developed hypersensitivity rashes, two had intractable hiccups and four reported nausea. Patients had failed therapy with phenobarbital, primidone, phenytoin, carbamazepine and valproic acid alone or in various combinations. Decreases in carbamazepine serum concentrations occurred after starting methsuximide as an adjunctive anti-epileptic. (Tennison MB et al Methsuximide for intractable childhood seizures Pediatrics Feb 1991; 87: 186-189).

COMMENT. Methsuximide has been reported of benefit in the treatment of petit mal, partial myoclonic, atonic and tonic seizures. As monotherapy methsuximide is not well established, but as an adjunct therapy further trials should be considered. Skin rash is not uncommon and methsuximide may be contraindicated in patients with a history of hypersensitivity reactions to other anticonvulsants.

VAGUS NERVE STIMULATION FOR CONTROL OF EPILEPSY

Results of intermittent stimulation of the vagus nerve in four patients with intractable partial seizures are reported from the Department of Neurology, Bowman Gray School of Medicine, Wake Forest University, Winston-Salem, NC. The criteria for implantation of the device were 1) refractory partial seizures, 2) adequate trials of anti-epileptic drugs, 3) adequate trials of investigational drugs, 4) age 18 to 55 and 5) not a candidate for epilepsy brain surgery. The stimulation electrodes are placed around the vagus nerve at or above the omohyoid muscle. The leads are tunneled through to a subcutaneous pocket in the subclavicular region and connected to the pulse generator. Complex and simple partial seizures as well as secondarily generalized seizures were reduced by 100% in patients 1 and 2 and by 40% in patient 4. Side effects were transient and occurred concomitantly with stimulation and included hoarseness and a stimulation sensation in the neck. One patient had an episode of uncontrolled hiccups. (Penry JK, Dean JC, Prevention of intractable partial seizures by intermittent vagal stimulation in humans: preliminary results. Epilepsia; 1990; 31 (Suppl 2):S40-43).

COMMENT. Five patients age 20 to 59 with complex partial seizures received vagus nerve stimulation at the Neurology Service and Neurological Surgery Section, Department of Veteran's Affairs Medical Center, Gainesville, Florida (Uthman, BM, Wilder BJ et al. Epilepsia 1990; 31 (Suppl 2): S44-S50). Three patients had a greater than 50% reduction in seizure frequency. The battery life of the stimulator is approximately two years and cost of replacement is comparable to that of a five year supply of anti-epileptic drugs. Vagal stimulation may offer an option of treatment before temporal lobectomy and in patients with bilateral independent epileptogenic foci.