FIRST SEIZURE MANAGEMENT

By Anna-Maria Leitgebur, MD – Albert Einstein College of Medicine, New York, USA

From the moment a person presents with a first epileptic seizure, determining the **etiology** of the patient’s seizure should be the clinician’s first task:
- Patient’s detailed history
- Physical examination
- Neuroimaging (epilepsy-protocol MRI)
- Electroencephalogram (EEG)

**Etiology**
- Structural
- Genetic
- Infectious
- Metabolic
- Immune
- Unknown

1 in 10 people worldwide will experience at least one seizure in their lifetime.

Levels of Diagnosis
- Epilepsy syndrome
- Epilepsy type
- Seizure type

According to the American Academy of Neurology (AAN) & the American Epilepsy Society (AES) Guidelines:
Seizure risk after an unprovoked first seizure is greatest within the first 2 years (21-45%).

Clinical variables associated with increased risk of seizure recurrence:
- A prior brain injury
- Epileptiform activity on EEG
- Abnormal brain imaging (CT/MRI)
- A nocturnal seizure

Antiepileptic drug (AED) treatment
Clinicians recommend that first seizure treatment decisions should be individualized according to:
- Patient preference
- Risk-benefit ratio

AED choice depends on:
- Seizure type
- Patient’s age
- Side effect profile
- Pregnancy potential

Two main types of AEDs
- Broad-spectrum vs Narrow-spectrum
  - All seizure types
  - Focal seizures
    - Focal, generalized, unknown

Questions or concerns? Consult your neurologist.

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