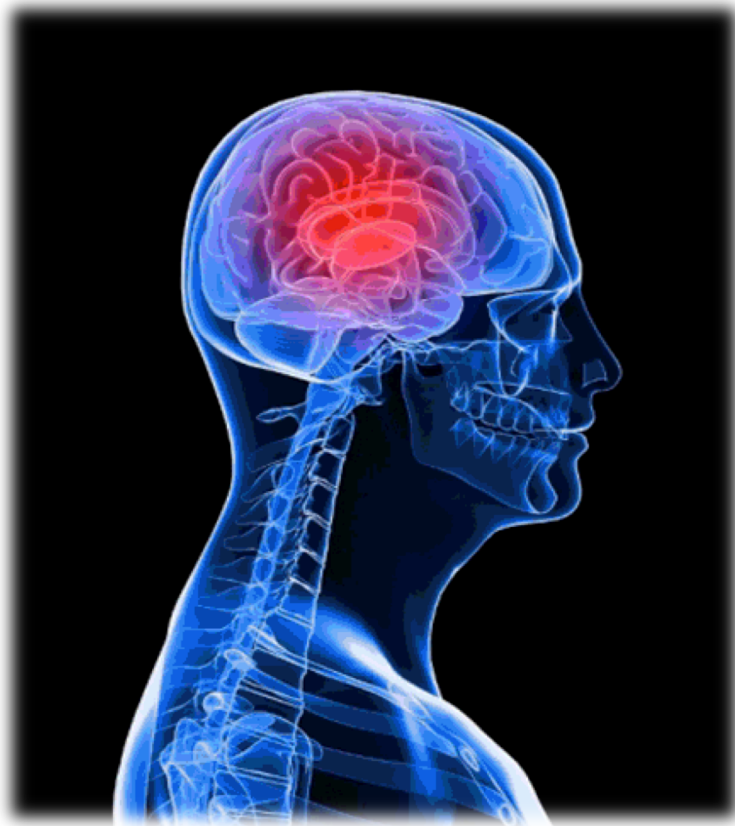


CNS Block

Revision Questions for week : 8&9



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Physiology :

Aging

1-Which two of the following are not true regarding neurological System changing with age:

- A. Loss of dendritic arborization
- B. The ability to learn decrease dramatically.
- C. Reduced Sympathetic nervous system activity
- D. Recall memory is affected more than cognitive function.
- E. Increased cerebral amyloid and carbonic anhydrase

Answer: B&E

2-A 85 year ole male after wearing a thob with tight collar he had a syncope. What is the best explanation for this:

- A. He couldn't breathe well because of the tight collar
- B. Carotid sinus hypersensitivity
- C. Vasoconstriction caused by pressure of the collar

Answer: B



Pathology :

Congenital Malformations and Hydrocephalus :

1. An absence of normal gyration and a smooth-surfaced brain. The cortex is abnormally thickened and is usually only four-layered (instead of normal six-layered) is called:

- A. Microencephaly
- B. *anencephaly*
- C. *Lissencephaly*
- D. *Encephalocele*

Answer: C

2- An encephalocele is:

- A. Malformation of the anterior end of the neural tube, with absence of the brain and top of skull
- B. Diverticulum of malformed CNS tissue extending through a defect in the cranium
- C. Absence of normal gyration
- D. Downward extension of *vermis* through the foramen magnum

Answer: B

3)-2. A female neonate is noted at birth to have a gross deformity of her lower back. Examination of the subcutaneous lesion reveals disorganized neural tissue with entrapment of nerve roots. What is the appropriate diagnosis?

- A. Meningocele
- B. Meningomyelocele
- C. Rachischisis
- D. Spina bifi da occulta
- E. Syringomyelia

Answer: B

Meningomyelocele. Neural tube defects (dysraphic anomalies) reflect impaired closure of the dorsal aspect of the vertebral column. These abnormalities are classified according to the extent of the defect, ranging in severity from spina bifi da occulta to meningocele, meningomyelocele, and rachischisis. Spina bifi da (choice D) is restricted to the vertebral arches and is usually asymptomatic. Meningocele (choice A) permits protrusion of the meninges as a fluid-filled sac. Meningomyelocele (choice B) exposes the spinal canal and causes the nerve roots to be entrapped. Rachischisis (choice C) is an extreme defect, often without a recognizable spinal cord. Syringomyelia (choice E) is a congenital malformation, in which a tubular cavitation (syrinx) extends for variable distances along the entire length of the spinal cord. **Diagnosis:** Neural tube defect, meningomyelocele

4-Which ONE of the following diseases consist of hydrocephalus,small posterior fossa,downward extension of vermis through the foramen magnumand lumbar myelomeningocele:

- A. *Arnold-Chiari malformation*
- B. Colloid cyst
- C. Aqueductal stenosis

Answer: A

5.Membranoproliferative glomerulonephritis(MPGN) which is one of the complications of the shunt (management of hydrocephalus). MPGN in this case can be detected by immunofluorescence and there will be presence of:

- A. IgG
- B. IgA
- C. IgE
- D. IgM

Answer: D MPGN that happens due to other causes is detected by presence of IgG. But particularly MPCN which is caused by the shunt detected by IgM.

