021 Nuerology miniOSCE

1st semester

the 1st month

By

Malak Abd-Alhadi

Yomna Khlil

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 spearing

- 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 kering's sign and neuchal 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)**

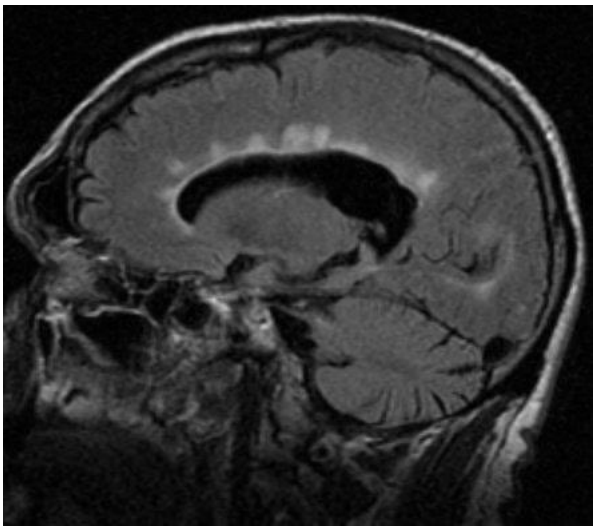
Ans : Acute bacterial meningitis

- 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

021 Nuerology miniOSCE

1st semester

the second month

Thanks for :
Hosam Theeb
Mohammad aladawi
Abdalrahman 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 strat 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 ,bedykinesia , 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 , protien

A) What is the diagnosis?

GBS

B) Mention 3 causes of this disease?

COVID 19, campylobacter jejani, cytomegalovirus

C) Mention 2 causes of difficult 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?

