

CHAPTER 5. HYPERTENSION, SELF-ASSESSMENT QUESTIONS

1. A 55-year-old white man with seated office blood pressure (BP) readings of 144/92 mm Hg and 136/84 mm Hg is asked to return in 2 weeks for repeat measurements, which are 138/88 mm Hg and 134/82 mm Hg. Which of the following classifies DG's BP per the American Society of Hypertension (ASH) and the International Society of Hypertension (ISH) joint Clinical Practice Guidelines for the Management of Hypertension in the Community?

- A. Isolated systolic hypertension
- B. Stage 1 hypertension
- C. Prehypertension
- D. Optimal BP
- E. Stage 2 hypertension

2. Lupus-like syndrome is a possible side effect of which of the following drug(s)?

- A. Clonidine
- B. Minoxidil
- C. Doxazosin
- D. Hydralazine
- E. Reserpine

3. A 55-year-old black woman has a history of left ventricular hypertrophy with a left ventricular ejection fraction of 55%. She has had hypertension for 10 years and is currently taking chlorthalidone 25 mg daily, metoprolol succinate 50 mg daily, and amlodipine 2.5 mg daily. Her averaged BP is 152/94 mm Hg with a heart rate of 54 beats/min. Her physical exam is unremarkable and basic metabolic panel reveals serum creatinine of 0.8 mg/dL [71 μ mol/L] and potassium of 3.9 mEq/L (3.9 mmol/L). She reports allergies to fosinopril and aspirin. Which of the following represents the optimal course of action?

- A. Increase amlodipine to 5 mg and have her take it at bedtime
- B. Increase metoprolol succinate to 100 mg daily
- C. Add lisinopril 5 mg daily
- D. Add spironolactone 50 mg daily
- E. A or B

4. A 34-year-old black man presents to your clinic with a BP of 160/94 mm Hg. Repeat readings over the next 2 weeks average 156/92 mm Hg. The patient has no past medical history with the exception of Crohn disease, which is currently treated with chronic steroid therapy. He is also taking an over-the-counter NSAID for ongoing back pain. Physical examination and laboratory tests are unremarkable. Appropriate interventions at this time include:

- A. No intervention because patient most likely has drug-induced hypertension
- B. Discontinuation of the NSAID
- C. Reassessment of the dose and need for long-term oral steroids
- D. Initiation of antihypertensive therapy
- E. B and C

5. A 68-year-old white man has resistant hypertension, prior myocardial infarction, and chronic kidney disease (CKD; serum creatinine 1.8 mg/dL [159 μ mol/L], estimated creatinine clearance 40 mL/min [0.67 mL/s]). You are initiating ramipril today. What is the most appropriate timeframe for laboratory follow-up?

- A. 1 to 2 days
- B. 1 to 2 weeks
- C. 1 to 2 months
- D. 3 to 4 months
- E. 4 to 6 months

6. A 47-year-old Hispanic man has primary hypertension with an average BP of 172/98 mm Hg and heart rate of 70 beats/min. His most recent serum potassium is 4.5 mEq/L (4.5 mmol/L), serum creatinine is 1.1 mg/dL (97 μ mol/L) and calculated creatinine clearance is 102 mL/min (1.70 mL/s). Which of the following antihypertensives would be most appropriate at this time?

- A. Furosemide
- B. Atenolol
- C. Chlorthalidone and lisinopril initiated concurrently
- D. Amlodipine and lisinopril initiated concurrently
- E. C or D

7. A 67-year-old Asian man with a recent non-ST segment elevation MI (2 weeks ago) has an average BP of 148/86 mm Hg and a heart rate of 76 beats/min. Which of the following antihypertensive agents is preferred in this setting?

- A. Metoprolol tartrate
- B. Acebutolol
- C. Hydrochlorothiazide
- D. Spironolactone
- E. A or B

8. Which of the following treatments is (are) the most appropriate for a hypertensive emergency?

- A. Normalization of BP within hours
- B. Reduction in mean arterial pressure by 25% to 50% within minutes to hours
- C. Reduction in mean arterial pressure up to 25% within minutes to hours
- D. Administration of sublingual nifedipine
- E. C and D

9. A 65-year-old black man with history of hypertension, prior MI, and benign prostatic hypertrophy, is currently receiving amlodipine 5 mg QAM and metoprolol succinate 50 mg once daily. He has an average 24-hour Ambulatory Blood Pressure of 156/92 mm Hg and HR of 66 beats/min with notable nocturnal hypertension. He complains of nocturia but states that the swelling in his feet improved when his amlodipine dose was reduced. Which of the following presents the most clinically appropriate course of action?

