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examine brain shapes or functions, such as brain imaging (pictures of the brain) studies like MRIs or brain wave (brain electricity) measurement studies such as EEGs. A diagnosis of TS is made entirely by observing symptoms and by what the individual reports.

While we suspect that there might be differences between the brains of those with TS and those who are unaffected, these differences have yet to be uncovered. It's important to know that such differences cannot be detected by either an MRI or an EEG test. Similarly, there are no blood or other laboratory procedure that can confirm a diagnosis of TS.

That said, a recommendation for imaging tests could be based on the unique clinical findings for individual patients. For example, symptoms may sound suspiciously like seizures. Or unusual neurological findings could suggest a diagnosis other than tics and this might indicate the need for an imaging test. Some clinicians recommend such tests more readily than others. Often, this decision is based on that physician's customary practice patterns. Not all clinicians will agree on where to draw these lines.

My son is 8-years-old and was recently diagnosed with TS. We don't really want to put him on medication right now and are looking for other options. I am finding a lot of information on the Internet and from other sources about nutritional therapy for TS symptoms. I've also heard about food and environmental allergies and how they can affect the brain. Are these useful avenues to pursue?

There is growing and very influential interest in "integrative healthcare" for childhood neurodevelopmental and behavioral conditions and general health. Often, integrative healthcare refers to "alternative and complementary" systems that use uncustomary or scientifically unproven approaches. Actually, quite a few proven and customary approaches started out as "alternative" but over time gained acceptance, often through research evidence.

Recent attention has focused on autism spectrum disorders and ADHD. However, there is appreciable interest in TS as well. TSA continues to respond to this interest by encouraging researchers to conduct good-quality scientific studies to help to answer questions about nutrition,

environmental allergies and other integrative healthcare issues. These studies will eventually enable doctors and families to make informed decisions about healthcare practices. In the meantime, it is important to consider any information available regarding safety and efficacy of any healthcare approach in treating (or not treating) TS and related conditions.

The Internet provides a ready source of both information and misinformation about healthcare. At this time, there are neither restrictive and/or supplemental dietary interventions, nor environmental and/or food allergens that have been proven to have an impact on TS symptoms. Resources are available to help educate clinicians, researchers and consumers about integrative healthcare and TS. Contact TSA or its web site www.tsa-usa.org for an informational brochure, "Complementary and Alternative Medicine for Tourette Syndrome." Extensive information about integrative healthcare is also available through the National Center for Complementary and Alternative Medicine at <http://nccam.nih.gov>. ■

I was told that there are no medical tests that can confirm that a person has TS. However, my doctor wants my daughter to get both an MRI and an EEG test. Why is he requesting these?

If the brain were simple enough that we could understand it, we'd be so simple that we couldn't.

— **Dr. Paul Greengard,**
Nobel Prize winner

To diagnose TS correctly, an individual should have a clinical evaluation including a complete medical history and physical examination. This should be done by a qualified professional who is knowledgeable about tic disorders, such as a primary care provider, neurologist or psychiatrist. Despite the fact that TS is a neurological disorder, most people with TS will not show any unusual findings in laboratory tests that

CBIT Meeting in Philadelphia

Fifty-eight psychologists, social workers and other health care providers gathered in Philadelphia on November 14, 2007 to learn how to use Comprehensive Behavior Management methods for reducing tics developed by the CBIT study. The featured speakers included Drs. John Piacentini, Sabine Wilhelm and Douglas Woods of the TSA Clinical Trials Consortium; and Dr. Alan Peterson of the TSA Behavior Science Consortium. Dr. Woods is also a member of the TSA Medical Advisory Board. The event was co-sponsored by TSA, the Centers for Disease Control (CDC) and the Association for Behavioral and Cognitive Therapies.

Pictured Right: Dr. Doug Woods, Dr. Sabine Wilhelm and Dr. John Piacentini

