

Botulinum Toxin Treatment of Painful Scoliosis Associated with Cervical Dystonia: ? A Potential Therapy for Idiopathic Scoliosis

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Three female patients with cervical dystonia (CD) ages 40, 63, and 74 years, with duration of CD symptoms for 20, 12, and 25 years respectively, two of whom with first degree relatives with scoliosis, one with a first degree relative with head tremor had CD successfully treated with botulinum toxin A (BOTX) therapy. Two had history of scoliosis antecedent to the onset of CD, all three had spine x-ray evidence of thoracolumbar scoliosis and complained of thoracolumbar pain. Utilizing EMG monitoring in all three and on repeated occasions treatment of the cervical dystonia was combined with treatment of the scoliotic pain with total thoracolumbar spinal dosages ranging from 50 to 150 iu Botox™, site and dose per site dictated by EMG activity. In all three, pain and clinical judgment of posture improved with Toronto Western Spasmodic Torticollis Rating Scale scores for spine pain reduced by more than 50%. Follow-up spine x-rays were not conducted.

Idiopathic scoliosis is associated with transcranial magnetic stimulation findings similar to idiopathic dystonia (Domenech J, et al, Neurology, 1997). Perhaps, as is cerebral palsy, treating idiopathic scoliosis with BOTX at critical stages may be a treatment option in idiopathic scoliosis.

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