- A. Initiate tamsulosin 0.4 mg daily at bedtime
- B. Increase amlodipine to 10 mg daily and change to bedtime
- C. Increase metoprolol succinate to 50 mg twice daily
- D. Initiate chlorthalidone 50 mg daily at bedtime
- E. Initiate doxazosin 2 mg daily at bedtime

10. A 67-year-old black man has resistant hypertension. Past medical history is also significant for heart failure with left ventricular systolic dysfunction, dyslipidemia, and peripheral vascular disease. Medications currently include lisinopril, carvedilol, and furosemide. Current blood pressure is 146/88 mm Hg and when repeated 148/82 mm Hg. Which of the following additions to his medication regimen would be an inappropriate choice at this time?

- A. Amlodipine
- B. Felodipine
- C. Hydralazine/Isosorbide Dinitrate
- D. Minoxidil
- E. Spironolactone

11. A 32-year-old woman is 20 weeks pregnant and has a history of gestational diabetes. She presents with an average BP of 154/96 mm Hg and a heart rate of 60 beats/min. Her laboratory results are remarkable for proteinuria, elevated serum uric acid, and low potassium. Which of the following presents the most appropriate course of action?

- A. Closely monitor her BP and provide supportive care
- B. Start Losartan 50 mg daily while monitoring BP
- C. Start methyldopa 250 mg every 6 hours while monitoring BP
- D. Start labetalol 100 mg every 12 hours while monitoring BP
- E. Start chlorthalidone 25 mg daily while monitoring BP

12. A 45-year-old black man has a past medical history significant only for hypertension. Despite therapy with lisinopril 40 mg daily, hydrochlorothiazide 12.5 mg daily, and amlodipine 10 mg daily, his home and office BPs over the last 2 weeks remain elevated with an average reading of 154/92 mm Hg. All laboratory results are within normal limits. Which of the following would be a reasonable change to his antihypertensive regimen?

- A. Replace hydrochlorothiazide with chlorthalidone 25 mg daily
- B. Add aliskiren 150 mg daily
- C. Add spironolactone 50 mg daily
- D. Add losartan 25 mg daily
- E. B or D

13. A 29-year-old woman has had stage 1 hypertension for the past 2 years that has been well controlled (BP range of 100–110/60–65 mm Hg) on lisinopril 10 mg once daily. She has successfully implemented lifestyle modifications, losing 14 kg (31 lb) and obtaining a body mass index of 21 kg/m². She informs you she is going to start trying to get pregnant. What changes should be instituted with her antihypertensive

therapy at this time?

- A. Discontinuing lisinopril and monitoring BP closely with lifestyle modifications
- B. Discontinuing lisinopril and initiating methyldopa
- C. Continuing lisinopril because her BP is well controlled
- D. Reducing lisinopril dose to 2.5 mg daily and maintaining lifestyle modifications
- E. Discontinuing lisinopril and starting HCTZ

14. A 57-year-old white woman has type 2 diabetes, morbid obesity, and hypertension. She is currently taking only lisinopril 20 mg daily and her office blood pressures are consistently at goal < 140/90 mm Hg, but her home readings are significantly higher. Which of the following is a possible explanation for her elevated home readings?

- A. Her home BP cuff is too small
- B. She has white coat hypertension
- C. Her home BP cuff is too large
- D. She checks her blood pressure immediately after exercise
- E. All of the above

15. A 56-year-old black woman is currently on verapamil ER 360 mg once daily. She has a past medical history of hypertension and atrial fibrillation. Today, her office BP readings are 137/97 mm Hg and 144/96 mm Hg with a heart rate of 60 beats/min. Which of the following is the most appropriate intervention?

- A. Add amlodipine 5 mg daily
- B. Increase verapamil ER to 360 mg twice daily
- C. Add chlorthalidone 12.5 mg daily
- D. Add lisinopril 5 mg daily
- E. Either C or D

ANSWERS

- 1. C
- 2. D
- 3. A
- 4. E
- 5. B
- 6. E
- 7. A
- 8. C
- 9. E
- 10. D
- 11. C
- 12. A
- 13. A
- 14. A
- 15. E