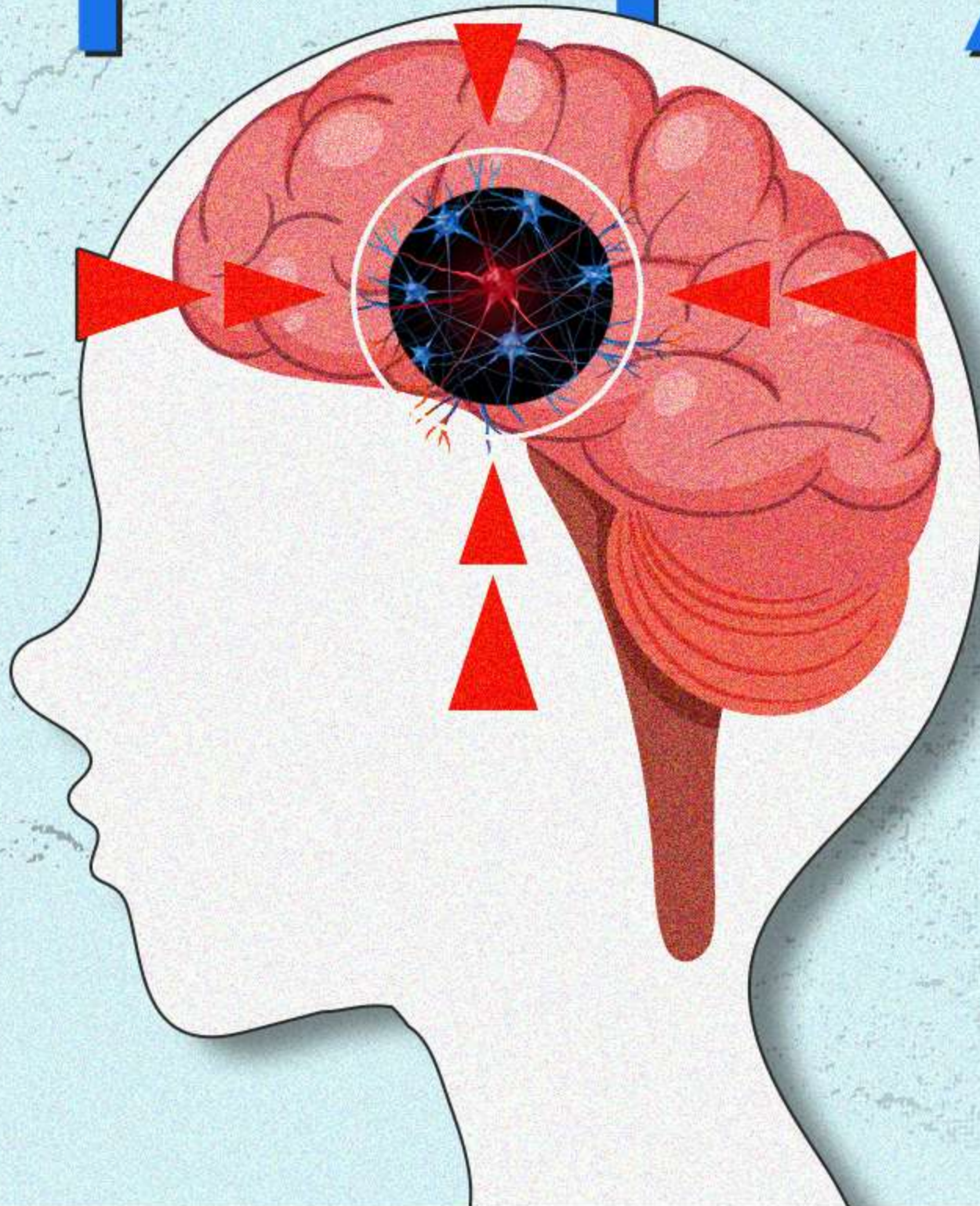


# Epilepsy



What Every Psychology Aspirant Should Know

# Sample MCQs For Exam Practice

Let's have a quick look at the questions that might appear in your exams from this topic!

