The electroencephalographic signature of subacute sclerosing panencephalitis

O padrão eletrencefalográfico da panencefalite esclerosante subaguda

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Periodic long-interval diffuse discharges synchronized with myoclonic jerks in subacute sclerosing panencephalitis (SSPE) are a very specific pattern in electroencephalography. They are characterized by generalized synchronous high-voltage complexes (300–1000 µV), composed of two or more waves consisting of variable elements, such as slow waves usually mixed with sharp waves. Complexes last from 0.5 to 3 seconds and recur every 5–7 seconds, as in the electroencephalographic record of a 15-year-old male patient presenting progressive cognitive deterioration and myoclonus showed in the Figure.

Although SSPE is considered a vanishing disease, global eradication may be hard to achieve, considering that outbreaks of measles occur worldwide on a regular basis and remain a public health problem in many countries.

Figure. Thirty-second epoch of an electroencephalographic record, performed in April 2011, in a case of subacute sclerosing panencephalitis, disclosing periodic long-interval diffuse discharges, occurring every seven seconds. Parameters are as follows: sensitivity 10 µV/mm, time constant 0.3 s and high-frequency filter 70 Hz.

References