

021 Nuerology miniOSCE

1st semester

the 1st month

By

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Q1. A patient with history of 12 right sided weakness, normal vital signs, 6% HbA1c, a CT scan was conducted, answer the following questions:

- What is the imaging abnormality ? **(1 mark)**

Ans: brain infarction (left PCA territory)

- What is the visual abnormality for this patient ? **(1 mark)**

Ans: right homonymous hemianopia with macular sparing

- What is the next step in the management ? **(1 mark)**

Ans : Aspirin 300 mg

- What other imaging modalities should be conducted ? (Mention 2) **(2 marks)**

Ans: MRI, MRA, DW



Q2. 20 years old patient comes to the ER with worsening headache, his family reported “feeling of hotness” while testing you found positive kernig’s sign and neck rigidity, he opens his eyes spontaneously during testing, he can localize the pain on his sternum, and his speech is confused.

- What other symptoms would you ask about? (Mention 2) **(2 marks)**

Ans : Rash, seizures, confusion/irritability

- What is the patient’s GCS (E + V + M) **(3 marks)**

Ans : 4+4+5 = 13/15



- What is the diagnosis ? **(1 mark)**

Ans : Acute bacterial meningitis

- Mention the most important test for the diagnosis and the abnormal expected findings **(5 marks)**

Ans : CSF analysis

↑Pressure, turbid, ↑cells (mostly polymorphs), ↑protein, ↓sugar, ↑lactate

Q3. A 24 years old woman suffering from acute right vision loss and pain while moving the eyes horizontally, the last year she had an episode of leg weakness that resolved shortly after, an MRI was conducted :

- What is most likely to be the reason for her symptoms ? **(1 mark)**

Ans: optic neuritis

- What is the diagnosis ? **(1 mark)**

Ans : Multiple sclerosis

- Mention 3 other investigations used to confirm the diagnosis ? **(3 marks)**

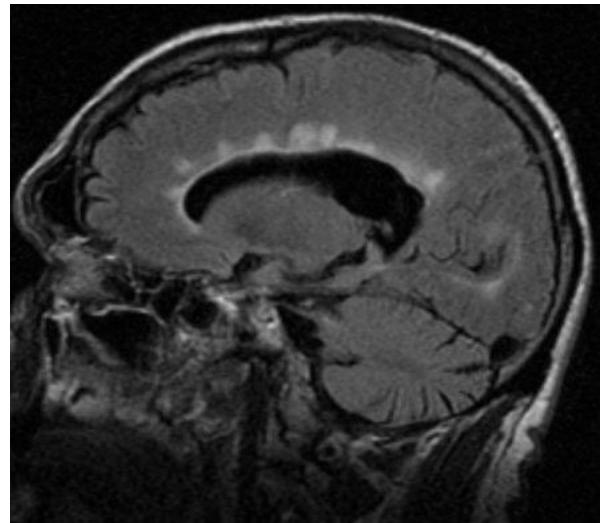
Ans: CSF testing, visual and other evoked potentials, optical coherence tomography.

Blood tests to exclude other diseases :

- Normal systemic inflammatory markers (ESR, CRP).
- Autoantibodies (Low-titre ANA may occur)
- Vasculitis screen, B12, TFT, LFT, serum ACE/CXR

- What is the appropriate treatment for the acute attack ? **(1 mark)**

Ans: High-dose steroids (IV/oral Methylprednisolone 1 g daily for 3-5 days)



- Mention 2 hypothesized risk factors **(2 marks)**

Ans : EBV theory, VitD theory, hygiene Theory, Viking Theory

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1st semester

the second month

Thanks for :

Hosam Theeb

Mohammad aladawi

Abdallahman aldabbas

Mohammad Harahsheh



Q1) A 70 years old man brought to the clinic by his family due to rest tremor in his hand and slow to start movement like getting up from a chair or a sitting position.

A- what is the diagnosis?

Parkinson disease

B- mention 5 signs you will find in the patient?

Rigidity ,tremor ,bradykinesia , stooped position, shuffled gait

C- what is the treatment of the disease?

Levodopa , carbidopa

D) mention 2 drug that can cause the disease?

phenytoin, valproic acid

E) mention 3 risk factors of the disease?

Age, family history , head injury

Q2) A 33 years old man come to the clinic suffer from 7 days progressive bilateral weakness in his lower limbs and weakness in his upper limbs, difficulty in chewing and swallowing , brain CT and MRI was normal

CSF findings

leukocytes 10.3 , sugar normal , protein

A) What is the diagnosis?

