Sleep Disturbances in Children Recovered from Central Nervous System Neoplasms.

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Abstract

OBJECTIVES: To identify the prevalence of long-term sleep disturbances in children successfully treated for central nervous system tumors by use of subjective and objective tools.

STUDY DESIGN: Children diagnosed and treated for central nervous system tumors and age-matched control subjects were studied. Information on demographics, tumor type, location, and therapies were collected. Parents completed a 28-item sleep questionnaire. Sleep was also evaluated with a sleep-log and actigraphy.

RESULTS: Forty patients (52% males) and 61 matched control subjects (48% males) were evaluated. The mean ages were 9.9 ± 3.8 and 11.4 ± 3.8 years, respectively (P = NS). The mean time from diagnosis to participation was 4.1 ± 1.4 years. Children in the study group reported longer nighttime sleep compared with control subjects (572 ± 66 minutes vs 519 ± 79 minutes, P < .001; respectively). This was confirmed by actigraphy. These differences disappeared when comparison by age groups was performed. Two patients compared with none in the control subjects resumed daytime napping. No significant sleep disturbances were observed in the study group. No effect was found for tumor type, anatomic site, or adjuvant therapy.

CONCLUSIONS: Recovered children with a history of brain tumor do not have significant sleep disorders. Their sleep is generally well preserved years after diagnosis and treatment. The possibility that excessive daytime somnolence affects a minority of these children needs further investigation.

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