

### **Case Example: Use with Neck Stiffness and Limited Neck Movement**

A 47-year-old woman is referred to a neurologist for neck stiffness and limitation of neck movement. She first noticed this problem one year ago, but in looking at family photographs, her husband pointed out that she was always looking towards her left. Otherwise she is in good health, and is not taking any medications other than a calcium supplement.

On examination she has turning of her head towards her left shoulder at about 45 degrees from straight ahead and slight tilting of her head towards her right shoulder. Active range of motion of her neck is normal and there is hypertrophy of her right sternocleidomastoid muscle. When she is distracted her head does not resume a normal position.

The neurologist discusses treatments with her, including the use of botulinum toxins. She informs the patient of the risks and then benefits of the injections. Included in this discussion is the fact that the majority of patients respond quite well to either botulinum toxin A (Botox<sup>®</sup>) or to botulinum toxin B (Myobloc<sup>®</sup>), though the doses are quite different. She decides to pursue the botulinum injections and receives a total of 240 units of strain A injected under EMG guidance into her right sternocleidomastoid, trapezius, levator scapulae, and her left splenius capitis muscles.

At the follow-up visit four weeks later, the patient is quite pleased with the results, her head is in a more neutral position, she no longer has stiffness limiting her range of motion, and she has not experienced any side effects.

—Dr. Richard M. Dubinsky, University of Kansas

### **Disclaimer**

This statement is provided as an educational service of the American Academy of Neurology. It is based on an assessment of current scientific and clinical information. It is not intended to include all possible proper methods of care for a particular neurologic problem or all legitimate criteria for choosing to use a specific procedure. Neither is it intended to exclude any reasonable alternative methodologies. The AAN recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on all of the circumstances involved.