Northwest Community EMS System
October 2025 CE: Stroke & Alzheimer's
Credit Questions

Name (Print):		EMS Agency:		
EMS Educator:				
Date submitted	Score:	☐ Acceptable ☐ Not acceptable	☐ Incomplete ☐ Incorrect answers	Date returned w/ feedback
Resubmission received:	Score:	☐ Acceptable ☐ Not acceptable	☐ Incomplete ☐ Incorrect answers	Date returned w/ feedback:
# CE Hours awarded:		Date		

This packet should take 2 hours to complete – which earns the equivalent of the 2-hour live CE class.

Sources of information/answers

October CE PowerPoint PDF, NWCEMSS SOPs, and NWC EMSS Procedure Manual.

1. What are the 2 indications that a patient should present with to be a candidate for Naloxone?

   A. Tachycardia and pinpoint pupils
   B. SBP < 90 and lethargy
   C. AMS & RR < 12
   D. Dilated pupils and RR > 20

2. What is the standard (adult) dose and timing of Naloxone administration?

   A. 1 mg IV/IO/IN/IM q 2 min up to 4mg
   B. 2 mg IV/IO/IN/IM q 30-60 seconds up to 4mg
   C. 0.4 mg/IV/IO/IN/IM q 1 min up to 8 mg
   D. 1 mg IV/IO/IN/IM q 30-60 seconds up to 4mg

3. What is the definition of dementia?

   _____

   _____

4. What are the 2 changes in the brain that take place in Alzheimer's disease, that differentiate it from other forms of dementia?

   A. Lewy bodies build up and neurons die
   B. Amyloid plaques and neurofibrillary tangles
   C. Frontal lobe shrinks degenerative vascular changes

5 – 8 When interacting with patients with Alzheimer's/dementia, the Alzheimer's Association recommends using TALK tactics. Fill in the blank for what each letter represents:

_____

_____

_____

_____

9. List 3 reasons why a person living with Alzheimer's or dementia may become aggressive or abusive?

_____

_____

10. List 4 ways a person living with Alzheimer's or dementia may be the victim of abuse:

_____

_____

11. First responders are mandated reporters of elder abuse. What is the phone number for the adult protective services hotline?

_____

12. There are 5 EMS actions (metrics) recommended by national guidelines that directly impact the amount of time until a stroke patient is treated in the hospital. Which of the following is NOT one of those actions?

    1) Obtaining a glucose
    2) Calling in a stroke alert to the receiving hospital
    3) Performing a 12-lead
    4) Securing an IV (18g, AC)
    5) Performing a prehospital stroke screen
    6) Maintaining scene time ≤ 15 min

13. The PBPI committee presented data from stroke calls that took place during 2024. Data on IV starts was broken down to look at successful attempts and appropriate size (18g) and location (AC) on potential stroke patients. Once all the variables were factored in, what percentage of patients arrived in the ER with appropriate vascular access?

    A. 37%
    B. 54%
    C. 86%
    D. 27%

14. List 6 risk factors for a stroke:

_____

_____

15. According to the American Heart Association, what percentage of all strokes are ischemic?

    a. 87%
    b. 72%
    c. 68%
    d. 49%

16. Which of these does NOT describe a potential ischemic stroke?

    a. Inadequate or interrupted blood flow in a cerebral vessel
    b. Obstruction can be formed by an embolus from outside cerebral circulation that travels to the brain
    c. Obstruction can be a thrombus that forms in a cerebral vessel
    d. A cerebral vessel ruptures, allowing blood to collect in the subdural space

17. Fill in the blank: "Hemorrhagic strokes account for appx. _____ of all strokes, yet they are associated with _____ mortality than ischemic strokes.

    A. 6 – 20%, lower
    B. 18 – 28%, similar
    C. 8 – 18%, higher
    D. 16 – 29%, higher

18. What is the most common etiology for hemorrhagic stroke?

    _____

19. What are the two types of hemorrhagic strokes?

    _____

20. List 4 signs or symptoms of an intracerebral or subarachnoid hemorrhage:

    _____

    _____

21. Match the symptom with the type of stroke it is most commonly associated with:

    a. Hemorrhagic B. Ischemic

    _____ Severe headache
    _____ Neuro deficits
    _____ Decreased consciousness
    _____ Nuchal rigidity
    _____ Vomiting

22. Select all statements that are true:

    a. Posterior stroke symptoms may be highly variable and inconsistent
    b. Patients may be unaware they are having symptoms of a posterior stroke
    c. A major underlying cause of posterior strokes is an autoimmune disorder
    d. Posterior circulation serves multiple regions of the brain

23. List the 5 Ds of a posterior stroke:

    _____

    _____

24. Match the stroke screen assessment to its description/findings:

    B: balance/coordination _____

    E: eyes _____

    F: face _____

    A: arms _____

    S: speech _____

    T: time _____

    1) Vision changes: blurred vision, diplopia, loss of visual field, bidirectional nystagmus, ptosis, horizontal gaze deviation
    2) Last known well (LKW) time / earlies time of symptom onset
    3) Smile/grimace, show teeth, close eyelids, wrinkle forehead, note unilateral weakness or asymmetry
    4) Unsteady, fall? Finger to nose, rapid alternating movements, heel to shin. Ataxia, tilting to one side, vertigo
    5) Motor: close eyes and hold out both arms (palms up) for 10 seconds, note any drift or unable to hold against gravity
    6) Repeat "you can't teach an old dog new tricks," or have them sing Happy Birthday. Note slurring, slow to respond, word substitution, dysarthria. Note receptive/expressive aphasia

25. What is the definition of an LVO?

_____

26. Which of the following are LVO signs and symptoms (select all that apply)?

A. Fails motor arm drop test
B. Neglect
C. Gaze deviation
D. Ataxia
E. Agnosia
F. Blurred vision
G. Failed finger to nose exam
H. Aphasia

27 – 34

Write next to each description if this is **expressive, receptive** or **global** aphasia:

_____ Can understand speech but difficulty speaking it
_____ Cannot read or write
_____ Can't follow commands
_____ Can speak fluent but will not make sense or lack meaning
_____ May not be able to get words out
_____ Can speak but takes effort
_____ Extreme limitations to understand and speak language

35-36

What is the definition of agnosia? What is a test EMS can perform to test for visual agnosia?

_____

_____

37. What is the definition of neglect?

_____

38. Destination determination: Which of the following statements is true regarding destination determination?

A. Pt. presents with stroke symptoms, but not indicative of an LVO or hemorrhagic stroke. LNW time is ≤ 24hrs AND transport to a comprehensive stroke center is ≤ 30 min., however the closest is a primary stroke center, you must go to the comprehensive.

B. Pt. presents with S/S of an LVO or hemorrhagic stroke AND LKW time is ≤ 24 hrs AND transport to a comprehensive is ≤ 30 min, go to the comprehensive.

39. List 3 benefits/techniques/therapies/advantages to a comprehensive stroke center vs a primary:

_____

_____

_____

40. List 5 stroke mimics:

_____