

CHAPTER 8. ACUTE CORONARY SYNDROMES, SELF-ASSESSMENT QUESTIONS

1. A 68-year-old man with a history of ischemic heart disease develops severe chest pain (8/10 on a pain scale) with subsequent ECG depression in leads II, III, and aVF. Serum creatinine is 1.0 mg/dL (88 μ mol/L) and troponin I is 3.4 ng/mL (3.4 mcg/L; 3400 ng/L). Which of the following **differentiates** MI from UA in this patient?

- A. Location of the coronary artery blockade
- B. Quality of chest discomfort
- C. Severity of coronary artery disease
- D. Elevated plasma troponin concentration
- E. ECG changes

2. A 76-year-old man with prior history of coronary artery disease, hypertension, hyperlipidemia and stroke is found to have STEMI and receives a DES. Which dual antiplatelet regimen is **most appropriate** for him to receive at time of discharge?

- A. Aspirin 325 mg and clopidogrel 75 mg daily
- B. Aspirin 325 mg and ticagrelor 90 mg twice daily
- C. Aspirin 325 mg and prasugrel 10 mg daily
- D. Aspirin 81 mg and prasugrel 10 mg daily
- E. Aspirin 81 mg and ticagrelor 90 mg twice daily

3. An 82-year-old man with STEMI was brought by ambulance to a small community hospital during nighttime (off-peak) hours. The nearest hospital with operating catheterization facilities is a 2.5-hour distance away. Which of the following **addresses the appropriate** reperfusion for this patient?

- A. Fibrinolytic therapy
- B. An early invasive strategy
- C. A delayed invasive strategy
- D. An ischemia-guided approach
- E. A percutaneous strategy

4. A 54-year-old woman with a CrCl of 20 mL/min (0.33 mL/s) is being treated for ACS by utilizing an ischemia-guided strategy. In addition to aspirin 81 mg daily, which of the following medication combinations is most appropriate in this patient?

- A. Clopidogrel, UFH, abciximab
- B. Ticagrelor, enoxaparin, eptifibatide
- C. Prasugrel, fondaparinux
- D. Ticagrelor, UFH
- E. Clopidogrel, bivalirudin, tirofiban

5. A 62-kg (137-lb) man with CrCl of 55 mL/min (0.92 mL/s) is found to have a NSTEMI-ACS. Troponin levels, drawn at three separate intervals, are all negative. Which of the following is the **preferred** antithrombotic regimen, in addition to ASA and clopidogrel if an ischemia-guided strategy is chosen?

- A. UFH infusion and eptifibatide IV infusion 2 mcg/kg/min
- B. Enoxaparin 60-mg SC twice daily
- C. Bivalirudin bolus plus infusion
- D. Fondaparinux 2.5 mg SC twice daily
- E. Bivalirudin bolus plus eptifibatide IV infusion 2 mcg/kg/min

6. A 45-year-old patient with STEMI presents to a hospital without the capacity to perform primary PCI. It has been 2 hours since the onset of chest discomfort with BP 134/80 mm Hg, HR 98 bpm, and troponin 10.8 ng/mL (10.8

mcg/L; 10,800 ng/L). In addition to ASA and IV NTG which early therapy option **would be best** to start within the first 24 hours to treat symptoms, and prevent long term complications?

- A. Clopidogrel, enoxaparin, ramipril, reteplase
- B. Clopidogrel, enoxaparin, tenecteplase
- C. Reteplase, UFH, metoprolol, enalapril
- D. Tenecteplase, bivalirudin, metoprolol
- E. Alteplase, bivalirudin, lisinopril

7. Which of the following is a **contraindication** to eplerenone in a patient with heart failure following MI?

- A. EF less than 40% (0.40)
- B. Persistent angina
- C. Angioedema to an ACE inhibitor
- D. Serum potassium of 5.6 mEq/L (5.6 mmol/L)
- E. Heart rate less than 60 beats/min

8. Which of the following represents the **most appropriate** antiplatelet regimen in a 55-year-old patient (weight 70 kg [154 lb]) administered tenecteplase 2 hours previously for STEMI?

- A. 600-mg clopidogrel loading dose, followed by 75 mg daily
- B. 300-mg clopidogrel loading dose, followed by 75 mg daily
- C. No clopidogrel load, followed by 75 mg daily
- D. 60-mg prasugrel loading dose, followed by 5 mg daily
- E. 60-mg prasugrel loading dose, followed by 10 mg daily

9. Which of the following patients is **most likely** to receive the most benefit from a GPI?

- A. A 47-year-old diabetic man with STEMI undergoing primary PCI receiving ticagrelor
- B. A 68-year-old man with NSTEMI-ACS undergoing PCI receiving bivalirudin and prasugrel
- C. A 60-year-old woman with negative troponins, receiving clopidogrel
- D. An 82-year-old man with positive troponins, receiving ticagrelor
- E. A 53-year-old woman with positive troponins, receiving heparin

10. Which of the following anticoagulants is **preferred** for PCI in a patient with a history of heparin-induced thrombocytopenia and ACS?

- A. UFH
- B. Enoxaparin
- C. Bivalirudin
- D. Fondaparinux
- E. Dalteparin

11. Which of the following is the **correct** coagulation monitoring goal for a patient with ACS receiving enoxaparin?

- A. Activated partial thromboplastin time (aPTT) 2.0 to 3.0 times control
- B. aPTT 50 to 70 seconds
- C. Activated clotting time less than 32 seconds
- D. Anti-Xa levels greater than 1.5 IU/mL (1.5 kIU/L)
- E. No coagulation goal recommended

12. Which of the following **best describes** a patient with ACS who is a candidate for treatment with amlodipine added to β -blocker?

- A. Continued chest discomfort despite nitrates and atenolol
- B. Acute heart failure while receiving metoprolol

- C. HR of 80 bpm and BP of 150/90 mm Hg while receiving low-dose metoprolol and enalapril
- D. Stable chronic obstructive pulmonary disease receiving a low-dose atenolol
- E. Contraindication to metoprolol receiving diltiazem

13. In patients undergoing coronary artery bypass graft (CABG) surgery, which of the following is a preferred antithrombotic strategy in addition to aspirin?

- A. UFH, discontinue prasugrel 5 days prior to surgery
- B. Eptifibatide, discontinue clopidogrel 7 days prior to surgery
- C. UFH, discontinue ticagrelor 5 days prior to surgery
- D. Fondaparinux, discontinue clopidogrel 5 days prior to surgery
- E. Bivalirudin, discontinue prasugrel 24 hours prior to surgery

14. Which anticoagulant regimen would be **most appropriate** for a 76-year-old woman (weight 64 kg [141 lb]) with NSTEMI-ACS with an estimated CrCl of 50 ml/min (0.83 mL/s) undergoing PCI?

- A. UFH 3800 unit bolus, followed by 800 units/hour
- B. Enoxaparin 140-mg SC twice daily
- C. Fondaparinux 2.5-mg SC daily
- D. Bivalirudin 24.5-mg bolus, followed by 35 mg/kg/hour infusion
- E. No anticoagulant needed

15. Secondary interventions proven to reduce risk following ACS include **all of the following except**:

- A. Pneumococcal vaccination in age older than 65 years
- B. Cardiac rehabilitation
- C. Nonsteroidal anti-inflammatory agents
- D. Cholesterol management
- E. Dual antiplatelet therapy

ANSWERS

1. D

2. E

3. A

4. D

5. B

6. B

7. D

8. B

9. E

10. C

11. E

12. A

13. C

14. A

15. C

