Neurology – QBank

1) 43-year old male presents to the ER complaining of severe headache that started 15 miutes ago, he described it as the worst headache in his life, the patients is abnormally thin and tall, and he was diagnosed with a connective tissue disease, the most likely cause of his headache is

a) Meningitis
b) Temporal artiritis
c) Subarachnoid hemorrhage
d) Cluster headaches
e) Migraine

2) 56-Year old female presents with headaches that is localized to the right side of her head, she states that in the last few days she was abandoining her normal daily tasks, and seeks bed in dark quite room, the most likely diagnosis is

a) Tension headache
b) Cluster headache
c) Meningitis
d) Migraine
e) Temporal Artitis

3) 72-year old male presents to the ER with difficulty moving his right arm, lower facial drop and slurred speech, the most likely diagnosis is

a) Middle cerebral artery stroke
b) Anterior cerebral artery stroke
c) Posterior cerebral artery stroke
d) Anterior spinal arterty stroke
e) Posterior spinal artery stroke

4) Recurrent dizziness epidosodes can be caused by all the following except

a) Cerebrovascular disease
b) Cardiac arrhythmia
c) Hyperventilation
d) Hypertension

5) 66-year old female presents with epidosed of vertigo, each episodes lasted for 30 minutes, and it was associated with nausea and vomiting, the most likely diagnosis is

a) Benign paroxysmal positional vertigo
b) Transient ischemic attacks
c) Ménière's disease

d) Migranous Vertigo

6) 25-year old female presents with numbness and spactic paresis in her left arm, she has a hisroy of eye pain worsened by eye movement accombanied by vision changes, the most likely diagnosis is

a) Ischemic Stroke in the Posterior cerebral artery
b) Multiple sclerosis
c) Brain tumor
d) Meningitis

7) 42-year old married caucassian male presents multiple episodes of seziures, while he has in ED, hed had three episodes, while hes ws seziuring, he had pelvic thrusts, and no post-ictal confusion were present, the most likely diagnosis is

a) Frontal Lobe seizure
b) Temporal Lobe seizure
c) Funcional Attacks
d) Generalized tonic-clonic seziures
e) Absence seizures

8) 65-year old man presents with tremors that decrease with movement, his gait was characterized by reduced stride length (shuffling gait) and loss of arm swing, his facial epxressions were absent, given that the patient had a history of manganese exposure, the most likely diagnosis is

a) Parkinson Disease
b) Huntington Disease
c) Cerebellar Stroke
d) Charcot-marry teath syndrome

9) 14-year old boy presents with a slow and progressive tremors that affects mostly the upper extermities, his mother had the same condition, for which she had treated with non-specific Betablockers, regarding this condition, one of the following is trure

a) These symptoms are usually associated with stroke
b) These symptoms improve with alcohol intake
c) Associated with Wilsone Disease
d) Associated with balissmus

10) 45-Year old lady presents with deficulty abducting her eyes, the patient had a history of hypercoagulability and was diagnosed with Cavrnous Sinus Symdrome, one of the following is not an expected complication of this condition

a) Ptosis
b) Difficulty going downstirs
c) Decreased Maxillary sensation
d) Decreased Mandibular sensation
e) Absence of the corneal reflex

11) 57-year old man presents with progressively enlarging mass in the right side of his face, after investigation, he was diagnosed with Pleomorphic adenoma in the parotic gland, all of the following are expected to be seen in this pateints presentation except

a) In ability to close his eye
b) Loss of the nasolabial fold
c) Deviation of the mouth to the right side
d) Loss of forehead wrinckles
e) Hyperacusis

12) 10-years old boy presents with decreased ability to dorflex his right foot, he needs to raise his foot higher than normal in order to walk, and a slapping sound is heard when his foot touches the ground, he had a history of fibular head fracture, paralysis of which on of the following caused this patient's presentation

a) Femoral Nerve
b) Obturator Nerve
c) Common peroneal nerve
d) Sural Nerve
e) Tibial Nerve

13) 75-year old man presents to the ER with difficulty moving the right side of his body, physical examination shows loss of the right visual field in each eye, the digosis

a) Total Anterior circulation Syndrome
b) Partial Anterior Circulation Syndrome
c) Posterior Cirulation Syndrome
d) Lacunar Infarcts

14) One of the following matches is wrong

a) Waddling Gait – Muscular Dystrophies
b) Cerberallar Diseases – Rebounding
c) Bulbar Palsy – Spastic Tounge
d) Pronator Drift – Good specificity and sensitivity for UMN lesion
e) Kernig's Sign – Increased neck stinfness, by flexing the knee on an extended hip

