Periodic Sharp Wave Complexes in Patient with Creutzfeldt-Jakob Disease

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Citation

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Abstract

Creutzfeldt- Jakob disease (CJD) is included under the umbrella of prior related neurodegenerative diseases. Other prior related diseases include Gerstmann-Sträussler-Scheinker (GSS), fatal familial insomnia (FFI), Kuru and new variant CJD (BSE) in humans, chronic wasting disease (CWD) in deer and scrapie in sheep. Sporadic CJD presents with rapidly progressive dementia and myoclonus. Diagnosis is typically clinical and supplemented by electroencephalography (EEG) and analysis of cerebrospinal fluid. During the course of sporadic CJD, most patients develop a characteristic picture on EEG with one second periodic or pseudoperiodic sharp waves complexes (PSWC) or spikes superimposed on a slow background (Fig 1 and 2).

EEG showing periodic sharp wave complexes (PSWC) in a patient with CJD.

Figure 1

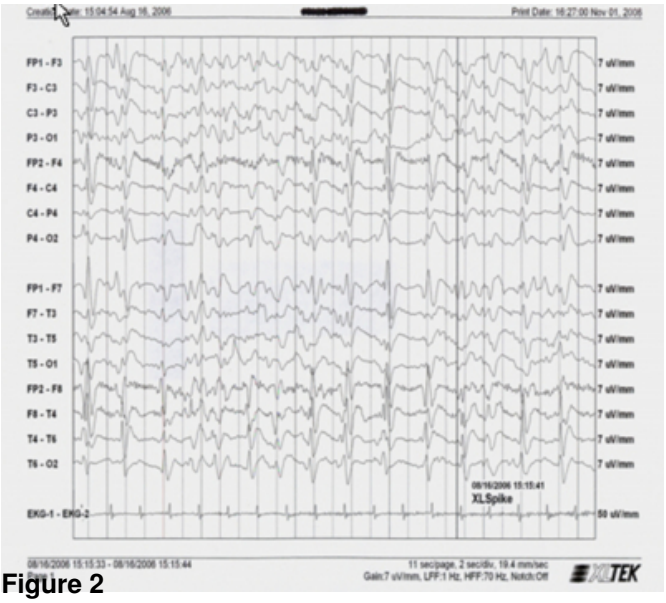
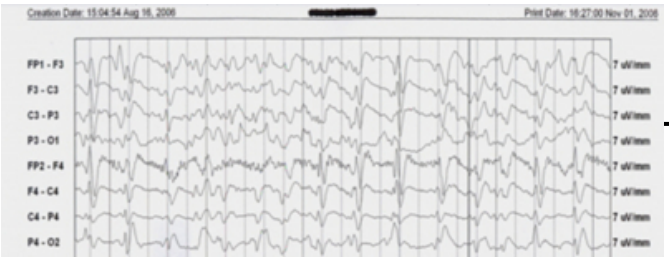


Figure 2



The sensitivity and specificity of PSWC varies from 60% to 80 % on a single EEG recorded from a suspected patient of CJD. They may not be present on the initial EEG but as the disease progresses more than 90% of the patients show the characteristic periodic EEG abnormalities. No PSWC occur in EEG recordings of patients with new variant CJD [1].

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References

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