Lecture #04 Cranial Nerves

Question 1: Which deficits will result from a stroke in the internal capsule that spares only the anterior limb?

a) No clinically deficits upon routine testing

b) Ipsilateral hemiparesis without facial paralysis

c) Anterograde amnesia and emotional lability

d) Cognitive deficits and emotional lability

e) Contralateral hemiparesis and contralateral lower facial paralysis

Lecture #04 Cranial Nerves

Question 2: Which cranial nerves carry special visceral sensory fibers?

a) Olfactory, facial, glossopharyngeal, vagus

b) Glossopharyngeal, vagus, accessory, hypoglossal

c) Oculomotor, trochlear, abducens

d) Optic, vestibulocochlear

e) Glossopharyngeal, vagus, hypoglossal

Lecture #04 Cranial Nerves

Question 3: Taste fibers that travel in the facial, glossopharyngeal, and vagus nerves project to which brainstem area?

a) Olfactory tubercle

b) Caudal solitary nucleus

c) Rostral solitary nucleus

d) Chief (or main, or principal) sensory nucleus

e) Anterior perforated substance

Lecture #04 Cranial Nerves

Question 4: What does the sulcus limitans divide?

a) Sensory from motor nuclei

b) Somatic from pharyngeal nuclei

c) Open from closed medulla

d) Visceral from pharyngeal nuclei

e) Spinal cord from medulla

Lecture #04 Cranial Nerves

Question 5: A stroke of the right corticobulbar tract in the genu of the internal capsule will result in which?

a) Complete paralysis of the right side of the face

b) Only paralysis of the right lower face

c) No paralysis because the left corticobulbar fibers end bilaterally in motor nuclei of the brainstem

d) Only paralysis of the left lower face

e) Complete paralysis of the right side of the face

Lecture #04 Cranial Nerves

Question 6: Where are the special sensory cranial nerve nuclei located?

a) Caudal diencephalon and rostral midbrain

b) Caudal medulla and rostral spinal cord

c) Caudal pons and rostral medulla

d) Midbrain tectum

e) Caudal midbrain and rostral pons

Lecture #04 Cranial Nerves

Question 7: A patient is diagnosed with a right medial medullary syndrome. What cranial nerve signs would you expect to see in this patient?

a) Left tongue atrophy

b) Right tongue atrophy

c) Right facial paralysis

d) Left facial paralysis

e) Left lower facial paralysis

Lecture #04 Cranial Nerves

Question 8: An upper motor neuron (supranuclear) lesion of the facial nerve is produced by interrupting the corticobulbar fibers to the facial motor nucleus. Such a lesion on the left side of the brain will produce which?

a) No paralysis at all because the corticobulbar fibers are crossed and uncrossed

b) Only paralysis of the left lower face

c) Only paralysis of the right lower face

d) Complete paralysis of the right side of the face

e) Complete paralysis of the left side of the face

Lecture #04 Cranial Nerves

Question 9: Which is the cranial nerve component (column) of the hypoglossal nerve?

a) Special motor

b) Somatic motor

c) Somatic sensory

d) Pharyngeal motor

e) Visceral motor

Lecture #04 Cranial Nerves

Question 10: A 65 year old man presents with a history of progressive weakness of the muscles of mastication, some difficulty in swallowing accompanied by rather raspy speech, difficulty in speaking and weakness of facial expression. What cranial nerve cell column is he suffering from lesions to?

a) Somatic sensory

b) Parasympathetic

c) Somatic motor

d) Special sensory

e) Pharyngeal (Branchial) motor

Lecture #04 Cranial Nerves

Question 11: Which syndrome includes ipsilateral loss of the gag reflex?

a) Dorsal midbrain

b) Medial medullary

c) Ventral midbrain

d) Medial midbrain

e) Lateral medullary

Lecture #04 Cranial Nerves

Question 12: A 65 year old man has been experiencing progressive weakness of movements of the eyes and tongue. What cranial nerve cell column is he suffering from strokes to?

a) Parasympathetic

b) Somatic motor

c) Special sensory

d) Pharyngeal motor

e) Somatic sensory

Lecture #04 Cranial Nerves

Question 13: To which cranial nerve component (column) do axons of the trochlear nerve belong?

a) Somatic motor

b) Pharyngeal motor

c) Visceral motor

d) Special visceral motor

e) Pharyngeal sensory

Lecture #04 Cranial Nerves

Question 14: A research subject is suspected of having a stroke. When he is asked to protrude his tongue, it deviates to the left. Where is the stroke?

a) Right lateral medullary syndrome

b) Right medial medullary syndrome

c) Left genu of the internal capsule

d) Left lateral medullary syndrome

e) Left medial medullary syndrome

Lecture #04 Cranial Nerves

Question 15: Which is a list of only parasympathetic visceral motor nuclei?

a) Intermediolateral cell column, Edinger-Westphal, inferior salivatory

b) Edinger-Westphal, inferior and superior salivatory, dorsal motor nucleus of vagus

c) Trochlear, Horner's, superior and inferior salivatory

d) Trochlear, Intermediolateral cell column

e) Intermediolateral cell column, Edinger-Westphal, superior salivatory

Lecture #04 Cranial Nerves

Question 16: Where are the cell bodies of third order neurons of cranial nerves?

a) Cranial nerve motor nuclei

b) Infranuclear

c) Sensory ganglia

d) Cranial nerve sensory nuclei

e) Thalamus

Lecture #04 Cranial Nerves

Question 17: Which is clinically the most obvious exception to the bilateral projection of cranial nerve upper motor neurons?

a) Facial nerve

b) Hypoglossal nerve

c) Trigeminal nerve

d) Ambiguus nerve

e) Mesencephalic nerve

Lecture #04 Cranial Nerves

Question 18: An occlusion of the posterior inferior cerebellar artery likely causes which brainstem-related deficit?

a) Contralateral loss of body pain and temperature sense

b) Contralateral Horner's syndrome with miosis and ptosis

c) Contralateral facial paralysis

d) Contralateral facial paralysis of lower face only

e) Ipsilateral body paralysis

Lecture #04 Cranial Nerves

Question 19: To which cranial nerve component (column) do axons conveying hearing and balance belong?

a) Somatic sensory

b) Special somatic sensory

c) Visceral sensory

d) Special visceral sensory

e) Pharyngeal sensory

Lecture #04 Cranial Nerves

Question 20: Which is caused by brainstem damage due to occlusion of a branch of the posterior cerebral artery, in addition to ipsilateral oculomotor (III) nerve palsy?

a) Contralateral Horner's syndrome with miosis and ptosis

b) Contralateral sympathetic autonomic deficits

c) Contralateral hemiparesis

d) Ipsilateral hemiparesis

e) Ipsilateral hypoglossal nerve palsy

Lecture #04 Cranial Nerves

Question 21: Where are corticobulbar axons located?

a) Medial corticospinal tract

b) Posterior limb of internal capsule

c) Genu of internal capsule

d) Anterior limb of internal capsule

e) Lateral corticospinal tract