

Ask the Medical Advisory Board

In each issue, a member of TSA's Medical Advisory Board addresses medical questions that affect people with TS and their families. This issue's contributor is Gerald Erenberg, M.D., Chairman, TSA Medical Advisory Board.

I am a teacher and one of my students has been diagnosed with TS. I can see no physical signs of this disorder. My student says he has "internal" motor tics. Is this possible?

Tics are commonly suppressed when someone with TS is away from home. The underlying brain mechanism by which this occurs is unknown, but this ability to suppress symptoms for varying periods can lead to confusion. Often, parents are distressed that teachers do not see the frequent tics that their child exhibits at home, but it may be true that the child's tics are completely or almost completely suppressed when in school. Holding in one's tics requires a great deal of mental energy, and this is one of the reasons that many children with TS are quite tired when school is over. It should be understood that while the outward expression of symptoms may be controlled, the internal urges are still present. I believe that this may be what the student is referring to when he complains of his "internal" motor tics.

My 10-year-old daughter was diagnosed with TS. Before this, her doctor had diagnosed her as having chronic motor tics. What is the difference?

Tics are involuntary movements that are divided into two types. The first are motor tics which are muscular contractions and twitches. The second type is known as phonic (*vocal*) because the outcome of the tic is a noise. Often, those who will eventually be diagnosed with Tourette Syndrome begin experiencing their tic symptoms by having only motor or only phonic tics. Typically, there is then an uneven course of development with tics coming and going. Over time, the tics change *form* and the motor tics join in with vocal tics or vice versa. Within months to years, the individual is experiencing a combination of both motor and vocal tics.

Technically, Tourette Syndrome is defined as a disorder occurring when there has been a combination of motor and phonic (*vocal*) tics present for more than one year. If there have been *only*

motor or *only* vocal tics for more than one year, the technical diagnosis is *chronic motor tics* or *chronic vocal tics*. Currently, most TS investigators believe that chronic motor tics and chronic vocal tics are simply variations of the typical TS pattern. This is because persons with only one or the other form of tics will experience the same waxing and waning pattern as is the case with classical TS. Frequently, they will exhibit some of the associated behavioral patterns as well.

Our daughter has TS. We know what side of the family the gene is coming from. Is it possible to identify which family members have a higher risk of passing on the gene to future generations?

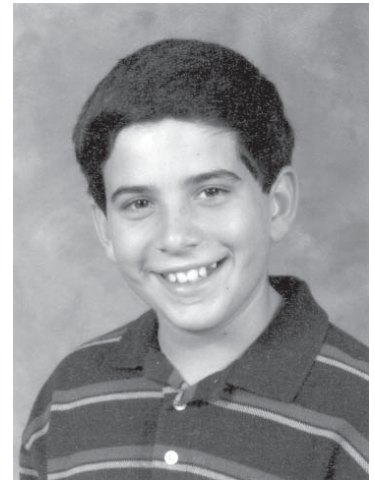
The research community is closing in on finding the gene(s) for Tourette Syndrome. When this breakthrough has been achieved, it should be only a short time before a diagnostic test can be developed that will identify those individuals who carry this genetic vulnerability. Because such a test is not available currently, our ability to make judgments about who is at risk for TS symptoms is based solely on whether the individual actually exhibits the symptoms. It is believed that this genetic susceptibility can show itself in the form of either tics or obsessive-compulsive traits. In your family, we can assume that those individuals who are *exhibiting* clinical symptoms of TS are the ones who have the highest risk of passing on the gene(s) to future generations. It is also likely, however, that some members of the family are carrying the gene in a silent manner. This means that they do not exhibit the actual symptoms, but have the potential for passing the vulnerability on to their offspring. As mentioned, the TS community is certainly hopeful that this dilemma will be solved in the near future when the genetic underpinnings of TS have been identified.

TSA's West Coast Dinner will be held on February 8, 2001 in Beverly Hills, CA. For information, contact Mark Levine at TSA, 718-224-2999, ext. 230.

Special Kids



Jessica Stein



Alfred Stein

When Jessica Stein was Bat Mitzvah'd, she asked her friends and family to donate money to TSA instead of giving her a gift. Her brother Alfred, who has TS, did his share by doing his own fundraising. Together, these two very special kids raised awareness as well as significant funds.

The Brain Bank May Hold the Key to the Cure!

We Can Help Scientists Find The Cure

For information about registering for the Brain Bank, call national TSA at 718-224-2999 (East Coast Business Hours).