

ANSWERS

Drug Interactions and Contraindications

1. Answer: Notify the physician to stop aspirin to reduce the risk of bleeding

Rationale: Aspirin potentiates the anticoagulant effect of warfarin and increases bleeding risk.

2. Answer: Crackers and tossed salad

Rationale: With MAOIs, the client should avoid ingesting foods that are high in tyramine. Ingestion of these foods could trigger a potentially fatal hypertensive crisis. Foods to avoid include yogurt; aged cheeses; smoked or processed meats; red wines; and fruits such as avocados, raisins, or figs.

3. Answer: Discontinue metformin due to lactic acidosis risk

Rationale: Metformin is contraindicated in renal failure because accumulation increases the risk of lactic acidosis.

4. Answer: Risk of hyperkalemia

Rationale: ACE inhibitors decrease aldosterone, leading to potassium retention; adding supplements can cause hyperkalemia.

5. Answer: The drug may induce bronchospasm and worsen asthma

Rationale: Non-selective beta blockers like propranolol block B₂ receptors in the lungs, causing bronchoconstriction.

6. Answer: It can cause profound hypotension and syncope

Rationale: Both drugs cause vasodilation; together they can lead to life-threatening hypotension.

7. Answer: Lithium toxicity

Rationale: Diuretics decrease sodium levels, leading to increased lithium reabsorption and potential toxicity.

8. Answer: **Avoid grapefruit juice to prevent drug accumulation and muscle toxicity**

Rationale: Grapefruit juice inhibits CYP3A4 enzymes, increasing statin levels and risk of rhabdomyolysis.

9. Answer: **Decreases INR and reduces drug effectiveness**

Rationale: Vitamin K in green vegetables reduces warfarin's anticoagulant effect, lowering INR.

10. Answer: **Avoid NSAIDs and consult physician for alternatives**

Rationale: NSAIDs inhibit prostaglandins that protect gastric mucosa, increasing ulcer risk.

11. Answer: **The drug may worsen heart failure due to negative inotropy**

Rationale: Verapamil decreases contractility, which can exacerbate heart failure symptoms.

12. Answer: **Separate doses by at least 2 hours to avoid absorption interference**

Rationale: Antacids bind tetracyclines, decreasing antibiotic absorption; spacing doses prevents this.

13. Answer: **Steroids mask infection signs and suppress immune response**

Rationale: Corticosteroids suppress immune function, masking infections and delaying treatment.

14. Answer: **Omeprazole inhibits activation of clopidogrel, reducing its effectiveness**

Rationale: Omeprazole inhibits CYP2C19, the enzyme needed to activate clopidogrel, leading to reduced antiplatelet action.

15. Answer: **Hold the medication and verify cross-sensitivity with the prescriber**

Password: Some patients allergic to sulfa drugs may react to loop diuretics; verify safety before administration.