6.If there is an obstacle to the flow of CSF within the ventricular system, then a portion of the ventricles enlarges while the remainder does not. This pattern is referred to as:

- A. Communicating
- B. Continuation
- C. Noncommunicating
- D. Noncontinuation

Answer: C

7- A female neonate is noted to have a pronounced enlargement of her head (shown in the image). She develops convulsions. MRI reveals excessive accumulation of cerebrospinal fluid,ventricular enlargement, and atrophy of the cerebral cortex.This developmental birth defect was most likely caused bywhich of the following mechanisms of disease?

- A. Atresia of the aqueduct of Sylvius
- B. Birth trauma
- C. Congenital brain tumor
- D. Maternal folate deficiency
- E. Oligohydramnios

Answer: A



Atresia of the aqueduct of Sylvius. Congenital hydrocephalus refers to an excessive amount of CSF and ventricular enlargement. Congenital atresia of the aqueduct of Sylvius is the most common cause of congenital hydrocephalus, occurring in 1 in 1,000 live births. Histologic examination of the midbrain may disclose multiple atretic channels or an aqueduct narrowed by gliosis. Congenital brain tumors (choice C) are rare. The other choices are not associated with congenital hydrocephalus. Because the infantile cranium expands easily, symptoms of increased intracranial pressure are generally absent. However, convulsions are common, and optic atrophy with blindness can occur.

Diagnosis: Hydrocephalus

Which one of the following is right concerning a specimen of an infected patient with meningitis:

- A. The first thing we can see is infiltration of neutrophils.
- B. Bacteria on a Gram stained smear a few hours before the neutrophils appear
- C. Nothing is there in first few hours
- D. Bacteria appears at the same time neutrophils appear.

Answer: B

Waterhouse-Friderichsen syndrome is a complication of meningitis. It characterizes by:

- A. venous occlusion which will lead to hemorrhagic infarction of the underlying brain
- B. Cerebral abscess
- C. Focal cerebritis & seizures
- D. hemorrhagic infarction of the adrenal glands and cutaneous petechiae

Answer: D

After doing a CT scan for a patient we find a well-circumscribed intraparenchymal mass we did a lumbar puncture and CSF examination revealed that there was a pleiocytosis made up of mixture of polymorphonuclear and mononuclear cells. The protein level was elevated with normal glucose content .What is the most likely diagnosis for this patient:

- A. Brain Abscess
- B. Meningitis
- C. Tuberculoma
- D. Aseptic Meningitis

Answer: C Brain abscess contains only scanty cells. No pleiocytosis



Pharmacology :

Antidepressant :

1-Monoamine oxidase inhibitors can cause:

- A. -pethidine intoxication
- B. -Dry mouth
- C. -Lower seizure threshold

Answer: A

2-One of the tricyclic antidepressants side effect is :

- A. -Lower seizure threshold
- B. -Hepatotoxicity
- C. -weight loss

Answer: A

3-which antidepressant doesn't cause sexual dysfunction:

- A. -Fluoxetine
- B. -Bupropion
- C. -Imipramine

Answer: B

4-which antidepressant is preferred in cancer patient:

- A. -Mirtazapine
- B. -Trazodone
- C. -Nortriptyline

Answer: A

Anaxolytic drugs

1-Patient is having depression with panic disorder which drug is best to use in this case:

- A. -Alprazolam
- B. -Triazolam
- C. -Lorazepam

Answer: A

2-which one of these drugs decrease the effect of benzodiazepines:

- A. -Cimetidine
- B. -Alcohol
- C. -rifampicin

Answer: C

3-which one of the anxiolytics is not effective in panic attacks:

- A. -Buspirone
- B. -Fluoxetine
- C. -atenolol

Answer: A

Antiparkinsonism

1-haypertensive crises occur when levodopa is combined with :

- A. -phenelzine
- B. -pyridoxine
- C. -Bromocriptine

Answer: A

2-Bromocriptine is contraindicated in:

- A. -Glaucoma
- B. -Patients with history of melanoma
- C. -Peripheral vascular disease

Answer: C

3-which drug is used in case of drug-induced parkinsonism:

- A. -Benztropine
- B. -Entacapone
- C. -Pramipexole

Answer: A

Meningitis

1-Which one of the following drugs can be inactivated by lactamase enzyme

- A. Ceftriaxone
- B. Amoxicillin
- C. Augmenten

Answer: B

And to prevent that we combine the penicillin with **B-lactamase inhibitors** like (**Clavulanic , sulbacta**)

If the meningitis caused by penicillin resistant pneumococci we give combination of **Vancomycin with** with 3rd generation cephalosporins(**Ceftazidime & Ceftriaxone**)

2-Imipenem is inactivated by dehydropeptidases, so it is given with:

