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SEIZURE DISORDERS

RISK OF SEIZURE RECURRENCE WITH NEUROCYSTICERCOSIS

The risk of seizure recurrence after a first seizure due to neurocysticercosis (NC) was evaluated in a prospective study of 77 patients at the School of Medicine and Research Institute, University of Cuenca, Ecuador, and Columbia University, New York. Seizures recurred in 31 (40.3%) patients, and the risk of a third seizure was 68% by 6 years after the second seizure. Estimated recurrence was 22% at 6 months, 32% at 12 months, 39% at 24 months, and 49% at 48 and 84 months. Recurrence rate was not affected by treatment with an anthelmintic (albendazole), and was not related to seizure type, EEG abnormalities, or localization of cyst. It was related to the persistence of active cyst lesions with edema on repeat CT scans; 56% seizure recurrence in patients with active lesions and persistent cysts and 22% in patients whose CT changed with resolution of cysts ($p < 0.05$). Antiepileptic medications should be continued until the acute lesion clears on CT. (Carpio A, Hauser WA. Prognosis for seizure recurrence in patients with newly diagnosed neurocysticercosis. Neurology December (1 of 2) 2002;59:1730-1734). (Reprints: Dr W Allen Hauser, 630 W 168th St, New York, NY).

COMMENT. Among potential risk factors for recurrence of symptomatic seizures, only CT scan evidence of an active lesion and cyst is predictive of seizure recurrence in neurocysticercosis. Treatment with anthelmintic drugs did not affect the seizure recurrence rate in this study, a finding in agreement with that of a recent Cochrane review (cited by Davis LE. Neurology Dec 2002;159:1669). Long-term antiepileptic treatment is recommended in patients with persistent active lesions on CT, and in those with seizure recurrence after the edema has resolved and the cyst has calcified. About one in five will have a seizure recurrence after the cyst has resolved, a rate similar to unprovoked seizure risk in patients with structural brain abnormalities and epilepsy.

It seems appropriate to monitor cyst activity with CT scans, and to continue AED treatment until the acute lesion has resolved, a process that can take 2 years.

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