

Test your understanding.

1. Choose the incorrect combination:
 - A. Gemistocytes and repair.
 - B. Red neurones and loss of Nissl substance.
 - C. Rod cells and microglia
 - D. **Oligodendrocytes and peripheral nervous system myelin production**
 - E. Lewy bodies and Parkinson disease

2. Match each neurodegenerative disease with the protein responsible for its pathogenesis:
 1. Alzheimer disease
 2. Parkinson
 3. Huntington Chorea
 4. Fredrick ataxia
 5. ALS
 6. Frontotemporal dementia
 7. Pick disease
 - A. Tau
 - B. Amyloid
 - C. Frataxin
 - D. Protein involved in long term memory
 - E. SOD
 - F. Alpha synuclein

Answer: 1. A and B (A as a secondary effect)

2.F

3.D

4. C.. note, there is no accumulation of frataxin, but a decrease in it.

5. E

6. A

7. A

3. Which of the following is caused by a trinucleotide repeat mutation?
 - A. Fredrick ataxia
 - B. Huntington disease
 - C. Alzheimer
 - D. Pick
 - E. **A and B**

4. Which of the following is the commonest cause of stroke:
- A. Thrombus of the middle cerebral artery
 - B. Embolism in the middle cerebral artery**
 - C. Haemorrhage of the middle cerebral artery
 - D. Thrombus of the anterior cerebral
 - E. Embolus of the anterior cerebral
5. Which of the following is a fatal complication of trans tentorial herniation?
- A. Duret haemorrhages**
 - B. Compressed anterior cerebral artery
 - C. Compressed posterior cerebral artery
 - D. Compression of the oculomotor nerve
 - E. All of the above
6. Intranuclear inclusions are seen in which of the following:
- A. Pick
 - B. Alzheimer
 - C. Huntington**
 - D. ALS
 - E. Fredrick ataxia
7. The source of blood in the subdural hematoma is:
- A. Bridging veins**
 - B. Middle cerebral
 - C. Middle meningeal
 - D. Basilar
 - E. Anterior cerebral
8. A 67 year old male presents with tremors, rigidity and slow movement. You notice that he had stooped posture and diminished facial expressions. He seems to have good cognitive function and no memory loss. All of the following play a role in his disease except:
- A. accumulation of alpha synculein
 - B. accumulation of protein that acts as a prion protein
 - C. lewy bodies
 - D. loss of pigmented neurons in substantia nigra
 - E. accumulation of a protein important for long term memory storage**
9. Which of the following is **incorrect** about amyloid accumulation in the brain
- A. forms extracellular plaques
 - B. causes hyper phosphorylation of Tau protein
 - C. accumulation in the elderly is not necessarily associated with dementia
 - D. increased risk of accumulation in people with Down syndrome
 - E. is the main protein responsible for Pick disease**

Good luck

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