GBS

B) Mention 3 causes of this disease?

COVID 19, campylobacter jejuni, cytomegalovirus

C) Mention 2 causes of difficulty in chewing?

1- ??

D) Mention 3 of acute complications of the disease?

1- respiratory failure

2- cardiac arrhythmia (not sure)

3- hypotension shock (not sure)

E) what is the term of CSF finding?

Albuminocytological dissociation

F) what is the treatment of the disease?

IVIg

Q 3) A 19 years old woman suffered from 2 months constant headache , that increase when the patient lying down or waking up, and suffer from pulsatile tinnitus , her blood pressure was normal , on fundoscopy examination, there is a papilledema , CT was normal, on MRI there is a slit like ventricles, BMI was 35

A) what is the diagnosis ?

Idiopathic Intracranial hypertension

B) what is the best way to confirm the diagnosis, and what the findings ?

LP , increase in the pressure

C) what is the most important differential diagnosis and how to exclude it ?

Venous sinus thrombosis / MRA

D) what is the therapy of the disease ? (Mention 2 therapies)

Acetazolamide + treatment of obesity

E) ?

021 Nuerology miniOSCE

1st semester

the third month

By

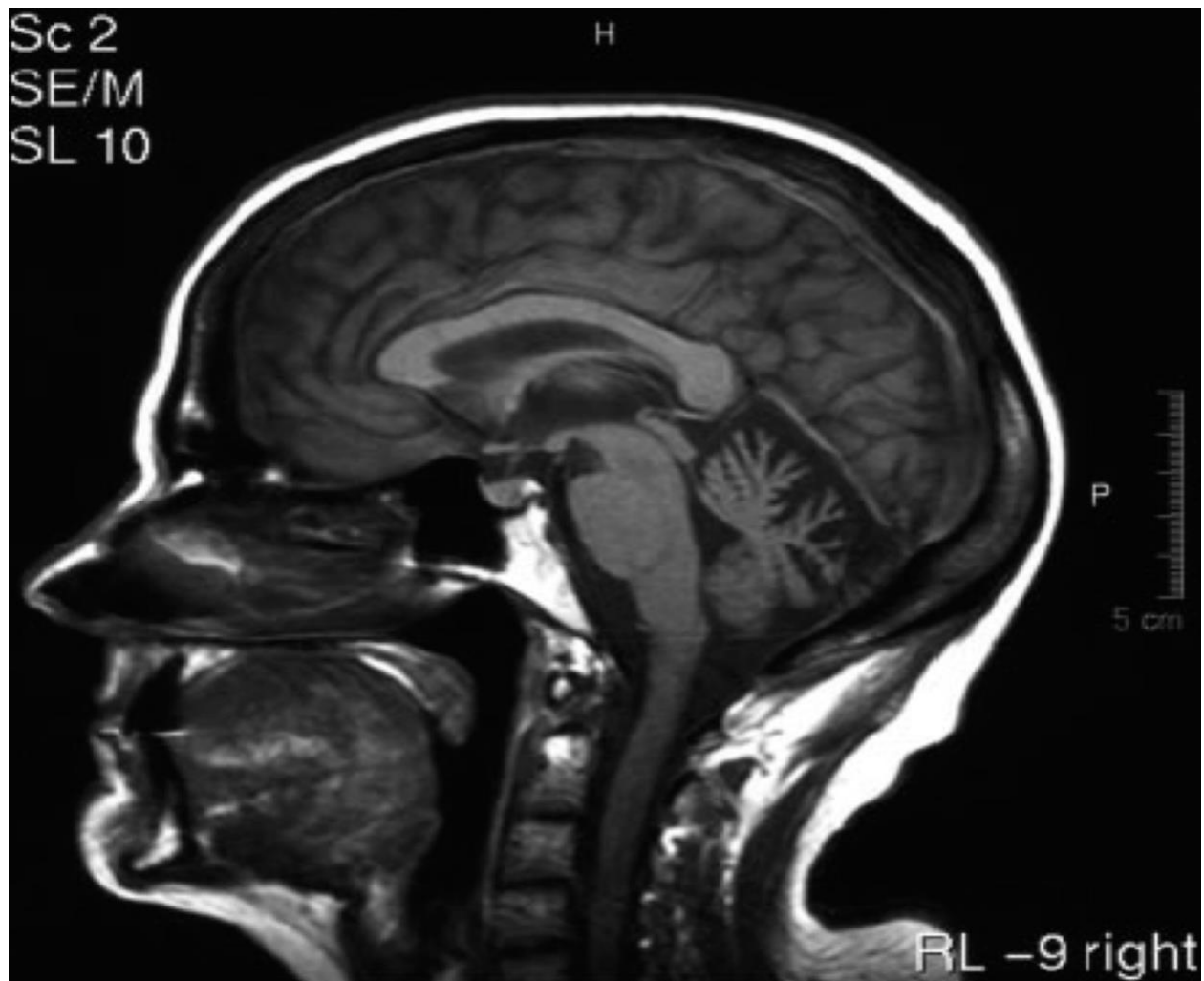
Mohamad Alsaed

Fatin Aldraawi



1st question:

