

The effect of b12 deficiency in adult seizure occurrence

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Cobalamin's contribution to normal nervous system functioning is well known. While extensive references exist concerning neuro-psychiatric disorders caused by B12 deficiency, only a few pertain to epileptic seizures especially in adulthood. 400 pg/ml). Patients with known epilepsy, antiepileptic drug treatment, alcohol abuse, metabolic, cognitive or psychiatric disorders were excluded. Both groups were submitted to brain imaging. Correlation between the participants' variables and quantitative electroencephalographic (QEEG) values was estimated. Re-evaluation was repeated three months after B12 treatment. Results Patients, with B12 200 pg/mL, showed statistically significant differences of their QEEG parameters both in relation to the control and second patient group. An increase of paroxysmal EEG activity was observed and 7% of them presented seizures. EEG recordings of the 2nd group were characterized by pronounced theta rhythms in the fronto-temporal regions and alpha3/alpha2 frequency ratio reduction, correlating with detected memory deficits. Restoration of EEG abnormalities was noted 3 months after intramuscular cobalamin supplementation. Conclusion B12 insufficiency appears to be associated with EEG rhythm alterations. Evaluation of B12 serum levels should be undertaken in differential diagnosis of late onset seizures"

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Restoration of EEG abnormalities was noted 3 months after intramuscular cobalamin supplementation. Conclusion B12 insufficiency appears to be associated with EEG rhythm alterations. Evaluation of B12 serum levels should be undertaken in differential diagnosis of late onset seizures" Two groups of 25 patients each (mean age 67 years) were investigated; one with B12 deficiency (serum levels 200 pg/ml); the other with B12 levels in the gray zone of 200- 400 pg/ml. A matching healthy control sample was included (B12 400 pg/ml). Patients with known epilepsy, antiepileptic drug treatment, alcohol abuse, metabolic, cognitive or psychiatric disorders were excluded. Both groups were submitted to brain imaging. Correlation between the participants' variables and quantitative electroencephalographic (QEEG) values was estimated. Re-evaluation was repeated three months after B12 treatment. 400 pg/ml). 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