Albominocytological 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

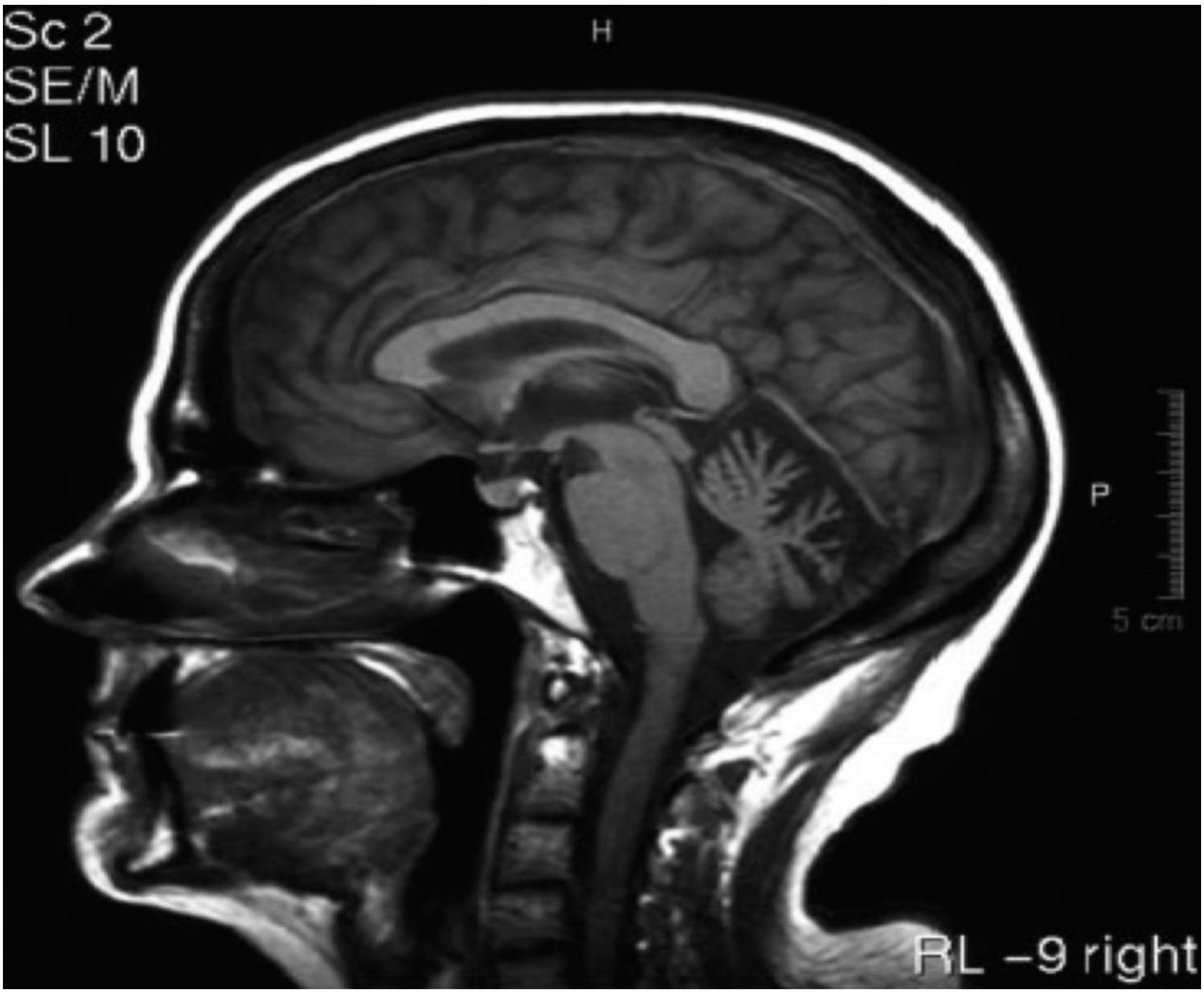
By

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.

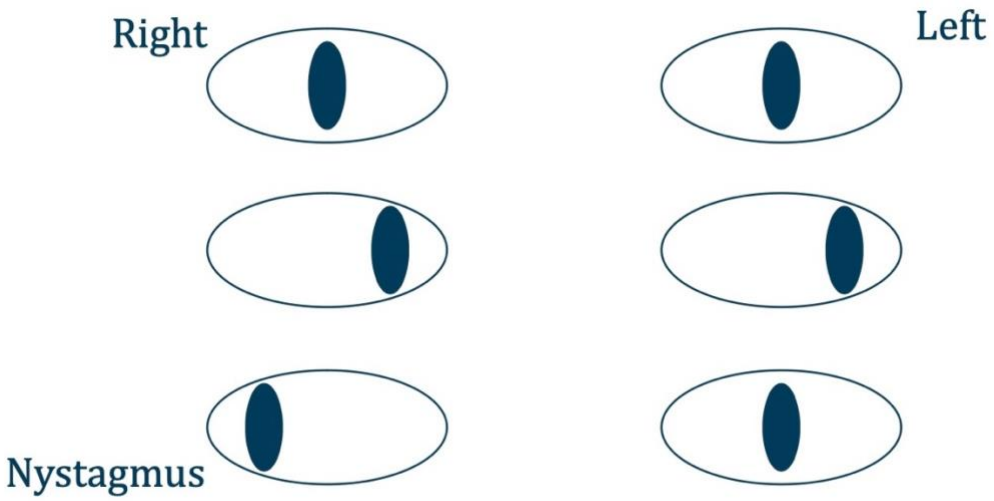
B- Name 3 more clinical features will be found in patient:
1- Vomiting
2- Photophobia
3- Phonophobia

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 periocular 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