A 24 YO gentleman with gait difficulty, imbalance and dysarthria:



A- What's the abnormality does the MRI show?

- Cerebellar atrophy.

B- What's the name /description of this gait?

- Ataxic gait

C- Name 4 more physical findings of this abnormality:

- 1- pendular reflex
- 2- nystagmus
- 3- intention tremor
- 4- hypotonia

(In the slides there's a list)

D- What other pathology in another part of the nervous system can cause those symptoms too, mention 4 clinical features to differentiate between them:

- Spinal cord lesion (dorsal column)
- 1- nystagmus (not found in sensory ataxia)
- 2- dysarthria (not found in sensory ataxia)
- 3- Romberg test (positive in sensory ataxia)
- 4- sensory exam (normal in cerebellar)

2nd question:

A 58 YO female with attacks of unilateral throbbing headaches, the attacks come around 5 times a month, with nausea, no specific timing or pattern to the attacks, the attacks were relieved by ibuprofen:

A- What's the diagnosis?

- Episodic migraine.

B- Name 3 more clinical features will be found in patient:

- 1- Vomiting
- 2- Photophobia
- 3- Phonophobia

C- Name 3 prophylactic drugs (preventive treatment):

- 1- propranolol
- 2- valproate
- 3- venlafaxine

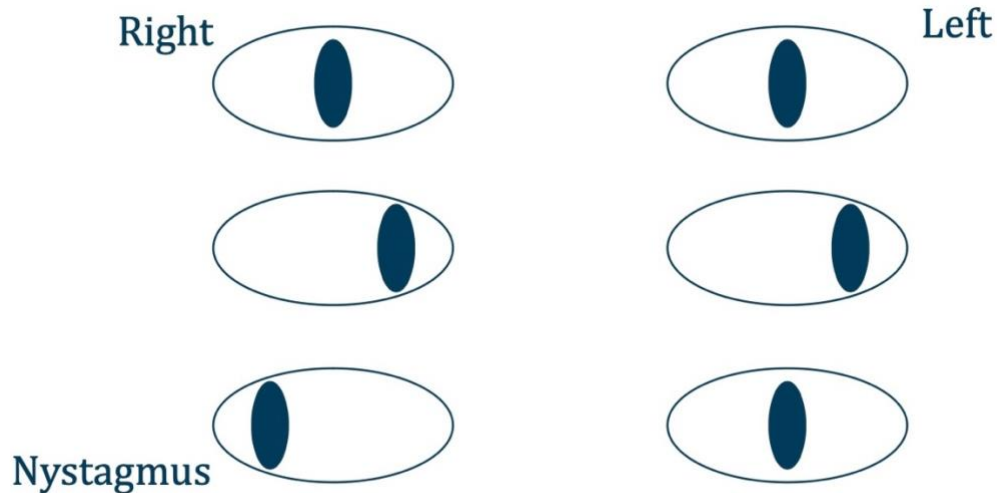
(long list in slides)

D- Patient kept on taking the ibuprofen chronically her headache became worse, what is the name of this disorder?

- Medication overuse headache.
- Status migrainus (I'm not sure if it's right).

3rd question:

A 45 YO lady and has nystagmus as following:
(with more little clinical details as fatigue)



A- What is this sign called?

- Left internuclear ophthalmoplegia.

B- Which part of CNS is damaged here?

- left MLF.

C- 1 year ago, this patient presented with an attack of periorcular pain and left sided visual loss, what's the reason of this presentation, and mention three physical findings that be present during that attack:

- optic neuritis.

1- scotoma

2- red desaturation

3- RAPD

D- What is the diagnosis?

- MS.

E- What's the treatment in an attack of this disease?

