AMERICAN ACADEMY OF NEUROLOGY

Assessment: Botulinum neurotoxin for the treatment of movement disorders (an evidence-based review)

Case Presentation

A 45-year-old man presents to the neurology clinic for a consultation complaining of neck pain and twisting. The symptoms started six months prior to presentation and have progressed gradually over time. He denies any associated tremor. He reports that his head pulls to the right. He can forcibly move his head back to midline but is unable to maintain a straight posture. He works as a bus driver and his neck movements are affecting his driving. He reports some associated right sided and posterior neck pain. It is mild in the morning and worse over the course of the day. It is a cramping type of pain that he rates as 6 out of 10 at the worst. The pain is somewhat improved with ibuprofen which he takes a few times a week. He denies twisting or cramping in other parts of his body. He denies a history of head or neck trauma. There is no family history of neurological disease to include dystonia. He has not had prior surgeries. Other than ibuprofen, he is on no other medications. He has no know drug allergies. He does not smoke or drink. On physical examination vitals are 120/70, HR 72 and regular, and RR 12. He is well nourished and in no acute distress. He is alert and oriented, recall is 3/3 in 5 minutes, and he has no language difficulties. Cranial nerve testing reveals intact detailed testing of cranial nerves 2-10, and 12. His head is rotated laterally to the right, and his left sternocleidomastoid is hypertrophied. Motor strength is 5/5 throughout, with normal tone and no drift. Sensory is intact bilaterally to light touch, pinprick, and proprioception. Reflexes are 2/4 throughout and toes are downgoing. Coordination is intact to finger to finger and heel to shin. Gait is narrow based and steady.

1. This patient has:
A. Cervical radiculopathy
B. Cervical dystonia
C. Sternocleidomastoid strain
D. Cervical dissection
E. Cervical strain

Correct answer: B. Cervical dystonia: This patient has classic features of cervical dystonia with twisting of the head and pain. Physical examination reveals a laterocollis and there is evidence of sternocleidomastoid hypertrophy.

2. Evidence supports that the best treatment (Level A) for cervical dystonia is:
A. Ibuprofen
B. Trihexyphenidyl
C. Botulinum toxin injections
D. Clonazepam
E. Amitriptyline

Correct answer: C: Botulinum toxin injection has been proven to be effective in the treatment of cervical dystonia.

Coding Discussion
Cervical dystonia
Code as:

333.83 Spasmodic torticollis

64612 Chemodenervation of muscle(s); muscle(s) innervated by facial nerve (eg, for blepharospasm, hemifacial spasm)

64613 Chemodenervation of muscle(s); neck muscle(s) (eg, for spasmodic torticollis, spasmodic dysphonia)

64614 Chemodenervation of muscle(s); extremity(s) and /or trunk muscle(s) (eg, for dystonia, cerebral palsy, multiple sclerosis)

+95874 Needle electromyography for guidance in conjunction with chemodenervation (List separately in addition to code for primary procedure)

J0585 Botulinum toxin type A, per unit

J0587 Botulinum toxin type B, per 100 units

Evaluation and Management

99243	• Detailed history and exam and • Low complexity MDM

As the present case is written, the highest code that could be assigned is 99243 or a level 3 outpatient consultation. The history and examination are only detailed, and the Medical Decision Making (MDM) is only moderate. The history is missing a 10 bullet ROS, the neurological examination shows only 19 bullets, and the medical decision making is moderate. Thus higher coding is limited by the lack of a 10 bullet ROS and a 23 bullet neurological examination.

To raise to a level 4 consultation (99244), one would need to add a 10 bullet ROS and 4 more facts in the neurological examination. The latter could be accomplished by adding a cardiac examination, a funduscopic examination, and 2 more facts in the mental status examination. If these changes were made, the history and examinations would be comprehensive and the MDM would be Moderate leading to a billing level of 4. If the patient was evaluated as a new patient rather than a consultation, the proper code would be 99203 for the present case and 99204 if the history and examination were augmented to comprehensive.

It is important to realize that one can never bill for a higher level than 3 in the Neurological Single System examination unless a 5 bullet mental status examination is completed.

Patient Safety Tips
When injecting with botulinum toxin advise the patient about risks of muscle weakness, nerve damage, and possible swallowing problems, particularly when injecting around the neck.

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.