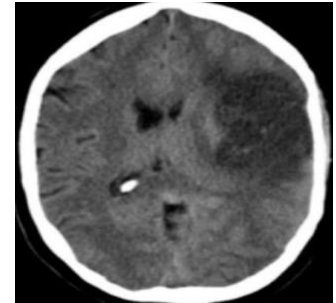


1) A 58 year old right-handed woman presents with sudden weakness in the right arm and face. She also has expressive aphasia. Then she became unresponsive, a neurological examination was done, she opens her eyes to pain, speaks inappropriate words, withdraws away from pain stimulus. CT imaging was done as shown below:

1. Calculate the GCS for this patient?
2. What is the imaging abnormality?
3. What is the next step in the management?
4. What other imaging modalities should be conducted?



Answers:

1. $GCS = E + V + M$
 $2 + 3 + 4 = 9$
2. brain infarction (left MCA Occlusion)
3. Aspirin 300 mg orally or rectally.
4. MRI, MRA, CTA

2) 15 years old female whose teacher noticed she often “zones out” during class for a few seconds at a time. These episodes happen several times a day and last less than 20 seconds. During the episodes, she appears to stop all activity, stare blankly, and is unresponsive. There is no warning before the episodes and no confusion afterward; she just resumes whatever she was doing as if nothing happened.

Her parents thought she was just daydreaming, but the frequency of episodes has increased, and her grades have started to drop. No convulsions, tongue-biting, or loss of bowel/bladder control has been observed.

1. What is the most likely diagnosis for this patient?
2. List three appropriate medications used to treat this patient?
3. List three antiepileptic drugs that are contraindicated or may worsen the situation? (dr mentioned them in the lecture)
4. What is the appropriate investigation you would perform in this case?
5. Are there any specific triggers, mention them?

Answers:

1. Absence Seizures ("Petit Mal seizures")
2. Ethosuximide, Valproic acid, Lamotrigine
3. Carbamazepine, Phenytoin, gabapentin
4. Electroencephalogram (EEG), Expected finding: 3 Hz spike and wave discharges
5. Hyperventilation (classic trigger, often used during EEG testing) and sleep deprivation, Stress or anxiety.

3) Mr. Mohammad presents with a 1-year history of progressive difficulty when writing. Initially, he noticed mild discomfort and stiffness in his right hand after prolonged writing. Over time, the hand began to cramp and twist involuntarily even after writing a few words, making it difficult to hold a pen.

1. What is the most likely diagnosis?
2. What features in this case support the diagnosis?
3. What is the **first-line treatment** for this patient ? (Dr mentioned it in the lecture)

Answers:

1. Focal dystonia.
2. Task-specific symptoms (only occurs while writing) ,Involuntary movements and abnormal posturing.
3. Botulinum toxin injections(Botox).

4) 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, dull ache that has gradually worsened. She also reports tenderness over the area, making it uncomfortable to lie on that side. She recently noticed some difficulty chewing due to jaw discomfort that starts after a few minutes of eating, which she finds unusual.

1. What is the most likely diagnosis?
2. blood tests that support the diagnosis?
3. What is the initial treatment?
4. What is the diagnostic test that confirms the diagnosis?
5. complications?
6. symptoms?

Answers:

1. Giant Cell Arteritis (GCA) (Also known as Temporal Arteritis).
2. Elevated ESR and CRP.
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.
6. symptoms including vision changes(amaurosis fugax), jaw claudication,fever, and scalp tenderness