

the Vitamin A analog Isotretinoin is teratogenic and should be avoided during pregnancy. Further studies are obviously needed to confirm these results. In the meantime mothers might be advised to take vitamins in the recommended daily allowances but not to resort to megavitamin therapy with possible adverse effects.

SEIZURE DISORDERS

HIGH DOSE ACTH FOR INFANTILE SPASMS

The efficacy and plasma levels of ACTH and Cortisol were studied in 15 children with infantile spasms and hypsarrhythmia using a high dose (150 IU/M²/D ACTH) and are reported from the Department of Pediatrics, University of Alabama at Birmingham School of Medicine, and the Comprehensive Epilepsy Center, the Alabama Children's Hospital, Birmingham, AL. An endocrinologic evaluation before and after initiation of the ACTH showed that all patients had normal prolactin, insulin, cortisol and ACTH levels in plasma and normal thyroid function before treatment and plasma cortisol rose rapidly within one hour after ACTH administration and continued a slower rise from 12-24 hours after the ACTH dose. Spasms were controlled and the EEG became normal in 14 of the 15 children. The initial dose was 75 IU/M² intramuscularly twice daily for one week, 75 IU/M²/D for one week, followed by 75 IU/M² every other day for one week and followed by a nine week taper. All patients developed cushingoid features and hyperirritability and one became hypertensive. One child with tuberous sclerosis developed a cardiac arrhythmia and was found to have an atrial myxoma. (Snead CC. Benton JW et al. Treatment of infantile spasms with high dose ACTH: Efficacy and plasma levels of ACTH and cortisol. Neurology August 1989; 39:1027-31).

COMMENT. The use of high dose ACTH regimen for infantile spasms and hypsarrhythmia is contrary to the recommendations of many pediatric neurologists in the U.S. but favored also by my colleagues at the Hospital for Sick Children, Great Ormond Street, London. The clinical response to the high dose ACTH in the present study and the relative paucity of serious adverse effects were remarkable. The authors suggest that a sustained high level of plasma cortisol may be more effective in controlling infantile spasms than the pulse effect expected with oral steroids or low doses of ACTH. However, it is admitted that the ACTH may exert its anticonvulsant effect independently of cortisol and by a direct effect on the brain. Personally, I would be concerned about the potential risks of the high dose ACTH therapy (e.g. cortical atrophy, gastrointestinal bleeding) and the reevaluation of CT scans following treatment would have been of interest in this study. The group of children reported was unusual in that one-half had other kinds of seizures that preceded the onset of infantile spasms. This might account for the need for high dose ACTH treatment to effect control. Smaller doses of 10-20 IU daily for a period of three or four weeks are usually advised and are generally effective in 50-80% of patients under one year of age. With the smaller dose schedules a lower incidence of serious side effects would be expected.