D. Every antipsychotic now uses the same blood-test schedule.

My answer: _____ My reason: _____

19. A patient receiving gentamicin reports new ringing in both ears. The patient is afebrile and says the infection feels better. Which nursing response is most appropriate?

- A. Assess hearing and balance, review the monitoring record, and promptly notify the prescriber before further dosing decisions.
- B. Explain that tinnitus proves the antibiotic is reaching the infection.
- C. Wait until the prescribed course is completed before reporting the symptom.
- D. Replace gentamicin with an oral antibiotic without an order.

My answer: _____ My reason: _____

20. A patient receiving IV vancomycin for a bloodstream infection asks to use leftover oral capsules instead. Which explanation is accurate?

- A. Capsules are always stronger because they are swallowed whole.
- B. Oral vancomycin acts mainly in the bowel and does not replace the ordered systemic IV treatment.
- C. The route does not matter as long as the medicine has the same name.
- D. The patient may substitute the capsules whenever the IV site is uncomfortable.

My answer: _____ My reason: _____

ORIGINAL APPLICATION PRACTICE

Practice the judgment

Choose one answer. Write your reason before checking the answer key.

21. A patient prescribed methotrexate once weekly for rheumatoid arthritis says, 'I put one dose in every morning compartment of my pill organizer.' What is the priority response?

- A. Suggest taking the daily doses with food.
- B. Tell the patient to skip the next laboratory appointment.
- C. Urgently clarify actual doses taken and contact the clinical team before another dose.
- D. Reassure the patient that daily dosing is standard for all methotrexate uses.

My answer: _____ My reason: _____

22. A patient taking a rifampin-containing TB regimen calls with a new symptom. Which report needs prompt evaluation for possible liver injury?

- A. Orange urine without discomfort.
- B. Orange tears that stained soft contact lenses.
- C. Orange sweat without other symptoms.
- D. Yellow eyes, poor appetite, and persistent nausea.

My answer: _____ My reason: _____

23. A patient taking metoclopramide develops repeated involuntary lip-smacking and tongue movements. Which interpretation should guide the nurse's response?

- A. These movements may be a serious drug-induced movement disorder and require prompt clinical assessment.
- B. They are proof that stomach emptying has normalized.
- C. They are harmless whenever nausea has improved.
- D. They should be treated by independently increasing the next dose.

My answer: _____ My reason: _____

24. A patient prescribed standard oral alendronate tablets describes a morning routine. Which statement shows correct understanding?

- A. I will swallow it with breakfast milk while lying in bed.
- B. I will take it with plain water on rising, wait at least 30 minutes before food, drinks, or other medicines, and stay upright for at least 30 minutes and until after breakfast.
- C. I will crush it into my calcium supplement.
- D. I will take it at bedtime so it stays in my stomach longer.

My answer: _____ My reason: _____

ORIGINAL APPLICATION PRACTICE

Practice the judgment

Choose one answer. Write your reason before checking the answer key.

25. A patient taking amiodarone reports a new persistent dry cough and increasing breathlessness. Which response best addresses the medication risk?

- A. Arrange prompt assessment for possible pulmonary toxicity
- B. Explain that every cough is expected with this medicine
- C. Advise an extra dose to improve circulation
- D. Wait until the next routine visit regardless of severity

My answer: _____ My reason: _____

26. A patient receiving magnesium sulfate develops absent patellar reflexes and slow, shallow breathing. Which action is most appropriate?

- A. Increase the infusion to prevent seizures
- B. Document an expected effect and continue
- C. Stop the infusion, summon urgent help, and support breathing per protocol
- D. Wait for a scheduled lab result before responding

My answer: _____ My reason: _____

27. A nurse is reviewing a postpartum methylergonovine order. Which history requires urgent clarification before administration?

- A. Mild uterine cramping during breastfeeding
- B. Marked hypertension
- C. An uncomplicated vaginal birth earlier today
- D. A prenatal vitamin taken that morning

My answer: _____ My reason: _____

28. Which proposed administration should the nurse stop and clarify immediately?

- A. Diluted potassium chloride through a programmed infusion pump under the prescribed protocol
- B. Oral potassium chloride after checking the product instructions and current laboratory results
- C. A pharmacy-prepared potassium solution after verifying its concentration and prescribed infusion rate
- D. Potassium chloride concentrate by IV push

My answer: _____ My reason: _____

ORIGINAL APPLICATION PRACTICE

Practice the judgment

Choose one answer. Write your reason before checking the answer key.

29. A patient improves after using the prescribed epinephrine auto-injector for anaphylaxis. Which teaching remains essential?

