

Musician's Dystonia

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Introduction

Musician's Dystonia, which is also referred to as Task Specific Focal Dystonia (TSFD), is a neurological disorder that causes excessive and involuntary muscle contractions that may affect any region of the body. Unlike Parkinson's Disease, which is also a movement disorder, Musician's Dystonia is not fatal. But like Parkinson's, it is life altering, with many suffering debilitating depression and anxiety due to it. Such accomplished artists who have been afflicted by this neurological disorder are: pianists Leon Fleisher and Glenn Gould; former Principal Oboist of the Chicago Symphony, Alex Klein; French hornist Glen Estrin; and Professor Paul Buyer, who is Director of Percussion and Music at Clemson University, to name but a few.

It is estimated that 1% of professional musicians are afflicted with Dystonia; and there are likely larger numbers of musicians living with it who remain undiagnosed. Yet only 0.05% of the general public suffer from it. Moreover, a significant majority of those who have Musician's Dystonia are classically trained, most are male, and up to 25% have a family history of some type of Dystonia.

Symptoms and Causes

The most common symptoms of Musician's Dystonia are: loss of motor control that may be accompanied by muscle spasms, abnormal repetitive movements, or postures that may be associated with a tremor that are initiated or worsened by voluntary action. This is due to an overflow of muscle activation that is also accompanied with muscle tone that is too high and/or too low (*the afflicted muscle's tone is too high, in comparison to the unaffected muscle that it works in conjunction with, which is too low*).

Interestingly, these symptoms occur when specific movements related to one's instrument are performed, yet when other actions using the same extremity are executed, no symptoms are

present. For instance, pianists, guitarists, violinists, and percussionists may experience symptoms in their fingers, hands, arms, or shoulders as they play their instruments, yet no symptoms are present when typing, or using utensils. Whereas wind players most commonly experience symptoms with their embouchure, but none are present when they blow out a candle, or whistle a tune.

The first signs of developing Musician's Dystonia are commonly lapses in one's instinctive ability to perform his/her instrument. And with these first signs, the musician often thinks this is due to a lack of technique or preparation; hence they practice more strenuously to no avail. Doctors and researchers have come to the conclusion that musicians are more prone to developing Dystonia because of their intense years of performing complex repetitive movements; as well as the psychological factors one experiences due this highly stressful career environment.

Diagnosis and Treatment

In order to confirm if one is afflicted with Dystonia, the best person to see is a neurologist who is a movement disorders specialist. The treatment options that a neurologist may prescribe are either one or more of the following: oral medications, Botox injections to the afflicted muscle(s), physical therapy, neuroplastic training, and in rare cases, a surgical procedure known as deep brain stimulation.

What Can We Do

The Dystonia Medical Research Foundation, and the Leon Fleisher for Musicians with Dystonia, have done great work to inform the general public about this neurological disorder. However, many performing musicians and pedagogues, as well as healthcare professionals, surprisingly have little to no knowledge of it. Therefore, the onus is on us to better understand,

support, and inform our students and colleagues about the symptoms of Dystonia; on how it is treated; and hopefully one day, on how to prevent and cure it.

Healthcare professionals need our input because they themselves don't quite understand how we approach playing percussion; how we teach it; and what muscle groups are used when we perform. Therefore, it is incumbent upon us to better our understanding of anatomy so we can succinctly and accurately describe what muscles we do use when performing; which will also greatly improve how we teach and analyze technique. Furthermore, consider reaching out to colleagues who teach medicine, psychology, and physical therapy, and see if they are willing to collaborate on developing protocols that aid in supporting mental and physical health to either identify, prevent, or ease the symptoms of Dystonia.

In regard to one's students, take advantage of the great opportunity we have teaching applied lessons. Being one on one with a student for an extended period of time is not only a great way to teach, but a great way to get to know a student. Therefore, keep your student's personality in mind, because there is significant evidence supporting the corollary between anxiety and Dystonia. What is not certain is if anxiety is a precursor to, a cause of, or a result of it. Regardless, taking such an approach may help your students avoid developing Dystonia; and may help them to better gauge their progress as a performer, as well as cope with the demands of this profession.

Lastly, let students' technique define their growth. Thus, try to guide your students toward literature that will challenge their technical skill, but not overwhelm them. Because if students don't have the prerequisite technique to perform a work, this may lead them to improperly perceive how to develop their technique; to suffer an injury, or worse, trigger them to develop Dystonia.

Closing Thoughts

Performance injuries are most commonly associated with musculoskeletal problems, yet Dystonia, which has greatly impacted many musicians' performing careers, is one that is rarely discussed. Thus, insight about this neurological disorder provides a greater understanding on how to prevent it; on how to slow its progression; on how to guide students and colleagues toward the best medical specialists who diagnose and treat it; on how to approach and teach future percussionists to understand and/or perceive their technique and performances; and on how to engage further discussion that will lead to the development of new pedagogical approaches for our profession.

Resources

To learn more about this neurological disorder, treatments for it, and/or to find recommendations of a movement disorders specialist near you, please consider going to the following organizations and individuals below:

Dystonia Medical Research Foundation

<https://dystonia-foundation.org/>

Leon Fleisher Foundation for Musicians With Dystonia

<https://dystonia-foundation.org/what-is-dystonia/types-dystonia/musicians/>

Dr. Joaquin Farias

<https://www.fariastechnique.com/>

Dr. Anna Detari

<https://www.musicians-focal-dystonia.com/>