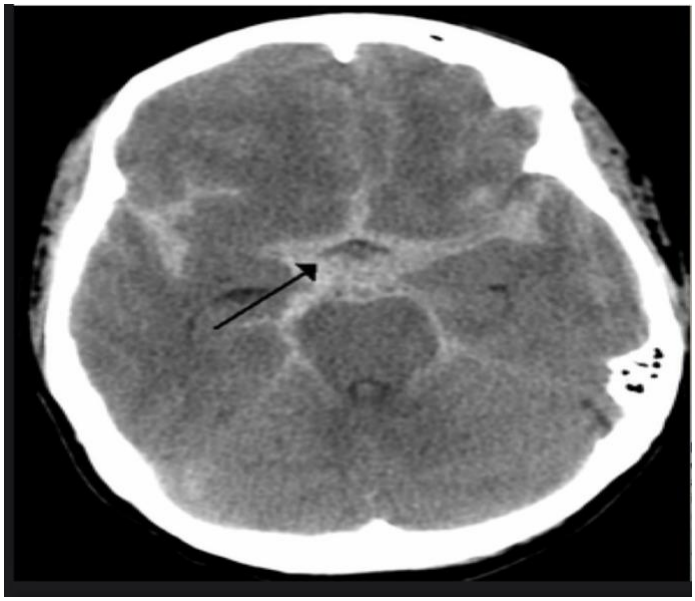
1st semester

the 4th month

By

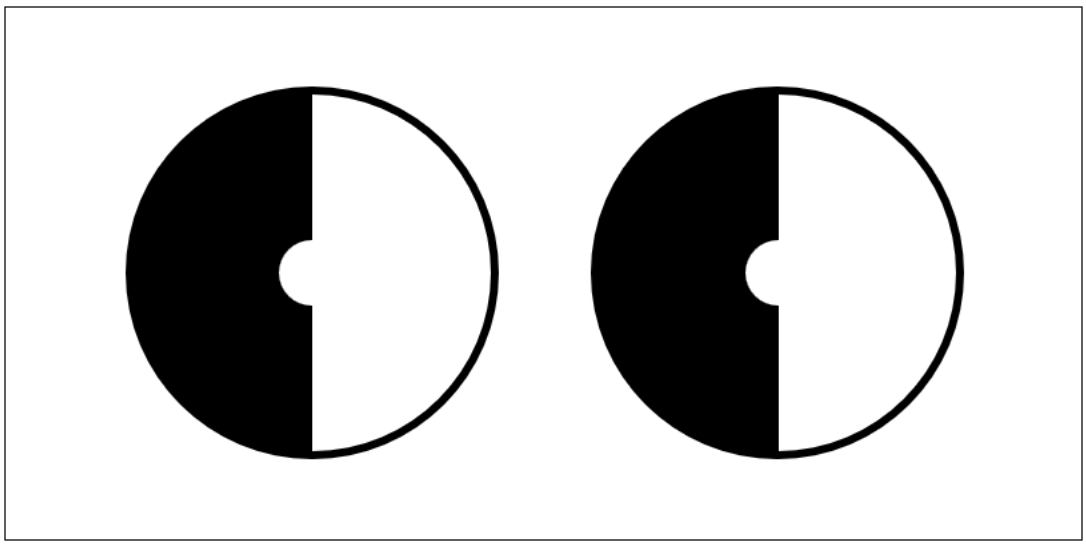
Leen Abd-Alqader

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 infracts (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 titanic 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

021 Nuerology miniOSCE

2nd semester

the first month

By

Youns Hamam

Zaid Samarat

Ayham Alhmaid

Q1: A 41-year-old female presents with a **fever** of 38.8°C, right facial twitching, and progressive disorientation over the past 2 days.

1. What is the most likely diagnosis for this patient?

Answer: Viral Encephalitis

2. What are two common causes of viral encephalitis?

Answer: HSV-1 & HSV-2 and VZV

3. What are three key investigations to perform in this case?

Answer: The three key investigations are:

1. **CSF (Cerebrospinal Fluid) analysis**
2. **EEG (Electroencephalogram)**
3. **Brain MRI**
4. **PCR (Polymerase Chain Reaction) testing**

4. What is the cause of the facial twitching in this patient?

Answer: meningeal irritation

5. What are two common treatments for viral encephalitis in this patient?

Answer: The two main treatments are:

1. **Acyclovir** (10 mg/kg IV every 8 hours for 2 weeks)
2. **Antipyretics** (e.g., acetaminophen or ibuprofen) to control fever

……..

