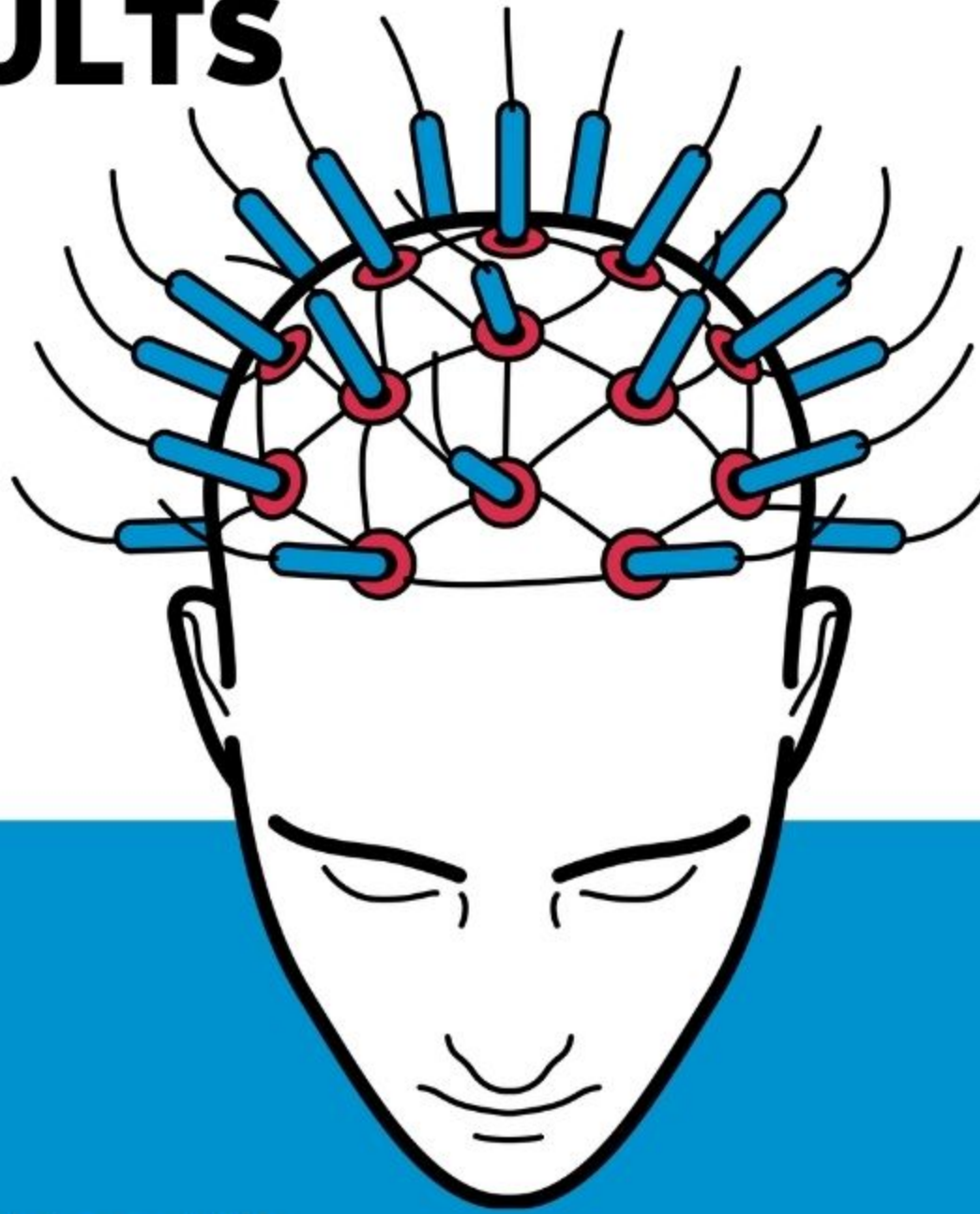


EEG IN THE DIAGNOSIS AND MONITORING OF EPILEPSY IN ADULTS



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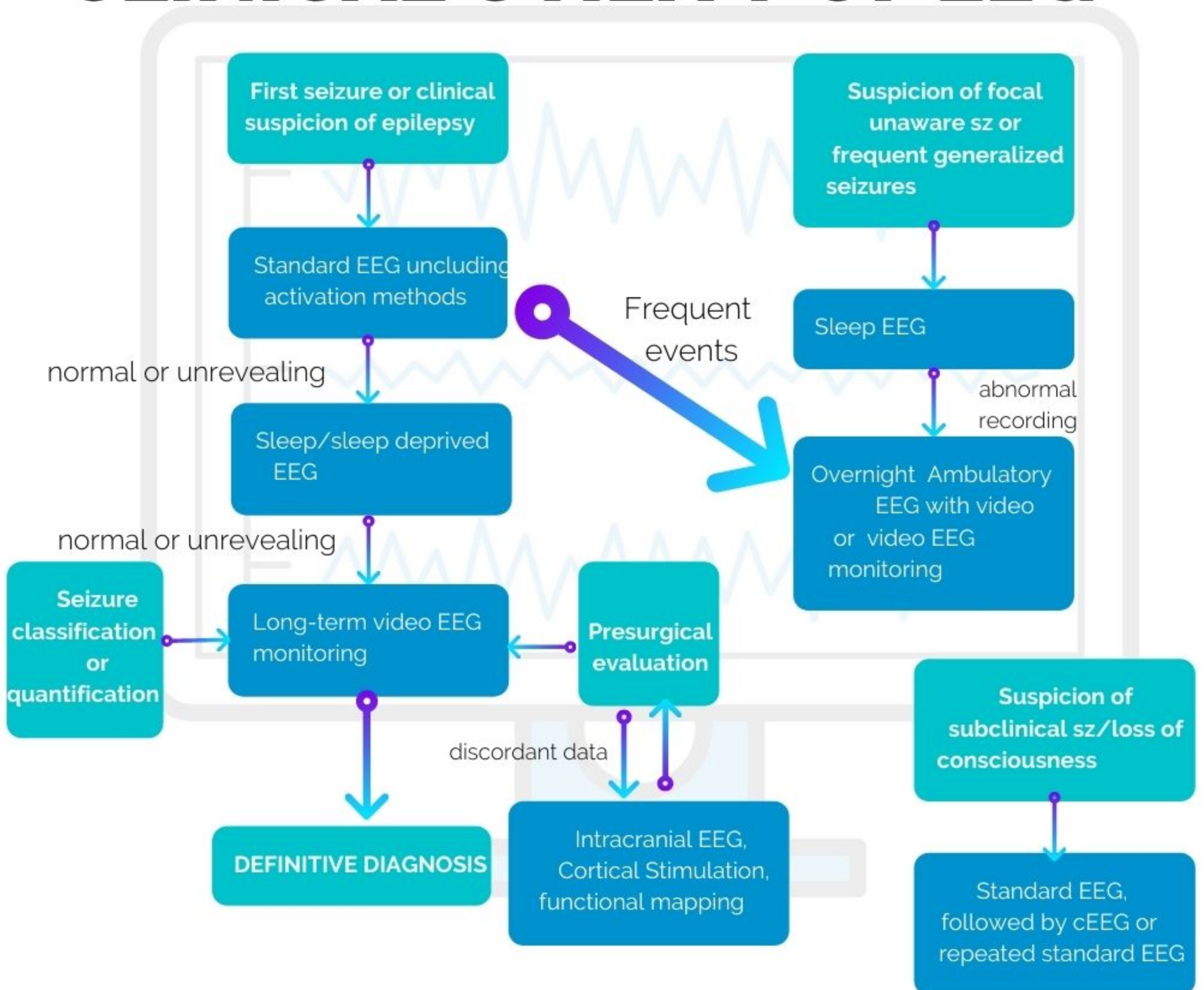
CLINICAL UTILITY OF EEG IN EPILEPSY

Electroencephalography (EEG) is an essential tool in the evaluation and management of People with Epilepsy (PWE). Abnormal EEGs containing interictal epileptiform discharges (IEDs) help classify seizures and identify epilepsy syndromes.

