Activase (Alteplase) for acute ischemic stroke

In-service knowledge check

Questions:

1. Acute ischemic stroke (AIS) accounts for ______ of all strokes that occur in the United States. (multiple choice)
   a. 22%  b. 56%  c. 87%

2. Activase is the only thrombolytic agent indicated for the treatment of AIS. (true/false)
   a. True  b. False

3. How does Activase work to break down a clot? (multiple choice)
   a. Activase converts entrapped plasminogen to plasmin, which then binds to fibrin in the thrombus.
   b. Activase initiates local fibrinolysis, then binds to fibrin in the thrombus—and ultimately converts entrapped plasminogen to plasmin.
   c. Activase binds to fibrin in the thrombus and converts entrapped plasminogen to plasmin, initiating local fibrinolysis.

4. Use of Activase in eligible patients is a Class I, Level of Evidence A recommendation of the American Heart Association/American Stroke Association 2007 guidelines. (true/false)
   a. True  b. False

5. What 3 names are used interchangeably to refer to the only FDA-approved drug to treat AIS? ____________________________________________ (fill in the blank)

6. What does “t-PA” stand for? ____________________________________________ (fill in the blank)

7. Activase must be given within ________ hours of symptom onset. (multiple choice)
   a. 2  b. 3  c. 6

8. The National Institutes of Health recommends that eligible stroke patients presenting to the emergency department (ED) receive Activase within _______ minutes. (multiple choice)
   a. 60  b. 120  c. 10

9. The recommended dose of Activase is 0.9 mg/kg (not to exceed 90 mg total dose) infused over 60 minutes, with 10% of the total dose administered as an initial intravenous bolus dose over 1 minute. (true/false)
   a. True  b. False

10. A patient with AIS aged ≥75 years is eligible for treatment with Activase, but may be at an increased risk of bleeding. (true/false)
    a. True  b. False

11. Patients are contraindicated for Activase for AIS treatment if their international normalized ratio (INR) is _______. (multiple choice)
    a. 1.9  b. ≥1.8  c. >1.7

12. A patient with AIS whose blood pressure is ≤185/110 mm Hg is eligible for Activase treatment. (true/false)
    a. True  b. False

13. In the NINDS pivotal trial, patients who received Activase had a 6.4% risk of having an intracerebral hemorrhage (ICH) vs 0.6% for placebo. (true/false)
    a. True  b. False

14. Patients treated with Activase in pivotal trials were at least _____ more likely to experience minimal to no disability at 3 months compared with patients given placebo. (multiple choice)
    a. 19%  b. 10%  c. 30%

15. Some common signs and symptoms of stroke include ___________________________. (fill in the blank)

16. What is the extent of clinical experience with Activase? (multiple choice)
    a. Use has been limited to academic medical centers only.
    b. Activase has been used for more than 5 years in over 10,000 patients.
    c. Activase has been used for more than 14 years in approximately 240,000 patients.

See reverse for correct answers, indication, and Important Safety Information.
ANSWERS:
1. c. 87%1
2. a. True
3. c. Activase binds to fibrin in the thrombus and converts entrapped plasminogen to plasmin, initiating local fibrinolysis.
4. a. True²
5. Activase, alteplase, and t-PA, or tissue plasminogen activator
6. Tissue plasminogen activator
7. b. 3
8. a. 60³
9. a. True
10. a. True⁴⁶
11. c. >1.7
12. a. True
13. a. True⁵
14. c. 30⁶
15. facial droop; arm drift; slurred speech; visual disturbances; difficulty speaking, writing, or comprehending words⁷
16. c. Activase has been used for more than 14 years in over 240,000 patients.

Indication
Activase is indicated for the management of acute ischemic stroke in adults for improving neurological recovery and reducing the incidence of disability. **Treatment should only be initiated within 3 hours after the onset of stroke symptoms, and after exclusion of intracranial hemorrhage by a cranial computerized tomography (CT) scan or other diagnostic imaging method sensitive for the presence of hemorrhage (see CONTRAINDICATIONS in the full prescribing information).**

Important Safety Information
All thrombolytic agents increase the risk of bleeding, including intracranial bleeding, and should be used only in appropriate patients. Not all patients with acute ischemic stroke will be eligible for Activase therapy, including patients with evidence of recent or active bleeding; recent (within 3 months) intracranial or intraspinal surgery, serious head trauma, or previous stroke; uncontrolled high blood pressure; or impaired blood clotting.

Please see accompanying full prescribing information.

For more information about stroke and thrombolytic therapy, visit the “Stroke Resources” page on www.activase.com and download or order our helpful materials, including DVDs and videos, dosing cards, slide kits, brochures, and patient counseling tools. You will also find access to an extensive library of clinical research articles.

Completed by:___________________________________________
Date Completed:________________________________________