

Pharmacology

- 1- The best drug for treating diarrhea among these is – Loperamide
- 2- A drug that can be used in status epilepticus - Diazepam
- 3- Correct statement – Triazolam hypnotic dose will more probably cause tolerance than the anxiolytic dose
- 4- A good pharmacological decision – Methadone use for severe pain unresponsive to morphine
- 5- A boy came to the emergency with respiratory depression, miosis and constipation after taking a large dose of a drug, the best drug to be used to decrease this effect – Naloxone

Physiology

- 6- True about Pontine RST and Medullary RST – both project mainly to the ipsilateral part of the body
- 7- The extra-pyramidal pathway covering almost all of the muscles of the body – reticulospinal tract
- 8- True about motor cortex – it is connected to other motor regions like the putamen, red nucleus and the cerebellum
- 9- An MRI showing a tumor in the paravermis of the anterior lobe of the cerebellum, all following symptoms exist except – vertigo and nystagmus
- 10- Not associated with PCML damage – allodynia
- 11- A woman with only lost pain sensation in her hands, site of lesion – cervical region of the spinal cord
- 12- A woman suffering difficulty walking, during testing she kept falling to the left side of her body and her arm movements were coordinated, the most probable site of the lesion is – the left lateral vestibulospinal tract
- 13- A man who was stabbed in the neck in a fight, the knife passed between vertebrae C5 and C6 and cut the right half of the spinal cord, what is a correct manifestation – loss of all sensations innervated by the C6 segment of the spinal cord in the right side
- 14- Which syndrome may cause loss of olfaction – Foster-Kennedy syndrome
- 15- A patient with left hand rest tremor, shuffling gait and difficulty in standing after taking a seat, a lesion in this can cause such a lesion – substantia nigra
- 16- A patient with ascending weakness in his right lower limb due to an extramedullary tumor affecting the cord laterally from behind the denticulate ligament, what would be the first manifestation – ataxia in the ipsilateral lower limb
- 17- True about hypocalcemia – is associated with increased skeletal muscle excitability
- 18- The dermatome for sensation from the knee – L3, L4
- 19- Patient diagnosed with cerebellum, a symptom he has – hypotonia

Anatomy

- 20- Wrong statement – ML projects to the thalamus through VPM (removed)
- 21- Wrong about motor cortex – connected to ipsilateral body
- 22- Wrong combination – activation of gamma motor neuron leads to – faster muscle contraction (maybe)
- 23- The cause of spasticity in spinal cord lesions is loss of – medullary reticulospinal tract

- 24- A patient unable to move the left eye out and below and spastic hemiplegia in the right half of the body, obstruction is most likely in – posterior cerebral artery (removed)
- 25- Wrong about pain – connected only to laminae I and V
- 26- Wrong combination – forgot
- 27- Wrong about the eye – contraction of ciliary muscle makes the lens thinner
- 28- Wrong statement – superior olivary nucleus is the only auditory nucleus that doesn't receive input from both ears
- 29- Wrong about eye – beta small ganglionic cells show center-surround activation
- 30- Wrong about MLF – if right one is lost, when asked to look left, left eye cannot abduct
- 31- Wrong about oculomotor lesion – mild ptosis
- 32- Wrong about a lesion to the left posterior limb of the internal capsule – mouth deviates to the right
- 33- Wrong about basal ganglia – when a new task is learned with skill, motor loop has decreased activity
- 34- Wrong about Parkinson's disease – underactive GPi
- 35- Wrong about cerebellum – output causes only inhibition of agonist muscle at the end of movement
- 36- Wrong statement – intermittent cradication is an example of visceral pain

Microbiology

- 37- Wrong statement – toxoplasma is tissue specific
- 38- Wrong about N. meningitidis – resistant to dryness
- 39- True – HSV 2 is harder to diagnose due to absence of genital infection
- 40- A patient with CJD, wrong – his survival median is 14 months
- 41- Not caused by Arboviruses – I really don't know
- 42- Only bad thing about OPV compared to IPV – rarely can cause paralytic poliomyelitis

Pathology

- 43- Most common brain malformation – posterior NT defect (apparently the doctor meant CNS malformations and not brain)
- 44- Wrong about brain herniation – cingulate gyrus herniates in transtentorial herniations
- 45- Wrong combination – amyloid is associated with MS
- 46- True about amyloid – proteins that share the same physical structure of an unbranched fibrillar protein
- 47- Wrong about MS – it affects both peripheral and central nerves

Biochemistry

- 48- Wrong about catecholamine synthesis – dopamine and norepinephrine have vesical synthesis
- 49- Pedigree for color blindness – C (X-recessive)

Lab

- 1- Frontal section at body of lateral ventricle – wrong – you can see two parts of the limbic system

- 2- Axial section at body of lateral ventricle with infarction in corona radiata – what happens – 1,2,4 (contralateral hemiplegia, hemiface, temporary hemianesthesia)
- 3- Angle axial section – wrong – you can see the body of caudate
- 4- Angle axial section pointing at striatum – true in Parkinson's – b and c (according to the doctor)
- 5- Image of brainstem pointing at middle cerebellar peduncle – true – none
- 6- Section through cerebellum pointing at dentate nucleus – true – all
- 7- Frontal MRI pointing at occipital lobe and cerebellum – wrong – both receive blood from posterior cerebral artery
- 8- A patient with intention tremor – wrong – lesion accompanied by paresis and paralysis
- 9- A patient with upper limbs atrophy and paralysis and areflexia and lower limbs hyperreflexia and spasticity – lesion at – lower cervical region
- 10- ICA angiogram – wrong – embolus in anterior cerebral artery is more common than in middle
- 11- Sagittal MRI showing large pituitary tumor – this causes – bitemporal hemianopia
- 12- A patient with marked ptosis and paralysis of medial rectus in the right eye, with normal movement of the other eye – lesion at – right oculomotor
- 13- A patient unable to close his left eye completely and mouth deviated to the right upon smiling – lesion at 1 (left facial)
- 14- An X-ray of the lower lumbar spine – wrong – posterolateral disk prolapse between L4 and L5 usually affects L4 root
- 15- Picture of toe position test – to perceive the position of the toe we don't need – gracile nucleus