Q2 A 56-year-old male presents with confusion. He has a history of **alcohol withdrawal** episodes, one occurring 2 years ago and another 10 years ago, both managed at the same hospital. He exhibits **restrictive eye movements**, **nystagmus**, and an **ataxic gait**.

1. What is the most likely diagnosis for this patient?

Answer: The most likely diagnosis is **Wernicke Encephalopathy**.

2. What is the most likely risk factor for this patient?

Answer: The most likely risk factor is **Alcohol** consumption, which is a common cause of Wernicke Encephalopathy.

3. What are three other risk factors for Wernicke Encephalopathy?

- **Answer:** Three other risk factors include:
  1. **Bariatric surgery**
  2. **Malignancy**
  3. **Anorexia nervosa**

4. What are two treatments for Wernicke Encephalopathy?

Answer: The two main treatments are:

1. **Thiamine (Vitamin B1) supplementation**
2. **Glucose administration**

5. What are two complications of Wernicke Encephalopathy?

Answer: Two major complications include:

1. **Death**
2. **Dementia**

……..

Q3: A 55-year-old male with a history of **hypertension** presents with a **normal heart rate**, **heavy tongue**, **right-sided weakness**, and a **headache**.

1. What is the most likely diagnosis for this patient?

- **Answer:** The most likely diagnosis is a **Left Intraparenchymal Hemorrhage**.

2. What are two common causes of intraparenchymal hemorrhage and their locations?

Answer: Two common causes include:

1. **Microaneurysm (Charcot-Bouchard aneurysm)** located in the **lenticulostriate arteries**
2. **Arteriovenous Malformation (AVM)**.

3. What is the initial management for this patient?

- **Answer:** The initial management includes:
  1. **Treating hypertension**
  2. **Assessing coagulopathy**

021 Nuerology miniOSCE

2nd semester

the second month

By

Malek abu rahma

Osama abu hussein

Osama zaareer

Q1: A 65-year-old male presents with a 3-day history of drooping eyelids (ptosis) and double vision (diplopia). His symptoms tend to improve in the evening. He also reports drooling on the right side of his face. On examination, you note weakness in the muscles of the eyelids and extraocular movements but no sensory abnormalities. His deep tendon reflexes are normal. He has a history of a similar episode occurring six months ago that resolved spontaneously. There is no recent history of fever, illness, or trauma.

1. **What is the most likely diagnosis for this patient?**
    - **Answer:**
      The most likely diagnosis is **Myasthenia Gravis (MG)**.
2. **What is the pathophysiology behind Myasthenia Gravis?**
    - **Answer:**
      Myasthenia Gravis is an autoimmune disorder where the body produces **autoantibodies against acetylcholine (ACh) receptors** at the neuromuscular junction.
3. **List four characteristic features of limb weakness commonly seen in this disease.**
    - **Answer:**
        1. **Hand weakness** (more than feet).
        2. **Symmetrical weakness**.
        3. More prominent weakness in **triceps and quadriceps**.
        4. **Proximal muscle weakness** > distal muscle weakness.
4. **What are the relevant blood and imaging investigations to confirm the diagnosis?**
    - **Answer:**
        - **Blood investigations**:
            - **Anti-acetylcholine receptor antibodies** (Anti-AChR antibodies).
        - **Imaging**:
            - **Chest CT**: To rule out thymoma, which is commonly associated with Myasthenia Gravis.
5. **A colleague suggests Guillain-Barré Syndrome (GBS) as a possible diagnosis. Based on the symptoms provided, how would you differentiate this case from GBS?**
    - **Answer:**
        - **Diplopia** and **normal reflexes**: These symptoms are typical of **Myasthenia Gravis**, but in **GBS**, reflexes are usually **absent** due to peripheral nerve involvement.
        - **Symptom improvement in the evening**: This is consistent with **MG**, where muscle weakness fluctuates and improves with rest. In **GBS**, weakness is **progressive** and does not improve with rest.
        - **GBS typically presents with ascending weakness** (starting from the lower limbs), whereas this patient presents with **cranial nerve involvement** (ptosis, diplopia) and **profound upper limb weakness**, which are more characteristic of **MG**.