**Q. 1:** Who first proposed that epilepsy has a medical explanation, not a mystical cause?

**a** Charcot

**b** Freud

**c** Hippocrates

**d** Galen

**Q. 2:** The diagnostic tool used to detect abnormal electrical activity in epilepsy is:

**a** CT Scan

**b** EEG

**c** PET Scan

**d** Blood Test

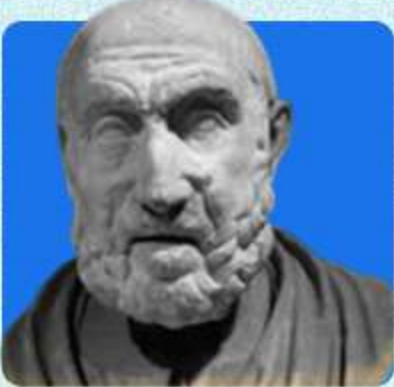
**Swipe left** and find out the answer to these questions while learning...

# What is Epilepsy?

Epilepsy is a **neurological disorder** characterized by **recurrent, unprovoked seizures** due to abnormal electrical discharges in the brain. Seizures result from sudden, excessive, and synchronized electrical activity of neurons, disrupting normal brain function.



# History of Epilepsy:



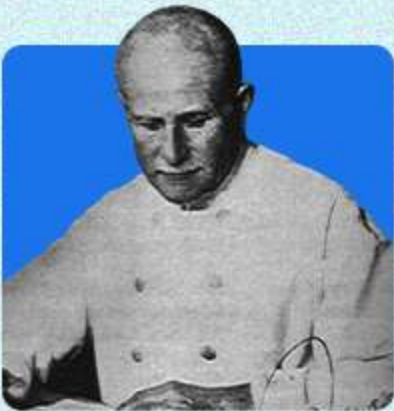
**Hippocrates**  
(5th century BC)

First to describe epilepsy as a brain disorder, not a mystical condition.



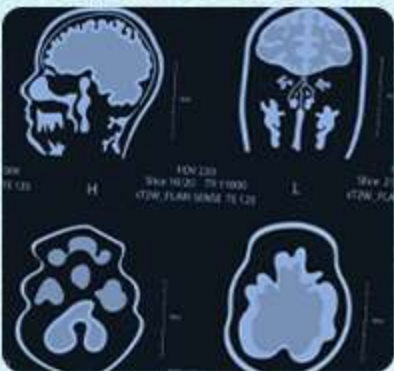
**John Hughlings Jackson**  
(19th century)

Explained epilepsy as abnormal brain electrical activity.



**Hans Berger (1929):**

Developed the EEG, a breakthrough tool to record brain waves.