15) One of the following is a cause for Bilateral Facial Palsy

a) Guillian Barre Syndrome
b) HIV
c) Lyme disease
d) Leprosy
e) All of the above

16) 56-year old woman presents with general weakness, and abnormal movements, during physical examination, the Uvula was diveated to the right side, upon imaging, a small tumor were found in the posterior cranial fossa, causing compression on the brainstem, one of the following is the cause of his deviated uvula

a) Compression of the Vagus nerve nulceus
b) Compression of the Glossopharyngeal nerve nucleus
c) Compression of the Vestibulococclear nerve nucleus
d) Compression of the Accessory nerve nucleus

17) Regarding the same previous case, if the right hypoglossal nerve was compressed, one of the following are expected to be seen in this patient

a) Jaw deviation to the right
b) Absent Gag reflex
c) Tongue deviation to the left
d) Absent Jaw jerk reflex
e) Tongue deviation to the right

18) 53-year old woman presents with enlarged mass in her anterior neck, accompanied by symptoms of lethargy, muscle weakness and weight gain, her labs showed low T3, Low T4, Low rT3 and increased TSH, a thyroid gland tumor was suspected and thyroidoctomy where preformed, after the surgery, she had dysphonia, and a bovine cough mostly due to a nerve injury, the injured nerve is a branch from

a) CN IX
b) CN X
c) CN XI
d) CN XII

19) 62-years old man presents with abnormal gait and instability that worsens with closing his eyes, the most likely diagnosis is

a) Sensory ataxia
b) Bilateral Vestibular failure
c) Apraxic Gait
d) Central Ataxi
e) A+B

20) 59-years old man presents with back pain that started two months ago, upon examination, a tumor was found and resected from the T10 area of the spinal cord, after the surgery, the patient started to feel weakness and decreased proprioception below T10, one of the following is not expected to also be seen in this patient

a) Spasiticity in the muscle of the right lower limb
b) Loss of pain and temperature sensation from right side below T10
c) Hyperreflexia in the Knee jerk
d) Normal muscle bulk in the right lower limb
e) None of the above

Q Number	Answer	Explanation
1	C	This patient suffers from subarachnoid hemorrhage due to ruptured sacular aneuryms in his brain Headcdach associated with subarachnoid hemorrhage is severe and usually described as 'the worst headache of my life' by the patient Causes of subarachnoid hemorrhages are a) Trauma b) Ruptured sacular aneurysm Risk factors for the development of aneurysms in the brain include a) Marfan syndrome (this patient is diagnosed with marfan) b) Polycystic Kidney disease c) Ehlers Danlos syndrome d) Age e) Hypertension f) Smoking
2-	D	Featurse of migraine a) Headache is localized to one side of the head during the attack b) Associated with photophobia and phonophobia (that's why this patient seeks a dark quite room)
3	A	Cerebral stokes are usually distinguished by their clinical presentation, and in case of MCA stroke, it presents with a) Contralateral paralysis of face and upper limbs b) Contralateral sensory loss in face and upper limbs c) Broca/Wernicke Aphasia (if left sided) d) Hemineglect (of right sided)
4	D	
5	C	Feature of Ménière's vertigo a) Epidoses lasts for minutes to hourse b) Associated with a. Hearing loss and tinnitus b. Nasuea and Vomiting BPPV vertigo episodes lasts for seconds only TIAs causes vertigo presents with stroke symptoms

6	B	Mulitble sclerosis presents with UMN lesion symptoms, with history of vision changes (or vice versa) She has a history of optic neuritis (eye pain with movement, and vision changes), caused by MS
7	C	Functional Attacks are from of seziures that are not considered epileptic seuizers, as they are characterized by a) Multiple attacks during the day (this patient had three in one day) b) Pelvic thrusts instead of flexion and extension movements c) Absence of Postictal confusion Frontal lobe seziures are more associated move extension and flexion movements, nystagmus and difficulty speaking Temporal lobe seiures are associated with autonomic and psychic symptoms Generalized tonic clonic seziures are associated with episodes of excessive movements, and epidosed of body stiffening
8	A	Parkinson disease is caused by degeneration of the Substania nigra in the basal ganglia, and it is characterized by a) Muscle Rigidity and decreased muscle movements – Dyskinesia (This may lead to the absence of facial expressions) b) Resting Tremors → Tremors that are present during rest and decreased with movement, these tremors usually indicate a basal ganglia lesion a. Intentiona Tremors → Tremors that are absent during rest and increase with movement, indicates cerebellat lesion c) Wide based shuffling gait without arm swinging (Parkinosnian gait) -Exposure to manganese is a risk factor of the development of Parkinson
9	B	Essential tremors are

