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 Dr. Anthony Lang, Director, Movement Disorders Centre, Toronto Western Hospital, Ontario, Canada.

My son has Tourette Syndrome and was recently diagnosed with depression. The psychiatrist recommends that he be put on an anti-depressant medication. He is currently on Catapres and has just been prescribed Zoloft. Are there any possible negative interactions?

It is right to be concerned about the possible interactions among various medications prescribed to patients with TS. Types of interactions that might cause concern include: increased sedation, a drop-in blood pressure causing faintness, a profound rise in blood pressure (termed hypertensive crisis) as well as a complex group of symptoms known as the serotonin syndrome. However, the combination of the medications referred to here (Clonidine and sertraline, a so-called selective serotonin re-uptake inhibitor or SSRI) has not been associated with any significant negative interaction. This also applies to Clonidine and other members of the SSRI group of medications.

My tics become progressively worse during the holiday season. I have heard that hypnotherapy may help decrease the tics. Do you have an opinion on this type of treatment?

Worsening of tics during holidays is generally not what we expect when one is able to relax. On the other hand, if "the holiday season" refers to a time when an individual is very busy and under a great deal of stress, tension or even excitement, then it is understandable that the tics could worsen at this time. Some patients do find that various forms of relaxation such as hypnosis, yoga and breathing exercises have a beneficial or ameliorative effect on their tics.

Certainly these treatments lack the potential complications of drug therapy so it can't hurt to try. However, not everyone can be successfully hypnotized. Rather than spending a great deal of money seeing a professional, try exploring self-hypnosis first. You can learn about self-hypnosis at your local library.

I have TS and tried several different medications that did not seem to be effective. My doctor suggested a medication called Topiramate (topamax). I attempted to research this drug, but found very little information. Do you have any information about this medication?

Topiramate is a drug that has been released relatively recently for the treatment of epilepsy. The exact mechanism of action in the brain is unknown. I could find only one report in the medical literature describing its use in Tourette Syndrome (a letter by Abuzzahab & Brown in the American Journal of Psychiatry, June 2001). This report described the experience of two patients who had either side effects or suboptimal control of tics with a relatively limited number of standard medications. Both patients were said to have obtained good control of tics when Topiramate was used. One patient experienced a lack of concentration and the other, lethargy. (Other possible side effects include blurred vision, double vision, and dizziness.)

No formal assessments of the patients were performed and little information is given about the follow-up (e.g., duration of benefit). It's important to recognize that this is very limited and anecdotal evidence. Letters published in this fashion are not generally peer reviewed, and so they lack the credibility of reviewed medical articles. On the other hand it is an interesting observation that will hopefully be followed up with a proper assessment of the drug.

If your physician is planning to use this agent, it should be given only after a clear discussion of the "experimental" nature of the treatment. A discussion should include all the possible side effects and then followed with careful and proper evaluations of the response.

I have heard of a new treatment involving botox injections. Can you tell me more about this approach?

Botulinum toxin has been used for the treatment of various movement disorders for the past 15 years. It is a potent neurotoxin that can cause severe generalized weakness and death when taken in large amounts by mouth as part of the "food poisoning" botulism. Although there is some disagreement on the mechanism of action, it seems to work largely by weakening muscle.

Recently it has been shown that botulinum toxin can be effective in treating certain types of tics by reducing the frequency and severity of the motor tics, and even reducing the volume and frequency of some severe vocal tics. It may also reduce the urge that typically accompanies many patients' tics.

This treatment requires direct injection into the muscles involved in the tic. Because the effect is to weaken muscle, the number of muscles that can be injected is relatively limited. Also, because excessive weakness of these muscles can be a side effect, one is best to avoid muscles that are involved in a great deal of functional activities (e.g., muscles of the dominant hand). There are no known long-term side effects, one important advantage is that the side effects are usually "local" and limited to the muscles injected (or nearby muscles) so that sedation, poor concentration and other "central" complications so common with the medication used to control tics do not occur.

Despite these advantages, it should be emphasized that the use of this treatment is generally limited to patients who are distressed or disabled by specific tics that involve a small number of muscles (typically "simple tics") such as eyelid clenching, other facial movements, some neck and shoulder movements. It will not have beneficial effects on other (non-injected) tics.

We have even seen a small number of patients who found that the treated tic was replaced with one or two other tics. This treatment should be provided only by a physician with experience using the toxin for other movement disorders. The effects in other conditions usually last for three to four months and it is likely that this will hold true for tics. However, we have seen a small number of patients who obtained considerably longer improvement. Once the beneficial effect begins to wane, repeated injections are required.