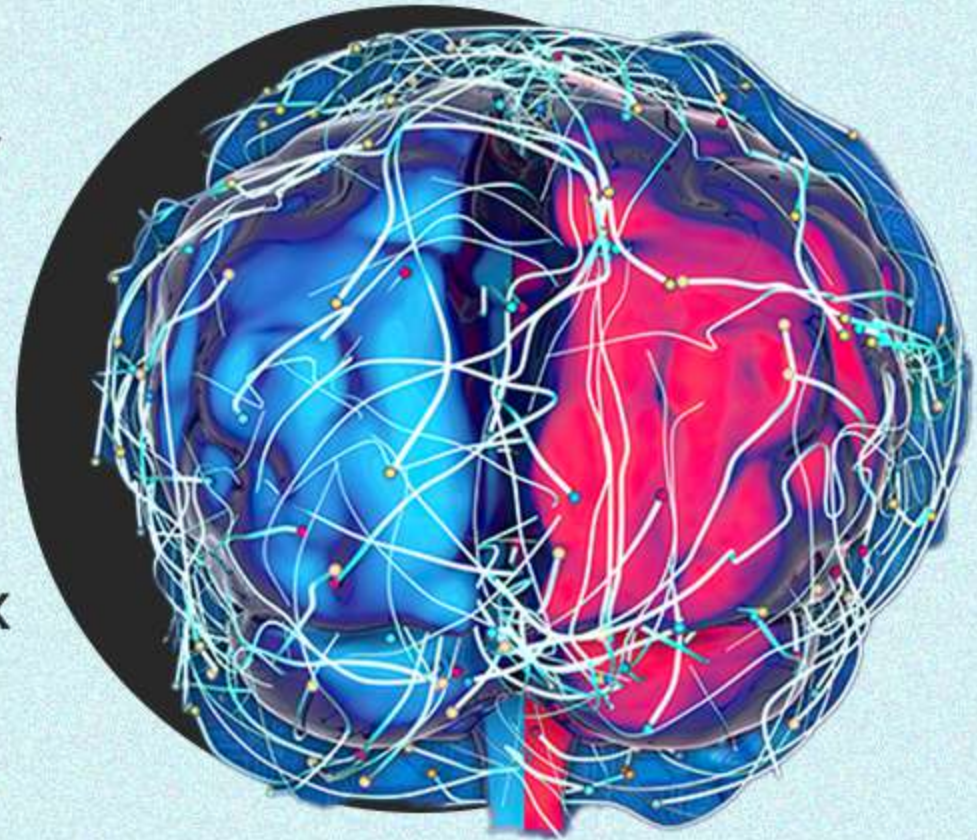


Modern research emphasizes genetics, neuroimaging, and pharmacological treatments.

# Brain and Epilepsy Connection

Epilepsy involves abnormal activity in the cerebral cortex (outer layer of the brain):

- Neurons in the cortex communicate via electrical impulses.
- In epilepsy, a group of neurons fire excessively and synchronously, leading to a seizure.
- Specific brain areas cause different seizure types (e.g., temporal lobe → focal seizures with altered awareness).
- Understanding brain regions is important for localization and treatment planning.



# Causes of Epilepsy

Main causes of epilepsy:



**Genetic mutations**  
(inherited predisposition)



**Structural brain abnormalities**  
Tumors, stroke, brain injury



**Infections**  
Meningitis, Encephalitis



**Metabolic disorders**  
Hypoglycemia, electrolyte imbalance



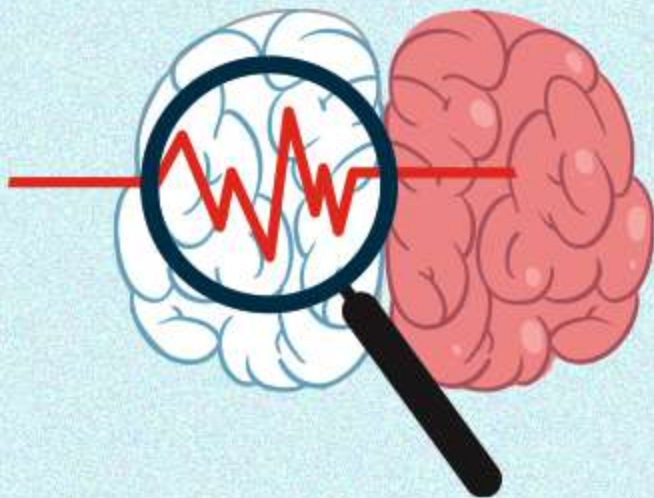
**Idiopathic epilepsy**  
No identifiable cause  
(common in children).

# Types of Seizures

## Focal (Partial) Seizures

Start in a specific brain area

- Simple focal: Consciousness intact
- Complex focal: Impaired consciousness



## Generalized Seizures

Involve the whole brain

- Absence seizure: Brief staring spells
- Tonic-clonic seizure: Loss of consciousness and convulsions
- Myoclonic seizure: Sudden muscle jerks



Understanding the type is crucial for treatment and diagnosis.

