

PEDIATRIC NEUROLOGY BRIEFS

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TOXIC DISORDERS

RADIATION-INDUCED PARTIAL EPILEPSY

Intractable epilepsy in 3 patients treated with low-dose irradiation to "strawberry" scalp nevi in infancy is reported from the Montreal Neurological Institute and Hospital, Montreal, Quebec, Canada. Focal seizures developed at ages 8 to 20 years. All patients had localized alopecia and EEG abnormalities corresponding with the irradiated site. MRI showed thinning of the cranial vault with expansion of the brain into the skull defect in one patient, and mild perisylvian atrophy in one other. Neurologic deficits were not progressive. (Reutens DC, Andermann F et al. Intractable partial epilepsy following low-dose scalp irradiation in infancy. *Ann Neurol* December 1995;38:951-954). (Respond: Dr Andermann, Montreal Neurological Institute, 3801 University St, Montreal, Quebec, Canada H3A 2B4).

COMMENT. Strawberry nevi invariably involute spontaneously before 10 years of age and scalp irradiation is no longer employed. The risk of epilepsy following low-dose irradiation is low, and may reflect induction of intracranial tumor or delayed cerebral radiation necrosis. The syndrome of delayed cerebral radiation necrosis is characterized by progressive neurological deficits and sometimes raised intracranial pressure developing months to years after irradiation. MRI shows cerebral atrophy, white matter lesions, and enhancing foci. In the above patient reports, the postirradiation syndrome was nonprogressive but intractable, and one showed mild cerebral focal atrophy. Irradiation to the skull should be avoided whenever possible.

NEUROLOGIC COMPLICATIONS OF FETAL COCAINE EXPOSURE

Cocaine-positive urine toxicology at birth in 51 newborns was associated with hypertonia during infancy in 21(41%) studied at the Harlem Hospital Center, New York. Cocaine-positive infants were four times more likely to show hypertonic tetraparesis than cocaine-negative infants. Hypertonia diminished over time and resolved by 24 months. Those with early hypertonia showed significantly lower developmental scores at 6 and 12 months than

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