		a) Most common movement disorders b) Slow and progressive tremors that affects mostly the upper extremities c) Symptoms improve with alcohol d) Believed to Autosomal dominant e) First line treatment in nonspecific beta blockers
10	D	This patient presents with Abducens nerve (CNVI) lesion, secondary to cavernous sinus syndrome (CSS) CSS → Thrombosis inside the cavernous sinus, associated with hypercoagulability and certain infections, symptoms are due to compression of the structures inside the sinus Content of the CSS a) CN III → Compression may lead to ptosis, miosis, and paralysis of most of the extraocular muscles b) CN IV → Compression may lead to paralysis of the superior oblique muscle → Defect in the downward movement of the eyes → Difficulty going downstairs and reading c) CN VI → Compression may lead to paralysis of the lateral rectus muscle → Defect in the abduction of the eys d) CN V1 → Compression of the ophthalmic division of the trigeminal nerve may lead to decreased sensation in the forehead and loss of the corneal reflex e) CN V2 → Compression of the maxillary division of the trigeminal nerve may lead to decreased sensation in the maxillary area Note → The CN V3 is not found in the cavernous sinus, so it is impossible to notice a decreased sensation in tha mandibular area, or weakenss in the mastication muscle in case of CSS
11	C	Tumors in the parotid gland can compress the facial nerve and cause facial nerve palsy, producing symptoms that include a) Paralysis of facial muscles (forehead wriknckles, nasolabial folds, closing the eyes, smiling, ..) b) Loss of taste sensation from the anterior two thirds of

		the tongue c) Hyperacusis → Hearing the qiute sounds as very oud ones →Due to paralysis of the stapedius muscle which is innervated by CNVII
12	C	Common peronial nerve innervates the anterior and the lateral compartment of the legs, thus, it is resobsible of the dorslfexion of the foot Foot Drop → Loss of the ability to dorsflex the foot, so in order to walk, the patient must raise his foot higher in the air Fracture of the ead of the fibula is one of the common causes for common peronial nerve injury
13	B	**7.3 Clinical classification of stroke** **Total anterior circulation syndrome (TACS)** • Hemiparesis, hemianopia and higher cortical deficit (e.g. dysphasia or visuospatial loss) **Partial anterior circulation syndrome (PACS)** • Two of the three components of a TACS • OR isolated higher cortical deficit • OR motor/sensory deficit more restricted than LACS (see below) **Posterior circulation syndrome (POCS)** • Ipsilateral cranial nerve palsy with contralateral motor and/or sensory deficit • OR bilateral motor and/or sensory deficit • OR disorder of conjugate eye movement • OR cerebellar dysfunction without ipsilateral long-tract deficits • OR isolated homonymous visual field defect **Lacunar syndrome (LACS)** • Pure motor > 2 out of 3 of face, arm, leg • OR pure sensory > 2 out of 3 of face, arm, leg • OR pure sensorimotor > 2 out of 3 of face, arm, leg • OR ataxic hemiparesis
14	C	
15	E	
16	A	
17	E	The Hypoglossal innerates most of the tongue muscles, and unilateral hypoglossal nerve injury usually causes tongue deviation toward the affected side Remember – Tongue and Jaw Deviation are toward the lesion, other deviations are away from the lesion (e,g Uvula)
18	B	Thyroid gland surgeries usually carry the risk of injuring the recurrent laryngeal nerve, which is a branch from the

		vagus nerve (CN X) Signs and symptoms of recurrent laryngeal nerve injury include dysphonia, hoarseness and bovine cough
19	E (A+B)	This is a typical presentation of Romberg sign, which is instability that worsens with eyes closure, indicates sensory ataxia and bilateral vestibular failure
20	B	Brown-Sequard Syndrome → Hemidissection of the spinal cord results in a) Ipsilateral UMN injury below the levels of the lesion a. In this case, presented as hypereflexia and normal muscle bulk b) Ipsilateral LMN injury at the level of the lesion c) Ipsialteral loss of proprioception and vibration below the levels of the lesion d) Contralateral loss of pain and tempreture below the levels of the lesion