- IV/ORAL methylprednisolone 1g daily 3-5 days
- Or ACTH gel 80 u daily
- Or plasma exchange

021 Nuerology miniOSCE

1st semester

the 4th month

By

Leen Abd-Alqader

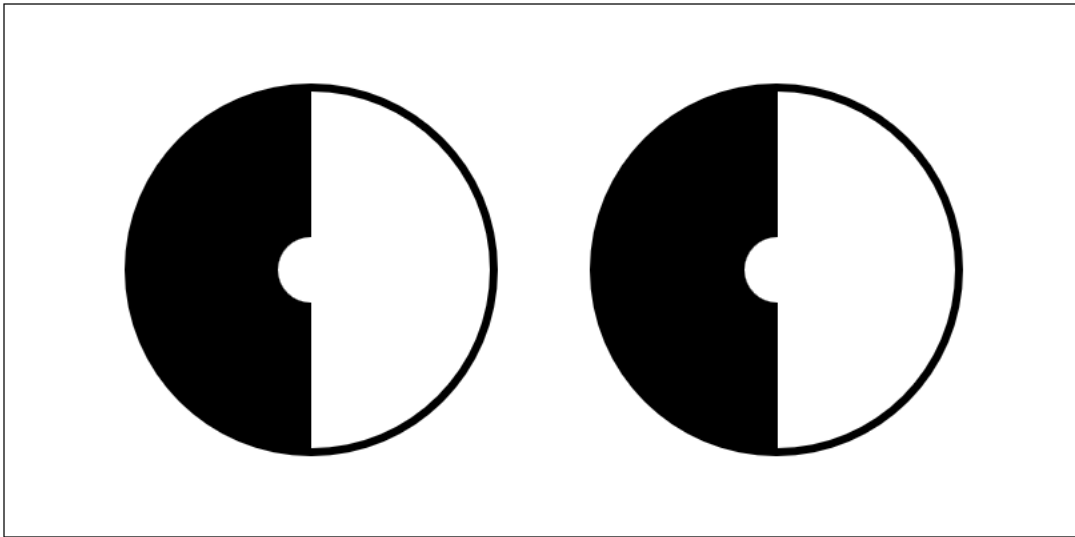


Q1. 79yrs old lady brought to emergency department by an ambulance, her daughter said that she had a sudden progressive very severe headache like being “hit on the head with a bat” then she became unresponsive, a neurological examination was done, she opens her eyes to pain, speaks inappropriate words, withdraws away from pain stimulus. Her pulse 96 bpm, BP 140/79 . CT imaging was done as shown below:



1. What's the diagnosis (finding in the image)? (2 marks)
Subarachnoid hemorrhage
2. Calculate the GCS for this patient? (3 marks)
 $2+3+4=9$
3. What's the most common non traumatic cause for this situation? (2 marks)
Aneurysmal rupture
4. Mention other reliable investigations that can be done for this patient: (2 marks)
MRI/MRA/CTA
5. Mention 3 neurological findings that can be seen on this patient: (3 marks)
CN3 palsy-IC/PCA aneurysm
Paraparesis -ACA aneurysm
Aphasia, hemiparesis -MCA aneurysm
6. Mention the most 2 serious complications that can happen for this patient , and medical procedures should be done to prevent them : (4 marks)
Vasoconstriction- nimodipine
Recurrence of aneurysmal rupture- clipping surgically or coiling by interventional techniques

Q2 : A 62yrs old gentleman with history of diabetes and hypertension, presenting to the ER complaining of progressive decreasing in the visual field within 6 hrs , visual field is shown below:



1. What type of visual field defect does the patient have?(2 marks)
Left homonymous hemianopia with macular sparing
2. What is the location of lesion that lead to this defect?(2 marks)
Infarction in the right occipital hemisphere
3. What is the most likely cause of the patient's visual field defect?(2 marks)
PCA territory infarcts (by embolism arising from the heart,aorta,or VA)
4. Mention investigations should be done for this patient: (2marks)
Brain imaging: CT , MRI

Q3:20 yrs old girl brought to ED ,her parents said that she has tonic posture with multiple jerking movements , they said that she is experiencing this for the past 40 minutes.she is afebrile , O2 sat 97%.

1. The emergency resident is expecting status epilepticus , so he gave her 2 doses of IV drug,name this IV medication (2 marks):

Benzodiazepines ex. lorazepam 4mg

2. If the patient is unresponsive to this medication, mention 2 medications can be given in this situation (2nd line treatment): (2 marks)

Phenytoin

Valproate

3. Her family noted that she experienced severe emotional stress before going into this situation, so the neurologist is expecting psychogenic non epileptic seizure, mention 3 features suggestive for this (3 marks) :

Eye closure ,Pelvic thrusting,Lack of postictal confusion ,Postictal crying or shouting ...etc