- A. Sulbactam
- B. Cilastatin
- C. Clavulanic acid
- D. Ceftriaxone

Answer: B

3-Red man syndrome due to histamine release is a side effect of which one of the following drugs:

- A. Imipenem
- B. Ceftazidime
- C. Vancomycin
- D. Ciprofloxacin

Answer: C

4-Which one of the following drugs is contraindicated in Growing children because it has effect on Cartilag:

- A. Imipenem
- B. Ceftazidime
- C. Vancomycin
- D. Ciprofloxacin

Answer: D

Alcohol

1-Which of the following is true concerning Alcohol:

- A. Rate of elimination is not concentration-dependent
- B. When the concentration is high the elimination increases and vice versa
- C. It's CNS activator
- D. It's CNS depressant

Answer:A&D

2-To manage Alcohol withdrawal by giving a weak NMDA receptor antagonist & GABA activator to reduce psychic craving. Which one of the following drugs provide these effects:

- A. Clonidine
- B. Acamprosate
- C. Naltrexone
- D. Benzodiazepines

Answer: B

3-To prevent alcohol relapse we give:

- A. Acamprosate
- B. Naltrexone
- C. Benzodiazepines
- D. Disulfiram

Answer: D

4-Acute alcohol use causes bleeding with Warfarin because:

- A. It inhibits liver enzyme, decreases metabolism of some drugs
- B. It induces liver microsomal enzymes, decreases metabolism of some drugs
- C. It inhibits liver enzyme, increases metabolism of drugs
- D. It induces liver microsomal enzymes, increases metabolism of drugs

Answer: A

5-Alcoholic patient took a drug then he developed a major GI bleed and ulcer. What do you think the drug he took and causes this problem:

- A. Codeine
- B. Acetaminophen
- C. NSAIDs
- D. Methadone

Answer: C

MCQ from Prof. Alhaider

6-Depressed patient on Fluoxetine decided to quit the drug as he had impotence after 2 months. Also, he is smoker and wants to find a drug that helps him for depression and to quit smoking as well. The best choice:

- a) Amitriptyline
- b) Venlafaxine
- c) Citalopram
- d) **Bupropion**
- e) Mirtazapine

7-SSRIs are much less effective than tricyclic antidepressants in the management of

- a) Bulimia
- b) Chronic pain of neuropathic origin
- c) Obsessive-compulsive disorder
- d) Premature ejaculation

8-Which one of the following antidepressants is most likely to be of a value in Obsessive-compulsive disorders?

- a) Amitriptyline
- b) Bupropion
- c) Clomipramine
- d) Venlafaxine
- e) Mirtazapine

9-Compared with other antidepressant drugs, mirtazapine has distinctive ability to act as an antagonist of:

- a) Beta-adrenoceptors
- b) D2 receptors
- c) Alpha2 adrenoceptors
- d) 5-HT transporters
- e) NE transporters

10-Antidepressant drug with potent 5-HT₂ antagonistic activity includes

- a) Amitriptyline
- b) Nefazadone
- c) Venlafaxine
- d) Fluoxetine
- e) Bupropion



Biochemistry:

1-Presence of Xanthochromia in CSF specimen indicates:

- A. Traumatic tap
- B. Subarachnoid hemorrhage (SAH)
- C. CNS infection
- D. Demyelination disease.

Answer :B

2-After doing a lumbar puncture we found that there's a high protein concentration specially IgG with approximately normal albumin. That suggest:

- A. Bacterial infection
- B. Viral infection
- C. multiple sclerosis (MS)
- D. Cerebral hemorrhage

Answer :C

but if albumin is increased it'll be due to increase permeability of BBB which suggests bacterial or fungal infection or cerebral hemorrhage.

3-How to differentiate between bacterial and TB meningitis:

- A. CSF glucose level
- B. Protein level
- C. Chloride level
- D. Cell count

Answer :C

In bacterial infection there'll be extremely high WBCs especially polymorphs up to 5000 while in TB meningitis there'll be a high WBCs but not as high as in bacteria.

4-After an accident Mohammed had rhinorrhea and the doctor wants to make sure whether it's a CSF or not. What do we measure to say if't a CSF or not:

- A. β -transferrin
- B. Protein concentration
- C. IgG
- D. Glucose

Answer :A



Psychiatry:

1-Which one of the following is a type of Schizophrenia:

- A. -differentiated type
- B. -Catatonic type
- C. -organized type

Answer:B

2-in the basal ganglia of Schizophrenic patient :

- A. -decrease glutamate, increase dopamine
- B. -increase glutamate, decrease dopamine
- C. -decrease glutamate, decrease dopamine

Answer: A

3-the highest risk factor for developing schizophrenia:

- A. -hypoxia
- B. -family history
- C. -rubella infection

Answer:B

If you have any questions you want to add, please send it to : Revesiontest432@Gmail.com

Good luck

Team Leaders :

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Remember this, " If you wanna be more successful and do things that you never done before .. (invest in your mind) "! 😊