- A. Seek emergency assessment because the reaction can recur
- B. Cancel emergency help once the rash fades
- C. Use someone else's injector instructions next time
- D. Assume antihistamines can replace epinephrine in the next severe reaction

My answer: _____ My reason: _____

30. A vincristine label is compared with an order specifying intrathecal administration. What is the appropriate response?

- A. Use the route because it appears in the order
- B. Administer more slowly by that route
- C. Stop and urgently resolve the route discrepancy
- D. Dilute it further and proceed intrathecally

My answer: _____ My reason: _____

ANSWER KEY & EXPLANATIONS

Understand the answer

01. A - Activate emergency assistance and assess the airway while stopping further administration.

Tongue swelling with breathing difficulty suggests angioedema and an airway emergency. This requires immediate assessment and escalation, not routine cough management.

Review the medication card: [p. 65](#)

02. B - Possible digoxin toxicity needs prompt assessment before another dose.

Potassium depletion increases susceptibility to digoxin toxicity. New gastrointestinal and visual symptoms should trigger prompt review of the patient, rhythm, renal function, electrolytes, and ordered drug-level assessment.

Review the medication card: [p. 67](#), [p. 68](#)

03. C - Keep vitamin K intake consistent and follow the prescribed INR monitoring plan.

Consistency helps keep the anticoagulant response predictable. The care team adjusts warfarin using the patient-specific INR target; blanket vegetable avoidance and self-adjusted dosing are unsafe.

Review the medication card: [p. 70](#)

04. D - Withhold the nitrate pending urgent prescriber review and continue the chest-pain emergency assessment.

Tadalafil is a PDE-5 inhibitor. Combining it with nitrates can produce severe hypotension; the patient still needs urgent evaluation and an appropriate alternative management plan.

Review the medication card: [p. 67](#)

05. A - Heparin-induced thrombocytopenia can cause thrombosis despite a low platelet count.

Heparin-induced thrombocytopenia is a prothrombotic immune reaction. The pattern requires urgent assessment and interruption of heparin exposure according to the clinical safety pathway.

Review the medication card: [p. 70](#)

06. B - Bleeding, kidney function, interactions, and adherence still need review even without a warfarin-style INR target.

The absence of routine INR-guided titration does not remove safety monitoring. Apixaban exposure and bleeding risk depend on clinical factors, and routine INR does not reliably quantify its anticoagulant effect.

Review the medication card: [p. 71](#)

07. B - Check the current glucose and coordinate the ordered dose with actual food availability.

Rapid-acting insulin needs coordination with intake and the glucose assessment. A delayed meal calls for clarification of the plan, not an automatic dose or an independent insulin substitution.

Review the medication card: [p. 72](#)

ANSWER KEY & EXPLANATIONS

Understand the answer

08. D - Urgent evaluation is needed because ketoacidosis can occur without marked hyperglycemia.

SGLT2-associated ketoacidosis can present with lower-than-expected glucose. The symptom pattern and reduced intake warrant prompt assessment rather than reassurance based on the glucose alone.

Review the medication card: [p. 76](#)

09. A - Arrange prompt clinical evaluation for possible agranulocytosis.

Fever and sore throat can indicate a dangerous reduction in neutrophils. The patient needs timely assessment and blood-count evaluation as directed, rather than symptom masking or delayed follow-up. Do not give further antithyroid doses until the clinician evaluates possible agranulocytosis and clears the patient to resume.

Review the medication card: [p. 77](#)

10. C - I will follow the maintenance schedule and rinse and spit after each treatment.

Steroid-only budesonide controls airway inflammation over time. Rinsing and spitting reduces local drug residue; rescue treatment must follow the patient's specific action plan.

Review the medication card: [p. 79](#)

11. B - Stop montelukast and contact the prescriber promptly for assessment.

Montelukast can cause serious neuropsychiatric changes even without a prior psychiatric diagnosis. New symptoms require prompt action; immediate danger requires emergency help.

Review the medication card: [p. 79](#)

12. D - Activate emergency help, protect the airway, and reassess the response.

Glucagon does not end the emergency. The caregiver should obtain emergency help and follow device instructions; oral intake is unsafe until the person can swallow safely.

Review the medication card: [p. 80](#)

13. A - Continue close breathing assessment and emergency care because respiratory depression can return.

Naloxone can wear off while opioid effects persist. An initial response does not eliminate the need for continued assessment, support, and emergency care.

