BOTULINUM TOXIN-A IN DYSTONIA

A report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology concludes that local injection of type A botulinum toxin (Botox) is proven as a safe and efficacious modality for the treatment of blepharospasm, cervical dystonia, and hemifacial spasm. The literature is reviewed in detail and 62 references are provided. Botox causes muscle paralysis by acting at peripheral nerve endings to block the release of acetylcholine. The effectiveness of the injections is transient lasting on the average four months. Side effects are transient, well tolerated, and amenable to treatment when indicated. (Van den Noort S et al. Assessment: The clinical usefulness of botulinum toxin-A in treating neurologic disorders. Neurology Sept 1990; 40:1332-1336).

COMENT. Efficacy of this treatment in children parallels that in adults but safety has not been studied. Use during pregnancy or lactation is not recommended. FDA approval for the use of Botox has been obtained for the treatment of strabismus and blepharospasm associated with dystonia in patients 12 years of age and older.

Snow BJ et al report a beneficial effect of botulinum toxin on focal spasticity of leg adductors in nine patients with multiple sclerosis. (Ann Neurol Oct 1990; 28:512-515).

VARICELIA WITH DELAYED HEMIPLEGIA

Acute hemiplegia developed seven weeks to four months after varicella infection in four children reported from the Division of Child Neurology, Institute of Neurological Sciences, Tottori University School of Medicine, Yonago, Japan. Carotid angiography demonstrated segmental narrowing and occlusion of the middle cerebral artery in two patients, findings that were similar to those associated with hemiplegia after herpes zoster ophthalmicus. Cerebral angiitis was cited as the cause. A survey of infectious diseases in the San-in District of Japan showed 26,000 varicella patients and a frequency of varicella with delayed hemiplegia of 1:6500. (Ichiyama T et al. Varicella with delayed hemiplegia. Pediatr Neurol July-August 1990; 6:279-281).

COMENT. The neurological complications of varicella may be caused by viremia with encephalitis, post exanthematous encephalitis or cerebral angiitis. Cerebellar ataxia is the most frequent neurologic complication and hemiparesis is unusual. Of the four children reported with delayed hemiparesis, two recovered completely and two had residual weakness, clumsiness, or dystonia.