Nervous System CNS Blood Supply, Quiz A (3 Images)

WITH ANSWERS

1. The caudal pons receives much of its blood supply from the
   A.) anterior inferior cerebellar artery
   B.) posterior cerebral artery
   C.) posterior inferior cerebellar artery
   D.) superior cerebellar artery
   E.) vertebral artery

2. The cingulate gyrus receives most of its arterial supply from branches of the
   A.) anterior cerebral artery
   B.) anterior choroidal artery
   C.) middle cerebral artery
   D.) posterior cerebral artery
   E.) superior cerebellar artery

3. The circle of Willis includes parts of all of the following EXCEPT the
   A.) anterior cerebral artery
   B.) internal carotid artery
   C.) middle cerebral artery
   D.) posterior cerebral artery
   E.) posterior communicating artery

4. An erythrocyte traveling from a distal branch of the middle cerebral artery to the internal
   jugular vein would traverse all of the following EXCEPT the
   A.) confluence of the sinuses
   B.) internal cerebral vein
   C.) superior sagittal sinus
   D.) transverse sinus

5. Sites where small protein molecules would meet a major diffusion barrier include
   A.) capillaries in the choroid plexus
   B.) the pia mater over the surface of the brain
   C.) capillaries in the cerebral cortex
   D.) all of the above
   E.) none of the above

6. A severe language disorder is most likely to follow occlusion of the
   A.) left anterior cerebral artery
   B.) left middle cerebral artery
   C.) left posterior cerebral artery
   D.) right anterior cerebral artery
   E.) right middle cerebral artery
   F.) right posterior cerebral artery
7. This blood vessel is the

A.) anterior cerebral artery
B.) basilar artery
C.) internal carotid artery
D.) middle cerebral artery
E.) posterior cerebral artery
F.) vertebral artery
G.) straight sinus
H.) superior sagittal sinus
I.) transverse sinus
J.) great cerebral vein
K.) internal cerebral vein

8. A 39-year-old handball hustler sat down in the corner of the court to take a break after beating 17 consecutive opponents. He started to watch a handball rolling across the court. A budding neurologist in the stands told a companion that the total blood flow to the handball hustler’s brain didn’t change much when he started watching the ball; instead, it increased in some areas (e.g., visual areas) and decreased in others. Was this correct?
A.) yes
B.) no
9. This blood vessel is the
A.) anterior cerebral artery
B.) basilar artery
C.) internal carotid artery
D.) middle cerebral artery
E.) posterior cerebral artery
F.) vertebral artery
G.) straight sinus
H.) superior sagittal sinus
I.) transverse sinus
J.) great cerebral vein
K.) internal cerebral vein

10. This blood vessel is the
A.) anterior cerebral artery
B.) basilar artery
C.) internal carotid artery
D.) middle cerebral artery
E.) posterior cerebral artery
F.) vertebral artery
G.) straight sinus
H.) superior sagittal sinus
I.) transverse sinus
J.) great cerebral vein
K.) internal cerebral vein