

Abstract

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Vitamin B12 treatment for sleep-wake rhythm disorders.

Okawa M, Mishima K, Nanami T, Shimizu T, Iijima S, Hishikawa Y, Takahashi K.

Department of Neuropsychiatry, Akita University School of Medicine, Japan.

BACKGROUND: Vitamin B12 (VB12) was administered to two patients suffering for many years from different sleep-wake rhythm disorders. One patient was a 15-year-old blind girl suffering from a free-running sleep-wake rhythm (hypernychthemeral syndrome) with a period of about 25 h. In spite of repeated trials to entrain her sleep-wake cycle to the environmental 24-h rhythm, her free-running rhythm persisted for about 13 years.

RESULTS: When she was 14 years old, administration of VB12 per os was started at the daily dose of 1.5 mg t.i.d. Shortly thereafter, her sleep-wake rhythm was entrained to the environmental 24-h rhythm, and her 24-h sleep-wake rhythm was maintained while she was on the medication. Within 2 months of the withholding of VB12, her free-running sleep-wake rhythm reappeared. The VB12 level in the serum was within the normal range both before and after treatment. The other patient was a 55-year-old man suffering from delayed sleep phase syndrome since 18 years of age. After administration of VB12 at the daily doses of 1.5 mg, his sleep-wake rhythm disorder was improved. The good therapeutic effect lasted for more than 6 months while he was on the medication.

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