Poster Presentation

Decrypting Epilepsy: The Deciphering Role of Electroencephalography

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Abstract

Introduction: Epilepsy is a debilitating neurological disorder characterized by recurrent seizures. It affects approximately 1% of the global population and is an important issue that needs to be tackled. The diagnosis and management of epilepsy remains challenging due to the complexity of seizure patterns and the variability of electroencephalographic (EEG) recordings. EEG is a non-invasive neuroimaging technique that has been instrumental in understanding epilepsy pathophysiology and identifying biomarkers for seizure prediction and diagnosis. ***Materials and Methods:*** This study explores the crucial role of EEG in epilepsy research, focusing on its applications in seizure detection, source localization, and neurophysiological characterization. ***Results:*** We investigate the EEG-based approaches to differentiate epilepsy subtypes, predict seizure onset, and monitor treatment responses. ***Conclusion:*** Our findings underscore the potential of EEG-based biomarkers in improving epilepsy diagnosis, treatment outcomes, and quality of life for patients.

Keywords: 1. Seizures 2. Neuroimaging 3. Diagnosis 4. Quality of Life

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