

# Final CNS 1

\*\*Physio:

1. MRI → thromboembolic
2. Huntington disease → affect caudate
3. Allodinia → sense of pain from non-painful stimuli
4. Migraine
5. Pontine hemorrhage ( patient 60-year old with hypertension and decerebrate position)
6. Willinberg syndrome
7. Babinski wrong → cerebral lesion
8. Dysarthria → basal ganglia
9. Question about Fredrich ataxia
10. Lesion (case ) → loss of pain and temp. on the left side ++  
UMNL on the right side ++loss of proprioception on the right side
11. Internal capsule injury → entire body with face
12. Amygdale removed (wrong) → being fearful
13. Lateral hypothalamus → eating + drinking
14. Question about Tourette's syndrome
15. Syringomyelia → dissociation loss of pain
16. 1b inhibit substantia gelatinosa .. ?
17. Cerebellar lesion (wrong) → contralateral hypotonia
18. Stretch reflex (wrong) → responsible for sudden tendinous jerkiness ?
19. Question about amorphsynthesis (non-dominant lobe)
20. Main diagnosis for brain death → PCO<sub>2</sub> = 60 mmHg

**\*\*Pharma:**

- I. Wrong side effect: Acyclovir= Bone Marrow depression
- II. Prednisolone (acute leukemia) → Vincristine
- III. Amantadine (wrong) → influenza A + B
- IV. Foscarnet → HSV1 is resistant to acyclovir
- V. Wrong combination → blue finger (or nail figers)
- VI. 5FU + bepaximab → colorectal cancer
- VII. Mitoxantrone → cardiac toxicity
- VIII. Actinomycin → RNA polymerase
- IX. Actinomycin → wilm's ???
- X. Resistance to cancer → Heterogenisity
- XI. Methotrexate → Ca++ levo... ?

**\*\*Parasites:**

- I. T.gondii → oocytic cyst
- II. Amastigote in reticular endothelial system

**\*\*Dr.Faraj:**

- A. Intention tremor (wrong) → middle cerebral peduncle
- B. 9-year-old ataxic kid → flocculonodular lobe
- C. Directly on nucleus → purkinje cells
- D. Excited by cortex → caudate
- E. A lesion ... → deviation of tongue to the left w when protruded
- F. Reticulospinal affect all except → fingers
- G. Stretch reflex maintains length

- H. Referred pain (wrong) → sth about pain in diaphragm
- I. A question about fast and slow pain
- J. A question about Parkinson and Huntington → All of the above
- K. Wrong → dopamine inhibits striatum pallidus
- L. Parkinson (wrong) → increase VC and VA firing
- M. Hemisection → more than one of the above
- N. Major part of basal ganglia in both direct and indirect pathways → G.P internal segments
- O. Positive heel-shin test (wrong) → mainly posterior lobe (cerebellar) lesion

Best Of Luck ☺ ☺ ☺

Study Well ☺ ☺

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## Neuro I:

### \* Micro:

- Not true about cysticercosis:  
Hydatid cyst
- Human can acquire toxoplasmosis by:  
oocyte + cyst
- True about toxoplasmosis:  
1<sup>o</sup> host is canine.
- Not caused by EBV:  
Retinal detachment
- Not true about WNV:  
There could be premonitory signs before infection
- Syncytium and neurotising vasculitis by Nipah virus.
- Not in post polio syndrome:  
Spastic paralysis recrudescence.
- Not true about Rabies:  
Transmission only by lick or bite of animal.
- Not true about Prions:  
accumulate in same place in different diseases.
- Not true about polio:  
Paralytic in areas of poor hygiene.

## Anatomy:

- Not true about Chorea and (Bettar) Diseases in striatum.
- Pain and temp. are lost in both sides at T<sub>4</sub>-T<sub>8</sub> / what's the lesion? Destruction of T<sub>4</sub>-T<sub>8</sub> centrally in the SC
- What happens if a lesion occurs b/n ant. + lat. columns of white matter? loss of pain and temp. at first
- \* At a high post. col. lesion, proprioception is lost only in UL.
- \* Gracile nucleus doesn't include position sense unlike cuneate nucleus.

→ Only 1st statement is correct.

- Not true about bladder:

PD + MS cause urge incontinence because of the facilitation of Bladder funxn by Frontal cortex and Basalganglia

- Striatum NT that causes facilitation of thalamus:

Inhibitory GABAergic.