Q2: A 35-year-old male presents with a complaint of **severe, unilateral headache** that typically starts around **2 AM**, waking him from sleep. The pain is localized to one side of his head, around the **eye** region, and is associated with mild **conjunctival swelling** and **tearing** on the affected side. The patient describes the pain as sharp and stabbing, and it lasts for **about 90 minutes** each time. He experiences these headaches **daily** over the last week. There is no significant past medical history, and the patient denies any recent trauma or other neurological symptoms.

1. **What is the most likely diagnosis for this patient's symptoms?**
    - **Answer:**
      The most likely diagnosis is **Cluster Headache**.

2. **Mention two prophylactic medications commonly used for cluster headaches.**
    - **Answer:**
        1. **Verapamil** (a calcium channel blocker).
        2. **Steroids** (e.g., Prednisone) for short-term control during an acute episode.
3. **What investigations are typically done to confirm the diagnosis of cluster headache?**
    - **Answer:**
        - **Brain MRI**: To rule out secondary causes of headaches, such as tumors or other structural abnormalities that could mimic cluster headaches.

4. **What are the main treatment options for managing cluster headaches?**

- **Oxygen therapy**: Inhaling 100% oxygen at a high flow rate (12-15 L/min) for 15-20 minutes can significantly relieve pain during an acute attack.
- **Sumatriptan** (a serotonin agonist): It can be administered subcutaneously or via nasal spray to provide quick relief from the pain of an acute cluster headache.

5. **What are the differences in the duration of pain for the three major types of headaches (cluster, migraine, tension-type)?**

- **Answer:**

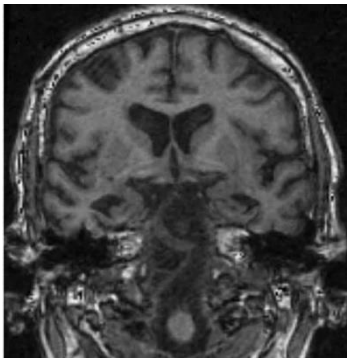
  1. Cluster headache: Typically lasts between **15 minutes and 2 hours** (occasionally up to 3 hours), and the attacks occur in **clusters** (several times a day for weeks to months).

  2. Migraine headache: Lasts **4 to 72 hours** and is often accompanied by nausea, photophobia, and phonophobia.

  3. Tension-type headache: Duration can range from **30 minutes to 7 days**. The pain is usually bilateral, mild to moderate in intensity, and feels like a tight band around the head.

Q3: A 70-year-old male presents to the clinic with his daughter, who is concerned about his recent memory loss. The patient has been **getting lost in familiar places**, asking the same **repetitive questions** multiple times, and **misplacing things** regularly. These symptoms have been worsening over the past few months. An MRI of the brain has already been performed.

1. **What is the most likely diagnosis based on the patient's symptoms?**
    - **Answer:**
      The most likely diagnosis is **Alzheimer's Disease (AD)**.
      This diagnosis is supported by the symptoms of **memory loss**, **disorientation (getting lost in familiar places)**, and **repetitive questioning**, which are classic signs of Alzheimer's disease, a form of **dementia**.
2. **Mention two histological findings commonly associated with Alzheimer's Disease.**
    - **Answer:**
        1. **Amyloid plaques** (extracellular deposits of amyloid beta).
        2. **Tau tangles** (intracellular twisted fibers of tau protein, which impair cellular function).
3. **Based on the MRI image, what two findings would you expect in a patient with Alzheimer's Disease?**
    - **Answer:**
        1. **Moderate to severe medial temporal atrophy**, which affects the hippocampus, a region essential for memory.
        2. **Milder global atrophy**, indicating the progressive loss of brain mass throughout the cerebral cortex, particularly in the parietal and frontal lobes.
4. **Mention two drugs with distinct mechanisms of action that are used in the management of Alzheimer's Disease.**
    - **Answer:**
        1. **Donepezil**: A **cholinesterase inhibitor** that increases acetylcholine levels in the brain, which is beneficial in the treatment of Alzheimer's-related cognitive decline.
        2. **Memantine**: An **NMDA antagonist**, which regulates glutamate activity and helps to protect against excitotoxicity, as well as an **HT3 receptor antagonist** to manage neurodegenerative symptoms.
5. **The patient is agitated. What class of drug would you consider for managing his agitation?**
    - **Answer:**
      The patient is agitated, and the appropriate class of drug to consider would be **antipsychotics**.
      Antipsychotic medications (e.g., risperidone, olanzapine) can be used cautiously to manage agitation and aggression in patients with Alzheimer's disease. However, the use of antipsychotics should be monitored due to the potential for serious side effects, such as increased risk of mortality in elderly patients with dementia.



