Dynamic Chiropractic

PAIN RELIEF / PREVENTION

Dystonia and Chronic Pain

Nancy Martin-Molina, DC, QME, MBA, CCSP

Dystonia is a movement disorder that causes the muscles to contract and spasm involuntarily. The neurological mechanism that makes muscles relax when they are not in use simply does not function properly. Opposing muscles often contract simultaneously as if they are "competing" for control of a body part. These involuntary muscle contractions force the body into repetitive, twisting movements and awkward, irregular postures.

There are approximately 13 forms of dystonia, and dozens of diseases and conditions include dystonia as a major symptom. With the recent mapping of genes for idiopathic torsion dystonia and identification of a gene (DYT1) for early-onset dystonia, the description *primary* or *idiopathic* dystonia has evolved. However, continuing to use *primary torsion dystonia* to classify a group of dystonias as a clinical group of movement disorders is justifiable because dystonia is the primary abnormality attributable to this condition. The following case illustrates chiropractic presentation of a primary dystonia: ICD-9 333.79 (an acquired dystonia).

Case History

A wheelchair-bound, mid-30s female presented to my office on medical referral. Her record indicated she had suffered an MMR vaccine complication with subsequent neurological complications. Besides motor-control difficulties, she suffered from defective sensory processing and sensory abnormalities. There was a high degree of functional impairment resulting from the dystonia. History included progressive onset of a hip disorder that prevented ambulation, thus accounting for her wheelchair use. Her visit to me was precipitated by her chronic hip pain.

Physical examination revealed slowness in speech and task working, with tremors on intention. She could not ambulate and required 24-hour care provisions in feeding, dress and hygiene. She apparently also suffered from an optic neuritis; examination revealed diplopia, drift and anascoia. She did not appear depressed, although she was very difficult to understand, yet expressed herself through many symbolic gestures that required extreme patience on the part of the examiner. Stated height and weight: 5'0," 98 lbs.

Cranial nerves were tested and outlined; CN III, IV and VI revealed abnormal movement, no ptosis and extreme lateral gaze nystagmus. Pupils were non-equally reactive to light change. CN VII facial muscles were affected, as manifested by patterned and sustained contractions of the forehead, eyelids and lower face. CN XII revealed abnormal tongue midline movement due to tardive movement.

Strength was diminished 3-4/5 in all extremities, with some pain production of the right hip on PROM with significant atrophy and increased tonus and angulation. Coordination efforts were abnormal. Tremors of the hands, feet, arms and legs on stimulation. Involuntary twisting and moving when using hands.

I recommended and obtained medical referral (neurology referral within a movement disorder center and orthopedic intervention with requested MRI of hip; no previous imaging had been obtained). Braces and assistive devices to help increase mobility, improve strength, and prevent further contractures were also recommended. I suggested relaxation techniques such as yoga and meditation within a cognitive center. I ordered gentle and controlled physical exercise including Pilates. Acupuncture for pain relief was also suggested, as was an ophthalmology consultation.

Summary Guidelines

Although there is presently no cure for dystonia, multiple treatment options are available. Because every dystonia patient is unique, treatment must be highly customized to the need of the individual. No single strategy will be appropriate for every case. The purpose of treatment is to help lessen the symptoms of muscle spasms, pain and awkward postures. The ultimate goal is to improve the quality of your patient's life and help them function.

To address this issue, I am suggesting an overview guideline consisting of four key recommendations for initial assessment in the diagnosis and management of dystonia in the chiropractic primary-care setting. In addition to your usual chiropractic musculoskeletal examination, take an accurate history and preform a physical evaluation to determine DRPP; a helpful acronym may be "*Don't Rely on Patient's Pain level*."

- Duration of symptoms. Symptoms that suggest hip dislocation and require stabilization intervention. Dispute chronicity with any imaging studies obtained to rule out or rule in an orthopedic disorder such as progressive hip dislocation. Acute pain levels are more readily apparent, yet patients with chronic pain may often be overlooked as to causation. Piece the history together and make your road map.
- Risk factors (loss of ambulation; other functional losses)
- Presence and severity of neurological defects (optic neuritis, tardive loss in communication ability). Patients require your attentiveness and appropriate referrals. Most are grateful simply for your recognition.
- Psychosocial risk factors (depression, inability to communicate, higher disability levels, dependency on others)

Editor's note: For more information about dystonia, read a chiropractor's personal journey as published in our Oct. 21, 2010 issue: "Surviving Dystonia: A Chiropractic Success Story," by Christa Hubbard, DC.

Resources

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