- Hypotonia and dysmetria on rt arm; rt. Cl' lesion

# Neuro

- It. 3rd cranial n. damage and rt. hemiplegia:  
It. mesencephalon lesion.
- Most involved in prox. and axial tone.  
Pontine rubrospinal tract
- Not involved in axial ms. or posture:  
Rubrospinal.
- Not true combination:  
Steppage gait → sensory ataxia.
- Dorsal col. is different than anterolat.in.  
more localisation
- UMN:Weakness, spasticity, abn. reflexes, hyperreflexia
- Not true combinations  
Protopathic sensations → ↑ threshold.
- Lesion that causes atrophy off LL + incontinence and flaccid paraparesis:  
Lumbosacral.

## Biochem:

- True about vision:  
cGMP increases when transducin activated
- Cones:  
for color vision -
- not true about Huntington dis → AR.
- In familial alzheimer: → Presenilin 1+2

### Pharma:

- The reason for chemotherapy failure:  
Drug resistance the tumor develops.
- Not true:  
Taxol is more toxic than vincristine
- About side effects, which is not true  
none of the above.
- Not true:  
HER-2 inhibited by cetuximab.
- Drug that revolutionized ovarian and testicular cancer Ht:  
Cisplatin.
- True: Deregulation of apoptosis by tumor
- True: G<sub>0</sub> cells are resistant to all types of anticancer drugs.
- True: Ribonucleotide reductase is inhibited by Thioguanine.

### Physio:

- Not an explanation why tone is canceled by rigidity → clasp knife.
- Best to study brain stem funxs; Anencephaly
- Lat. part of C<sub>1</sub>' doesn't affect: spine, bip..
- If a lesion in ventral corticosp. tract:  
Axial ms's affected

I

- of 1st lesions in alzheimer:

Hippocampus -

- Not of amygdala funxs:  
Memory storage

- Not true:

Periventricular hippocampus associated  
with pleasure.

- A test for inverse myotatic reflex:  
Clonus.

- Not caused by Cl' lesion:

Dysphagia.

- Not funxn of premotor cortex:  
facial recognition.

- Chorea:

moves are flitting ...

- Vertigo, nystagmus, cr. n. 1 hemiparesis/Lesion in?  
Brain stem.

Acute lesion of column, which is not true  
tone increased.

- The only inhibitory of tone:

Medullary reflex esp.

## Biotin

① SAM use in all <sup>metabolism</sup> except

④ N-methyl trans form

⑤ Gln t

⑥ decarboxylation

⑦ methylation of phosphatidylethanolamine

Neuro

② starvation lead to increase in

④ Glut-1

⑤ Glut-3

→ ⑦ mono carboxylic acid.

pts

① which cause chronic meningitis & brain abscess

- ② complete rnr



② wrong in N. meningitis

④ gram -ve

④ Neurotoxin

⑤ oligo polysaccharide

= Chost Toxoplasma gondii (wrong)

⑥ Sexual ... inter.

- (a) spontaneous release for prejunctional <sup>near</sup> <sup>near</sup> terminals of one quantum
- (b) have trophic influence in NMJ
- (c) amplitudes give idea about the amount of ACh in vesicles
- (d) frequency indication of activity of cholinesterase enzyme
- (e) we ask Li for synth. drug about G protein choose wrong has 2 component ~~binding~~ binding & ionophoric
- (f) opposing ion channel to potentiating
- (g) activate cGMP in postsynaptic
- (h) ~ cAMP ~ - -
- (i) ~ gene transcription ~ ~
- (j) about dendrite choose true
- (k) most dendriti can transmit AP
- (l) ~ ~ cannot ~ EP
- (m) has decremental conduction

- about neuronal pool circuit  
Ch  
Time
- (ii) convergence  $\rightarrow$  amplification
  - (b) parallel after discharge  $\rightarrow$
  - control Rhythm
- $\rightarrow$  Parallel after discharge & Reverbatory  
units  $\rightarrow$  intelligent  
Thinking

- about pain transmission & suppression  
choose way
- (a) glutamate
  - (b) serotonin
- $\nearrow$  GABA
- $\rightarrow$  about reflected pain threshold time
- (a) role of convergence
- $\rightarrow$  v/v B.vz difference