Neurology Mini-OSCE, third month / second semester questions

1. a 72-year-old woman, presents to the clinic with a 2-week history of new-onset headache localized to the right temporal region. She describes the pain as a constant, throbbing in nature that has gradually worsened.
She recently noticed some difficulty chewing due to jaw pain that starts after a few minutes of eating, which she finds unusual.
ESR elevated

1. What is the most likely diagnosis? (1mark)
2. Mention 3 physical findings are found in this case?(3marks)
3. What is the first line treatment?(2marks)
4. What is the diagnostic test that confirms the diagnosis?(1mark)
5. What are the main complications you found in this case?(2marks)

Answers:

1. Giant Cell Arteritis (GCA) (Also known as Temporal Arteritis).
2. vision changes(amaurosis fugax), jaw claudication,fever, and scalp tenderness
3. Empiric steroids should be started in any patient with a high clinical concern.
4. Temporal artery biopsy.
5. blindness if not readily identified and treated promptly.

2. 18-year-old female has a loss of consciousness,history was taken from her mother she fallen down to the ground. Her mother described Witnesses her body and stiffening for a few seconds, followed by violent rhythmic jerking movements the lips became blue and the attacks lasting for 2minutes of, the physical examination was normal.

1. What is the most likely diagnosis? (1mark)
2. Mention 3 other investigations used to confirm the diagnosis? (3 marks)
3. While we in the hospital awaiting investigations, he had another similar episode. The medical team administered two doses of IV medication within five minutes, but the patient remained unstable. What medications should be administered next while waiting for diagnostic results with doses?(3marks)

4. What are the causes of the patient's state according to the etiology should in her age group? (2marks)
5. The patient stayed up all night to study, and his mom described abnormal jerking movements in her son's arms during breakfast that morning. What does she most likely have?(1mark)

Answers:

1. Generalized tonic-clonic seizure
2. EEG,ECG,MRI,Blood test
3. Phenytoin (15-20 mg/kg),Valproate (20-30 mg/kg),Levetiracetam (30-70 mg/kg)
4. Drug intoxication and withdrawal ,Head trauma,CNS infections
5. Myoclonic Epilepsy

3.A 40-year-old male presented to the Emergency Department in a "sleep like". On initial evaluation, his eyes were closed and he was unresponsive to verbal stimuli. However, upon application of a noxious stimulus, he demonstrated arousal by opening his eyes, localizing the stimulus with purposeful hand movements, and producing inappropriate words. His physical examination was otherwise unremarkable, with no focal neurological deficits noted. Notably, his pupils were pinpoint and reactive to light.

1. what is the state of consciousness of this patient?(1mark)
2. Calculate the GCS for this patient?(3marks)
3. Give 2 causes of the patient state?(2marks)
4. what are the physical findings that you should exclude for the structural pain damage?(3marks)
5. what are the appropriate investigations you should do?(1mark)
6. if the investigation in the previous question (question 5) was normal what medication you would administrate for patient?(1mark)

Answers:

1. stupor state
2. Total GCS = E2 + V3 + M5 = 10
3. Opioid toxicity, pontine haemorrhage

4.Roving eye movement,skew deviations,horizontal deviation of the eye to one side.

