

DIAGNOSIS: TOURETTE SYNDROME

There's a cliché in medicine—if you hear hooves thundering toward you think horses not zebras. Medical students are taught to look for the obvious before the unusual in the one part science, one part art and one part inspiration that is the work of a diagnostician. But people who are familiar with Tourette Syndrome know that sometimes the unusual is right on target. The National Institutes of Health estimates that 200,000 Americans have full-blown TS, but other genetic studies put the number much higher—suggesting that as many as one in 200 could be considered as having TS (if people with chronic or transient childhood tics are included in the total count).

Watching Tics: Diagnosis by Observation

The diagnosis of TS is made by observation of tics over a period of time. To come to the conclusion that a child or adult has TS, both motor (movement) and vocal tics must be present and these symptoms must persist for a year. Often, these motor tics and vocalizations may not conveniently occur in the doctor's office allowing for easy observation by a professional. Tics also change, appear, disappear, increase and decrease which can make the diagnostic process more difficult and time consuming.

It's all about direct observation of the symptoms and since many people with TS adopt strategies to suppress symptoms in public, confirming a diagnosis may take time. Even very young children can become used to holding tics back in school and then letting go at home. A youngster may not be able to relax that system control in a doctor's office. Therefore, what parents, siblings and teachers observe can be helpful to the doctor, and a video of unguarded, unchecked behavior at home may be a helpful diagnostic tool when symptoms are elusive. In addition, TS waxes and wanes

in unpredictable cycles, adding to the time required for a conclusive diagnosis.

As of today there is no definitive medical test that confirms a TS diagnosis or a quick test that could short cut the process. So an MRI, CAT scan, EEG or blood test will not be part of the diagnostic process unless completely unrelated conditions are being ruled out.

It is also important to note that in the recent past many cases of mild to moderate TS were missed completely or misdiagnosed because of the widely held misconception that TS was the "cursing disease" while it is now known that less than 15% of individuals with TS actually have this symptom (called coprolalia).

What is a Tic?

Pediatrician Chet Berlin, M.D, a longtime member of TSA's Medical Advisory Board, says that a tic is more "... easily observed than defined. In the medical sense it refers to a rapid, involuntary muscular movement, usually involving a group of muscles rather than a single muscle. A tic may mimic a normal movement, but it is uncontrollable and in many cases its repetitive nature sets it apart.

Some of these movements may be misinterpreted as habits or mannerisms. The latter usually refers to more deliberative and slower muscle movements, such as repeated adjusting of eye glasses or pulling at one's collar."

Common TS tics include: sniffing, head jerking, blinking, grimacing, shoulder shrugging and coughing. All of these common symptoms can be confused with the symptoms of other problems—from colds and allergies to the need for glasses. When seen out of context more distracting tics: jumping, yelping, the compulsion to touch things and shout words, can be mistaken for behavioral problems. So the observation of tics over a reasonably long period is essential when seeking a definitive diagnosis.

Not All That Tics is TS, But TS is All About Tics

Tics are common. As many as 10% of children in regular classrooms have tics. Stress exacerbates tics, so children inclined toward having tics may exhibit them during school presentations, the first week of school, in anticipation of holidays and in situations that provoke the kind of anxiety and excitement that are part of a normal childhood. But not all tics are symptoms of TS. Many children experience transitory tics (tics that do not persist) and this is another reason for the time involved in reaching a TS diagnosis. Tics can also be a side effect caused by some medications.

Dr. Sam Zinner, Assistant Professor of Pediatrics, University of Washington School of Medicine and member of the TSA Medical Advisory Board, explains the line between TS and other tic disorders. "Sometimes, parents ask me, 'Is it Tourette Syndrome, or just tics?' It's important

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