# MED

Neuro I

- Dr.Faraj
- The wrong in knee flexor reflex : ms. Spindle inhibits the agonist
- Gamma activation : causes shortening in intrafusal fibers only in case of dorsal root cutting
- Hyperreflexia : to be considered as pathological ,should be associated with babinski sign
- The wrong statement : + rombergs sign is associated with cerebellar ataxia
- Lateral corticospinal tract, the wrong is : gives 25% cervical
- A lesion in the left internal capsule + left area 8 : right hemiplegia + eyes go to the left
- The wrong statement about breathing effect : sends inhibitory signals only
- Meningioma in falk cerebri : cause paraplegia + incontinence
- The wrong stamen : Recurrent inhibition for gamma
- Premotor cortex : affects medial motor system
- The early signs of ms. Degeneration is : fasciculations
- The wrong combination : Thalamus → Sterognosis
- About spinocerebellum correct. *Compare intended to actual*
- Spasticity : loss of inhibition by (pyramidal loss)
- Dr.Eman
- All the following work on DMNA receptor except : GABA
- Lesion in area 5+7 : Amorphosynthesis
- The wrong about ,Motor nerve conduction velocity : antidromic
- The wrong statement is : we use penicillin to treat sensory ataxia
- Vit b12 deficiency affects : dorsal column and lateral column
- The wrong statement is : serotonin causes exitotoxicity
- Lidocane : blocks Na channels
- The wrong about ,Loss of all sensations in contralateral part of the face + body : right lower medulla lesion
- Dissociated sensory loss in : syringomyelia
- The wrong about saddle sensory loss is : intramedullary lesion
- Vit B6 deficiency causes : Seizures
- The drug that increases the half decay time in MEPP : for myasthenia gravis
- The wrong statement is : max receptor pressure is 10mv
- All are tonic receptors except : semicircular canals of the ear
- The wrong about the fibers to suppress pain : make synapse the <sup>from</sup> same 1ry afferentas
- The wrong statement of the following is : subconscious proprioception by DC\_UL
- Dr.Basem
- What is the cause of meningitis associated with skin rash : N.meningitidis
- What is the wrong about S.Pneomonia : susceptible to penicillin in Jordan
- Dr.Azmi
- What is the wrong statement : meningitis is almost always associated with systemic manifestations
- What is the wrong about encephalitis : direct or indirect cause focal or diffuse disease
- What is the wrong about meningitis : brain biopsy is routinely taken in diagnosis

- Biochem
- SNARE : its job is attachment to presynaptic membrane
- Histidine to histamine rxn : requires pyridoxal phosphate
- Can't cross BBB : Glutamate
- Dopamine B-hydroxylase : requires O<sub>2</sub> + Ascorbate (vit C)

Physio

- 1) Anencephaly → Model for Brain stem
- 2) Flicking → movement in Huntington  
Glutamate, Brief
- 3) Brain Stem → Vertigo, ~~ipsilat.~~, C. Palsy, ~~mystagmus~~
- 4) Clasp reflex → inverse stretch
- 5) Clonus →
- 6) Dysphasia → Cerebellum except
- 7) Dyslexia → Wernicke (<sup>Visual</sup> A.R.)
- 8) Medial reticulo spinal →
- 9) Hippocampus →
- 10) Contralateral, hips → Dentate <sup>except</sup> → ~~Premotor cortex~~
- 11) Pace, recognition → ~~hippocampus~~ N → Rage incorrect
- 12) Periventricular → ~~hippocampus~~
- 13) ~~amygdala~~ → true about Amygdala
- 14) ~~amygdala~~ → ~~hypothalamus~~ → ~~hypothalamus~~ → stroke to Pyramidal
- 15) ~~hypothalamus~~ → ~~hypothalamus~~ → ~~hypothalamus~~ → Au. Reflected to spinal cord except

عکس

A+β

Hydantoin cyst.

Wide tissue range

Blocker

① GABA

③ ↑ CGMP

④ Cones  $\Rightarrow$  color

2.10

Hormone V

② TC - cerebellar

③ Only (A) is correct

④ protoporphyrin  $\Rightarrow$  UV light

⑤ sulphage cycle - excess

⑥ cerebral cancer

⑦ cold, thermal in series

⑧ Lt. mesencephalic

⑨ inhibitory GABAergic

⑩ Pontine vario spinal

⑪ 1<sup>st</sup> Path in serous

⑫ knees, soles, myobronchial reflex

⑬ dorsal spinal

⑭ lumbo coccygeal

⑮ B: 1<sup>st</sup> order sensory

⑯ 2<sup>nd</sup> order sensory

pharma

① Granuloma  $\Rightarrow$  white

② none of the above

③ cisplatin

④ taxol more toxic

⑤ All (cause ??)

⑥ Dexamethasone  $\Rightarrow$  ok ??

⑦ curcumin  $\Rightarrow$  white

⑧ Hypoxia:  $Q_0 \text{ cell}$

⑨ prednisolone  $\Rightarrow$  white

⑩ same site of diff. species

⑪ Prostaglandins

⑫ P1 - retina

⑬ P2 - white, transparent

⑭ P3 - black