Writer's dystonia in left hand 25 years after right hand

Sir,

Dystonia is an involuntary movement disorder characterized by sustained muscle contractions that cause twisting and repetitive movements or abnormal postures and spasms in the affected body parts. It is commonly classified by the underlying cause or etiology, the age of onset and distribution of involved body regions.^[1]

According to the underlying causes, dystonia can be broadly grouped into primary (idiopathic) and secondary (symptomatic) dystonia. Defining the age of onset is important in determining the probability of disease progression because the earlier the onset of symptoms, the more likely it is that the dystonia will become generalized with advancing age.^[2]

Classified by distribution of involved body regions, dystonia is defined as focal when only a single part of the body is involved, segmental when two or more contiguous body regions are affected, multifocal when multiple non-contiguous body sites are involved, unilateral when one half of the body is affected, or generalized when there is involvement of legs with other body sites.[3]

Focal dystonia can be task-specific, such as focal dystonia involving the upper limbs include musician's dystonia and writer's dystonia. Writer's dystonia is the most common type of focal task-specific dystonia. [4] However, to the best of our knowledge, no case of bilateral writer's dystonia has been described till date.

We report a case of bilateral writer's dystonia involving both hands where it took 25 years for the patient to develop dystonia in the contralateral hand. Our patient was a 55-year-old right-handed male who became left handed about 25 years ago when he started to notice difficulty writing with his right hand. His speed of writing became very slow and he was developing cramping in his forearm soon after initiating to write. He could not write more than two to three sentences. He was diagnosed with writer's dystonia and he decided to become left-handed. Over the last few months, he started experiencing significant difficulty in writing with his left hand. His hand did not flow as smooth as it was before. His speed of writing also became slow and he experienced discomfort in his forearm upon writing. He was only able to write few lines without significant difficulty and then it became painful to continue writing. These symptoms were present only during the act of writing and other motor tasks remained unaffected. His family history was unremarkable. He worked as an accountant where his job required the use of a pen and keyboard.

Various recent studies have been conducted to understand the underlying basis of focal hand dystonia. In addition to the genetic predisposition and other environmental risk factors, several other key mechanisms such as failure of inhibition, abnormal sensorimotor integration, and maladaptive plasticity have been identified as important contributory factors in the genesis of focal hand dystonia.[5]

To the best of our knowledge, no case of bilateral writer's dystonia as ours has ever been reported as our patient has complete inability to write with both hands. Our case report is unique and interesting in that we report a patient with the inability to write with both hands with a relatively lengthy duration of onset of dystonia in the opposite hand.

Pharmacological treatments for writer's dystonia including anticholinergic drugs and chemodenervation treatment with botulinum toxin injections are currently suboptimal and only partial responses have been seen with these treatments.^[6] However, non-pharmacological treatments may be partially helpful in many cases. These include alteration of the grip of the pen, and using a thick pen and Blackburn® writing device. These should be offered to every patient before trying other mentioned pharmacological interventions.

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