Non-convulsive status epilepticus

Sir,

We have read Manning and Rosenbloom’s interesting paper concerning non-convulsive status epilepticus. They report 13 patients, five of whom presented with fluctuating neurological symptoms (ataxia, dysphasia, and unresponsiveness) and developmental deterioration coinciding with continuous paroxysmal activity on the electroencephalogram. The authors stress the ‘epileptic’ nature of such symptoms. They have not, however, reported whether the evidence of status epilepticus was also detected on an electroencephalogram taken during sleep.

We have observed five boys and five girls with a mean age of 6 years who have long standing ‘electrical status epilepticus during slow sleep’ in six cases focal or unilateral epileptiform activity occurred during more than 85% of non-rapid eye movement sleep, but electroencephalograms taken while they were awake disclosed only a frontal or frontal/central focus. The remaining patients presented with typical electrical status epilepticus during slow sleep characterised by a generalised epileptic pattern on electroencephalography during non-rapid eye movement sleep. All patients had fluctuating neurological symptoms as well as disturbance of gait and motor coordination, speech impairment, behavioural changes associated with alteration in responsiveness, and developmental deterioration. All these children were suffering from epileptic seizures and were mentally retarded (six presented with congenital cerebral palsy). Remission of electrical status epilepticus during slow sleep was observed in two patients who fully recovered.

We believe that such fluctuating symptoms are not directly related to paroxysmal activity seen on electroencephalograms, but probably reflect a more complex brain disorder. In our cases a continuous epileptic activity was recorded on electroencephalograms only during sleep, while neurological symptoms were present when the children were awake. Moreover, our observations suggest that electroencephalography should be performed during spontaneous sleep in children with fluctuating neurological symptoms and mental deterioration, even if the recording made when awake did not show non-convulsive status epilepticus.

References

3. Brinciotti M, Galletti F, Pelliccia A. Istituto di Neuropsichiatria Infantile, 00100 Roma, Italy

Topical iodine, breastfeeding, and neonatal hypothyroidism

Sir,

The case of transient congenital hypothyroidism after topical iodine in pregnancy reported by Danziger et al confirms and extends our previous observation that the cutaneous application of povidone-iodine (PVP-I) in mothers at the time of delivery results in iodine overload and in slight impairment of the thyroid function of their breastfed infants due to a Wolff-Chaikoff effect. We recently observed severe transient congenital hypothyroidism in a breastfed infant born to a mother who had performed vaginal douching with PVP-I for gynaecological reasons twice a day since delivery. As shown in the figure the concentration of thyroid stimulating hormone (TSH) in serum was moderately raised at the time of systematic screening for congenital hypothyroidism, but thyroxine (T4) was normal. Control examinations performed on days 14 and 22 showed an appreciable increase in serum TSH

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