CHAPTER 11. STROKE, SELF-ASSESSMENT QUESTIONS

1. Which one of the following is true regarding the use of heparin and low–molecular weight heparins (LMWHs) in acute ischemic stroke?

A. Should be used emergently in all patients
B. Increase the risk of hemorrhagic conversion
C. Should be administered preferentially instead of IV alteplase
D. Improve outcomes in most patients if dosed properly
E. Should be used in the acute setting if IV alteplase is not an option

2. A 62-year-old Hispanic woman had a stroke 2 years ago. She presents to clinic complaining of several episodes of “not being able to get the words out” over the past 2 days. She has had gastrointestinal upset with ASA in the past and is currently being treated for peripheral arterial disease and arthritis. Which one of the following medications would be the most appropriate for stroke prevention in this patient?

A. Ticlopidine 250 mg twice daily
B. Clopidogrel 75 mg daily
C. ASA and ER dipyridamole 25/200 mg twice daily
D. ASA 50 mg daily
E. No treatment is necessary

3. A 64-year-old African American woman with a history of ischemic stroke several months ago was previously prescribed ASA 325 mg daily, but developed an allergy to ASA and stopped taking it 2 weeks ago. Which one of the following is the most appropriate recommendation at this time?

A. Make no change at this time
B. Change the ASA dose from 325 mg daily to 50 mg daily

C. Discontinue ASA and begin clopidogrel 75 mg daily

D. Restart ASA 325 mg every other day

E. Discontinue ASA and begin ticlopidine 250 mg twice daily

4. Which one of the following is the most important diagnostic test for ischemic and hemorrhagic stroke?

   A. Carotid Doppler studies

   B. Transthoracic echocardiogram

   C. Transcranial Doppler

   D. CT scan of the head

   E. MRI of the neck

5. A 68-year-old male patient is admitted to the acute stroke unit for IV alteplase approximately 2.5 hours after his symptoms began. His blood pressure is 198/115 mm Hg on admission to the acute stroke unit. Which one of the following is the appropriate treatment at this time?

   A. Administer IV alteplase immediately using recommended dosing

   B. Administer labetalol 10 mg IV and recheck BP in 10 minutes

   C. Hold IV alteplase and recheck BP in 30 minutes

   D. Hold IV alteplase and complete a full neurologic examination

   E. Hold IV alteplase as patient is not an appropriate candidate for treatment

6. A 64-year-old African American man is diagnosed with ischemic stroke. He was taking ASA 81 mg daily at the time of his ischemic stroke and claims he never missed a dose. Which one of the following recommendations would be most appropriate for prevention of a recurrent stroke?

   A. Continue aspirin; however, increase the dose to 325 mg po BID
B. Continue his current aspirin regimen
C. Discontinue aspirin and start clopidogrel 75 mg po daily
D. Discontinue aspirin and start dipyridamole 100 mg po QID
E. Discontinue aspirin and start warfarin with an INR goal of 2–3

7. A 54-year-old white woman has diabetes, hypertension and dyslipidemia. She gets little activity during her working hours as an administrative assistant and eats a normal diet. Which one of the following represents her combination of risk factors for stroke?
   A. Inactivity, age, race, poor diet  
   B. Hypertension, dyslipidemia  
   C. Hypertension, dyslipidemia, race, gender  
   D. Hypertension, dyslipidemia, diabetes, inactivity  
   E. Hypertension, diabetes, gender

8. Carotid endarterectomy is recommended in which one of the following situations?
   A. 57-year-old man with symptomatic carotid artery occlusion of 47%  
   B. 73-year-old man with recent stroke and symptomatic carotid artery occlusion of 70%  
   C. 83-year-old woman with asymptomatic carotid artery occlusion of 65%  
   D. 62-year-old woman with asymptomatic carotid artery occlusion of 47%  
   E. 78-year-old man with high operative risk and symptomatic carotid artery occlusion of 65%

9. Recombinant factor VIIa has been studied in clinical trials of patients with ICH. Which one of the following is true regarding this agent?
   A. Shown to increase mortality at 90 days  
   B. Shown to decrease overall functioning at 90 days  
   C. Increased the incidence of thromboembolic events
D. Improved patient survival
E. Improved functional outcome

10. Which of the following are risk factors for both ischemic stroke and hemorrhagic stroke?
   A. Hypertension, cigarette smoking, male gender
   B. Cocaine use, arteriovenous malformation
   C. Trauma, hypertension, cigarette smoking
   D. Male gender, trauma
   E. Cocaine use, cigarette smoking, trauma

11. An 84-year-old woman with a history of TIAs and ischemic stroke experiences difficulty speaking that lasts over 2 hours. She presents acutely to the ED 3.5 hours after her symptoms started. She is currently on aspirin 81 mg daily. Which one of the following is a contraindication to alteplase therapy for this patient?
   A. Symptoms started greater than 3 hours ago
   B. History of TIAs
   C. History of aspirin use
   D. Age more than 80 years old
   E. History of previous ischemic stroke

12. Of the following, who would have the highest risk for an ischemic stroke?
   A. 35-year-old pregnant woman
   B. 69-year-old Japanese man
   C. 72-year-old Caucasian woman
   D. 52-year-old African American woman
   E. 80-year-old African American man
13. A patient is brought in to the emergency department with suspected ischemic stroke. His symptoms started approximately 3 hours ago. Which one of the following is true regarding the use of alteplase in this patient?

A. It is too late to administer alteplase as the first hour after symptom onset is past.
B. Alteplase would need to be administered within the next 1.5 hours if the patient is found to be a candidate for treatment.
C. Alteplase must be administered within 6 hours of symptom onset.
D. Alteplase must be administered within 12 hours of symptom onset.
E. Alteplase is only used within the first 90 minutes after symptom onset.

14. A 63-year-old African American woman is being discharged after a stroke. She has a history of hypertension, dyslipidemia and smoking. Which one of the following discharge plans is appropriate?

A. Blood pressure control, statin therapy, referral to smoking cessation program, aspirin
B. Blood pressure control, statin therapy
C. Statin therapy, referral to smoking cessation program, aspirin
D. Referral to a smoking cessation program
E. Blood pressure control

15. Vasospasm is a complication of subarachnoid hemorrhage. Which one of the following is the drug of choice to decrease morbidity secondary to vasospasm?

A. Nifedipine
B. Aminocaproic acid
C. Nimodipine
D. Diltiazem
E. Labetalol

**ANSWERS**

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