عنوان مقاله:

(The Correlation Between Fixation Frequencies with Alpha Power Spectra in Mild Alzheimer Disease (AD

محل انتشار:

ششمین کنگره بین المللی نقشه برداری مغز ایران (سال: 1398)

تعداد صفحات اصل مقاله: 2

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خلاصه مقاله:

Alzheimer s disease (AD) is a major cognitive disorder in the elderly that affects millions of people and their families around the world. This disorder may occur many years before the first clinical symptoms. Recent studies have shown that in the early stages of disease, neuronal degeneration occurs even without clinical signs. Electroencephalography (EEG) and eye tracking biomarkers would provide non-invasive and relatively inexpensive tools for early detection and prediction of AD. Therefore, we examined the simultaneous changes between EEG and eye tracking in mild AD patients. Method 19 patients with mild Alzheimer's disease (AD) compared to 19 gender and age matched normal subjects without any history of cognitive, neurological or psychiatric disorders. EEG and eye-tracking data were concurrently acquired in both groups in the fixation task.Results Our results proved that destroyed correlation among fixation frequency with alpha power spectra in AD compared to controls. Increased theta power and also decreased alpha power in the AD group observed. Fixation duration was significantly shorter for AD patients and fixation frequency and count was more than control in AD patients.Conclusions Therefore, our results may suggest that AD patients recruit more neural networks to fixate. It is assumed that, they might use compensatory mechanisms to encode fixation.

کلمات کلیدی:

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