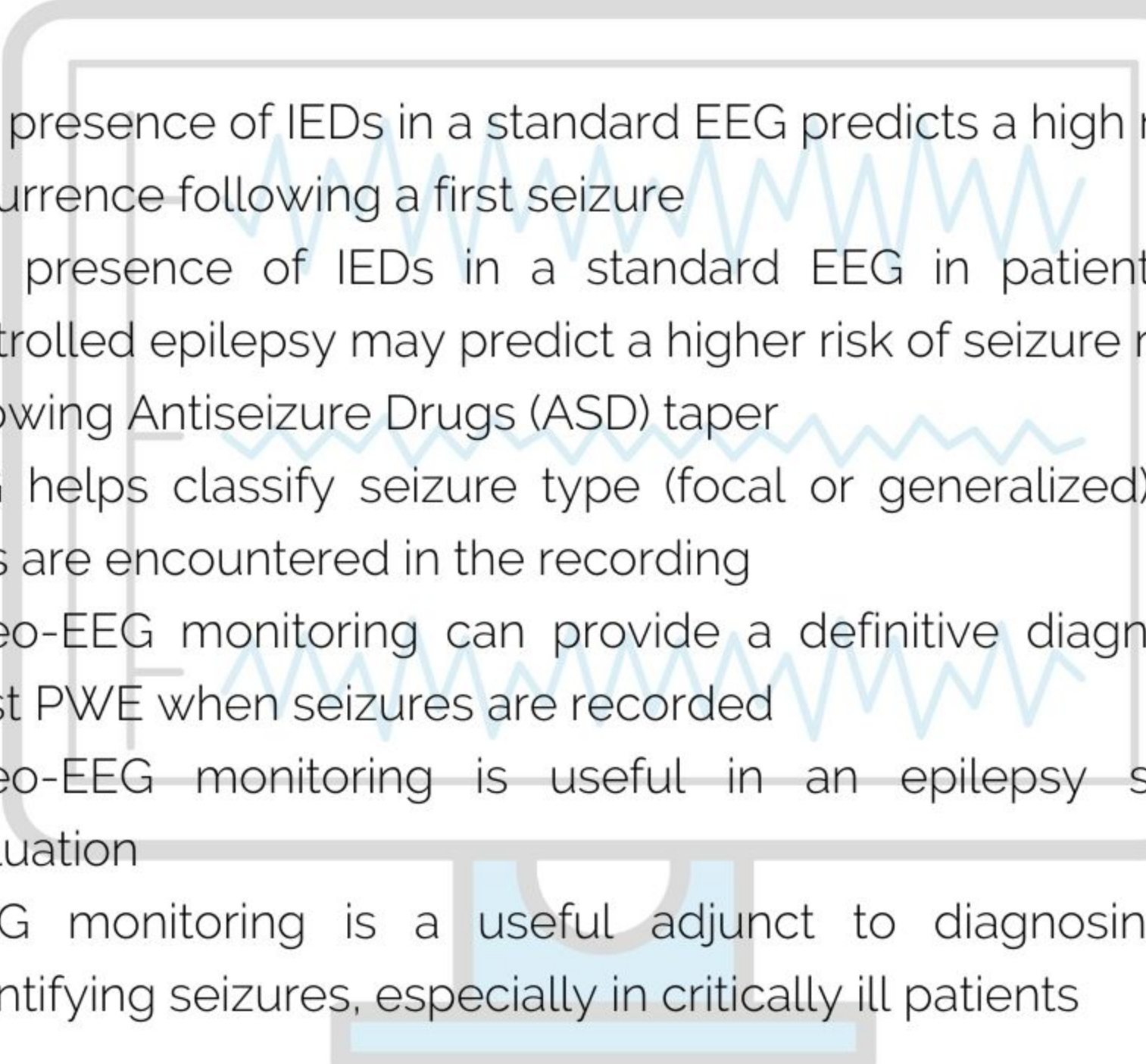
Standard scalp EEG represents the combined electrical activity of billions of neurons, but records only one-third of the cerebral cortex. Seizures contribute to epilepsy diagnosis and the electro-anatomo-clinical correlation in presurgical evaluation.

A standardized protocol for EEG (including activation procedures) should be used to ensure reproducibility from one recording to another. Continuous EEG (cEEG) in special care units can quantify clinical/subclinical seizures for diagnosis and assist in the management of seizure emergencies, including status epilepticus.

CLINICAL UTILITY OF EEG



TAKE-HOME MESSAGES

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- The presence of IEDs in a standard EEG predicts a high risk of recurrence following a first seizure
 - The presence of IEDs in a standard EEG in patients with controlled epilepsy may predict a higher risk of seizure relapse following Antiseizure Drugs (ASD) taper
 - EEG helps classify seizure type (focal or generalized) when IEDs are encountered in the recording
 - Video-EEG monitoring can provide a definitive diagnosis in most PWE when seizures are recorded
 - Video-EEG monitoring is useful in an epilepsy surgery evaluation
 - cEEG monitoring is a useful adjunct to diagnosing and quantifying seizures, especially in critically ill patients