# Diagnosis of Epilepsy

Diagnostic tools used in epilepsy:

- **EEG (Electroencephalogram)**

Detects abnormal brain wave patterns (spikes, sharp waves)

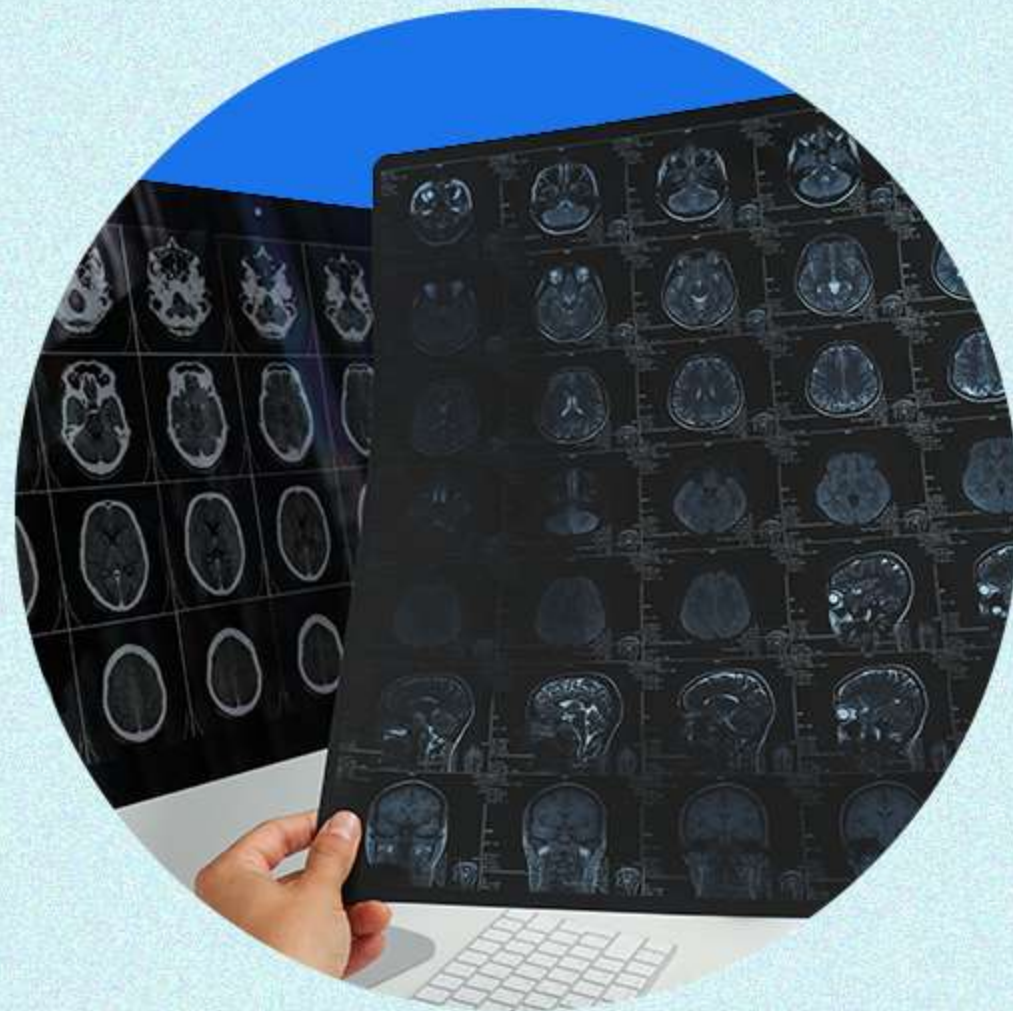
- **MRI/CT scan**

Identifies structural abnormalities (tumors, lesions)

- **Video EEG monitoring**

Records seizures along with EEG for detailed analysis

- Clinical history of seizure events is essential for accurate diagnosis.



# Treatment of Epilepsy

Treatment objectives:

Control seizures and improve quality of life.



## Anti-Epileptic Drugs (AEDs)

First-line treatment  
(e.g., Phenytoin, Valproate)



## Surgical intervention

For drug-resistant epilepsy  
(e.g., temporal lobectomy)



## Lifestyle management

Regular sleep, avoiding alcohol,  
and stress reduction



Importance of a personalized treatment  
plan and regular follow-up to monitor  
drug levels and side effects.

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Correct Answers: Q.1 c) Hippocrates & Q.2 b) EEG