Review the medication card: [p. 81](#)

14. C - It can provoke withdrawal seizures and may be unsafe in some mixed overdoses.

Dependence and co-ingested proconvulsant drugs can make flumazenil hazardous. Airway support and expert assessment take priority over assuming every sedative has a safe reversal shortcut.

Review the medication card: [p. 83](#)

15. B - This combination requires urgent evaluation for serotonin toxicity.

The medication exposure plus mental-status, autonomic, and neuromuscular changes raises concern for serotonin syndrome. Urgent assessment is needed; the pattern is not itself a complete diagnosis.

Review the medication card: [p. 83](#)

ANSWER KEY & EXPLANATIONS

Understand the answer

16. D - Withhold further administration pending urgent clinical assessment for possible toxicity.

Dehydration and electrolyte changes can increase toxicity risk. New gastrointestinal and neurologic findings require prompt assessment even with an unchanged dose or a previously acceptable level.

Review the medication card: [p. 85](#)

17. A - Escalate immediately for assessment of neuroleptic malignant syndrome and other serious causes.

This systemic pattern is a medical emergency, not routine restlessness. Prompt escalation, medication review, and supportive management are needed while causes are evaluated.

Review the medication card: [p. 85](#)

18. C - The program requirements ended, but absolute neutrophil count monitoring still follows the prescribing information.

FDA removed the enrollment and reporting program, not the drug's neutropenia risk. Clinically recommended ANC monitoring continues according to the label.

Review the medication card: [p. 86](#)

19. A - Assess hearing and balance, review the monitoring record, and promptly notify the prescriber before further dosing decisions.

New tinnitus is a possible ototoxicity warning. Infection improvement does not cancel this risk; assessment and prompt escalation support a safe treatment decision.

Review the medication card: [p. 89](#)

20. B - Oral vancomycin acts mainly in the bowel and does not replace the ordered systemic IV treatment.

The delivery route determines where clinically useful drug exposure occurs. Oral vancomycin has a bowel-focused role; a bloodstream infection requires the prescribed systemic treatment plan.

Review the medication card: [p. 88](#)

21. C - Urgently clarify actual doses taken and contact the clinical team before another dose.

A weekly inflammatory-disease prescription taken daily can cause severe or fatal toxicity. The nurse must establish whether an overdose occurred and escalate immediately; oncology schedules do not justify changing this order.

Review the medication card: [p. 93](#)

22. D - Yellow eyes, poor appetite, and persistent nausea.

Jaundice with systemic or gastrointestinal symptoms may indicate hepatotoxicity. Orange body fluids alone are an expected rifampin effect, though counseling and routine follow-up remain important.

Review the medication card: [p. 91](#)

ANSWER KEY & EXPLANATIONS

Understand the answer

23. A - These movements may be a serious drug-induced movement disorder and require prompt clinical assessment.

Metoclopramide can cause tardive dyskinesia, which may persist after discontinuation. New involuntary movements require prompt evaluation and review of treatment.

Review the medication card: [p. 92](#)

24. B - I will take it with plain water on rising, wait at least 30 minutes before food, drinks, or other medicines, and stay upright for at least 30 minutes and until after breakfast.

Alendronate tablets require plain water and separation from food and other oral medicines. Remaining upright reduces esophageal injury risk; the precise directions depend on the product.

Review the medication card: [p. 94](#)

25. A - Arrange prompt assessment for possible pulmonary toxicity

New respiratory symptoms may signal serious amiodarone lung toxicity. Prompt assessment is needed, with emergency escalation for severe distress.

Review the medication card: [p. 95](#)

26. C - Stop the infusion, summon urgent help, and support breathing per protocol

Loss of reflexes and respiratory depression suggest magnesium toxicity. Immediate support and escalation take priority; calcium may be ordered as part of emergency treatment.

Review the medication card: [p. 97](#)

27. B - Marked hypertension

Methylergonovine is contraindicated in hypertension. The nurse should clarify the order while the team continues appropriate hemorrhage management.

Review the medication card: [p. 97](#)

28. D - Potassium chloride concentrate by IV push

Concentrated potassium must be diluted and administered by a controlled infusion according to the prescription and protocol. IV-push potassium can cause cardiac arrest.

Review the medication card: [p. 98](#)

29. A - Seek emergency assessment because the reaction can recur

Improvement does not eliminate the need for emergency follow-up. Symptoms may recur, and the patient's specific emergency action plan remains important.

Review the medication card: [p. 96](#)

30. C - Stop and urgently resolve the route discrepancy

Vincristine is for IV use only. Intrathecal administration can be fatal; dilution or slowing does not make that route safe.

Review the medication card: [p. 98](#)

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