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The Evolving Role of Electroencephalography in the Neurocritically Ill Patient

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Every day, it becomes more relevant in the management of critically ill patients, the different modalities to monitor vital functions, of which, the brain is not the exception. The last decades have been characterized by the remarkable advance of the technology applied to the different types of monitoring. Monitoring means "to watch over" or "to anticipate". Monitoring is crucial and essential in the modern management of severely ill patients in intensive care units. It is simply the act of observing the course of one or more physiological parameters in order to detect anomalies. Neurological status monitoring is essential during acute brain injury of any origin, as well as in the critically ill patient without primary neurological injury. In general, monitoring in intensive care units is intended to achieve the following objectives: 1) to evaluate and follow the function of an organ or system; 2) to interpret the pathophysiology of a particular entity; 3) to provide physiological data that allow the identification of abnormal situations; 4) to guide and evaluate the response to therapy; and 5) to help establish the prognosis. Specifically speaking, neuromonitoring modalities cover a broad spectrum of brain physiology, from clinical evaluation to obtaining and acquiring sophisticated variables that evaluate different aspects of brain functioning. One of these parameters is the electroencephalography (EEG), which is a simple, and non-invasive way aids to obtain information on neuronal activity in the face of structural and/or functional changes [1]. This variable can be obtained in isolation or continuously [1].

In their review article, Vaz de Melo et al, in a clear, simple, practical and graphic way, provide information about the specific use of EEG in the different types of encephalitis, which is not limited to diagnostic assistance or in the detection of seizure states [2]. The available literature in this regard is scarce, which is why I highlight the value of this manuscript.

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Conflict of Interest

None to declare.

Author Contributions

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Data Availability

The authors declare that data supporting the findings of this study are available within the article.

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