

Brain electrical activity in apparently healthy young people in a state of hypnosis

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Introduction: There are many ways to distinguish hypnosis from wakefulness.

Materials and methods: A quasi-experimental study was conducted in 21 young adults with 20 years apparently healthy in a state of hypnosis at the "Juan Bruno Zayas" hospital in Santiago de Cuba, during the period from September 2014 to June 2015

Objective: evaluate if the narrow band quantitative analysis allows to distinguish hypnosis from wakefulness.

Results: In order to validate the statistical information, the Manova multivariate analysis of variance was used as a technique and, through the Nest statistical system, the difference between hypnosis and wakefulness was validated through the student's t 'test. Validation of the difference between the different levels of hypnotic depth was carried out through the Nest statistical system using the False Discovery Rate (FDR) statistic. For all hypothesis tests, a statistical significance level of 0.05 was considered.

Conclusions: The narrow band quantitative analysis allows to differentiate the wakefulness of the hypnosis state, the multivariate analysis of the hypnotic depth level by derivation for each of the narrow band frequencies allows to identify the hypnotic depth level, in the quantitative analysis of The narrow band spectral parameters are concentrated in the largest frequency range with statistical significance in the theta band, the leads that obtain a greater range of frequencies with significant responses are located in the frontocentral region of the right hemisphere and central midline.

Keywords: hypnosis, wakefulness, brain electrical activity