Suggested answers:

1. Focal neurological deficits (e.g., hemiparesis, facial droop, asymmetric reflexes)
2. Abnormal posturing (decerebrate or decorticate).
3. Asymmetric or fixed pupils
4. Cranial nerve abnormalities

5.

1. CT brain (non-contrast):rule out hemorrhage or mass
2. Blood glucose :check for hypoglycemia
3. Lumbar puncture :to rule out if CNS infection

6.Naloxone : opioid antagonist

Done by :

- **Boshra Al-Rbaihat**
- **Rama Harb**
- **Huda Abu-Rumman**

021 Nuerology miniOSCE

2nd semester

the fourth month

By

Abdullah AlTa'ani

Q1: A 36-year-old male with pain when brushing teeth and previous optic neuritis.

A 36-year-old male presents with pain when brushing his teeth. He visited a dentist, but no dental cause was found. Two years ago, he experienced sudden vision loss accompanied by pain on eye movement, which resolved spontaneously after three weeks without treatment. He also reports an electrical sensation traveling down his spine when he flexes his neck.

1. What is the cause of his pain?

Answer: Trigeminal neuralgia

2. What is the underlying disease that caused his problem?

Answer: Multiple Sclerosis (MS)

3. What red flags support the diagnosis of MS in this patient?

Answer: Age below 40, history of optic neuritis, and sensory changes such as Lhermitte's sign (electric sensation in the spine on neck flexion).

4. What investigations would you perform to confirm MS?

Answer: MRI of brain and spinal cord to detect demyelination, CSF analysis showing oligoclonal bands, and visual evoked potentials.

5. What is the first-line treatment to relieve his facial pain?

Answer: Carbamazepine is the first-line treatment for trigeminal neuralgia.

Q2: A diabetic hypertensive male with ataxia, nystagmus, dysphagia, and crossed sensory loss.

A patient presents with nystagmus, ataxia, and loss of pain and temperature sensation on the right side of the face and the left side of the body. He reports difficulty in swallowing. His medical history includes diabetes mellitus, hypertension, and hyperlipidemia. A CT scan showed no abnormalities.

1. What is the most likely diagnosis for this presentation?

Answer: Ischemic stroke in the Posterior Inferior Cerebellar Artery (PICA).

2. What is the name of the syndrome caused by this stroke?

Answer: Wallenberg Syndrome, also called Lateral Medullary Syndrome.

3. Which cranial nerves are responsible for the dysphagia seen in this case?

Answer: Glossopharyngeal nerve (IX) and Vagus nerve (X).

4. What drugs are indicated in the management of this stroke?

Answer: Aspirin or Clopidogrel; thrombolytics may be considered if within the window period and no contraindications.

5. What investigations should be done?

Answer: MRI brain with diffusion-weighted imaging (DWI), MRA to evaluate vessels, and echocardiography for embolic source assessment.

Q3: A patient presents with headache, fever, neck stiffness, and altered consciousness.

A patient presents with headache, fever, neck rigidity, and a positive Kernig's sign. Neurologically, he opens his eyes in response to loud noise, speaks in a confused manner, and localizes pain when pressure is applied to the sternum.

1. What is the most likely diagnosis?

Answer: Bacterial meningitis.

2. What is the patient's GCS based on their current neurological status?

Answer: 12/15 (E3 V4 M5).

3. What is the most common causative pathogen?

Answer: Streptococcus pneumoniae.

4. What investigation confirms the diagnosis?

Answer: CSF analysis.

5. What may be seen on CT brain prior to lumbar puncture?

Answer: Normal.

6. What is the empirical treatment for bacterial meningitis?

Answer: Ceftriaxone + Vancomycin.

7. Mention 4 other symptoms you should look for in suspected meningitis.

Answer: Photophobia, confusion, vomiting, seizures.