## **Yeast and Tourette's Syndrome**

http://www.nutritioninstitute.com/Tourettes\_Syndrome.html by <u>Bruce Semon, M.D., Ph.D.</u>

### **Discussion Forum**

By popular demand, we created this Discussion Forum to provide on-line support, recipe exchange, and general information! It is free and easy to use! Please feel free to browse, post questions, respond to concerns, get support from other people! (January 16, 2006)

The following is a description of a boy with Tourette's Syndrome, also called Tourette's Disorder, whose symptoms were treated by safe effective therapy of a change of food choices and the non-absorbed anti-yeast medicine nystatin.

This page is based on the clinical experience and research of <u>Bruce Semon</u>, <u>M.D.</u>, <u>Ph.D.</u>, a board certified psychiatrist who also has a Ph.D. in Nutrition.

This page contains information about Tourette's Syndrome, and how to treat it by changing diet. This is not intended to be specific medical advice for specific individuals. Dr. Semon is available for consultations and new patients. Call toll-free 1-877-332-7899. For more detailed information, we suggest that you make an appointment to see Dr. Semon and read our new book, <u>An Extraordinary Power to Heal</u> Wisconsin Institute of Nutrition's new cookbook, <u>Extraordinary Foods for the Everyday Kitchen</u>, is completely free of yeast, gluten and casein as well as common allergens of soy, rye, corn, peanuts, and other foods. It also is completely sugar free and kosher.

# A case of Tourette's in a child who had severe side effects to conventional medications and who was treated with change of food choices and nystatin

Don came to me at the age of 11 to get help with Tourette's and the side effects of medications. He had had Tourette's symptoms for four years and had been diagnosed five months previously. At that time, the tics had suddenly become worse with coprolalia (involuntary utterance of obscene words). His coprolalia was so bad that he was saying four letter words continuously from the time he got out of bed. Before that he had only facial tics.

His neurological examination was normal except for the tics. A number of anti psychotic medications were tried. Orap was tried for six weeks, but he gained twenty pounds. Then Risperdal (an anti-psychotic) was tried but he

had nausea and increased breast tissue. He lasted two months on Risperdal. Then Zyprexa (an anti-psychotic) was tried which controlled the tics but he had scenes of visual rage. Paxil (an anti depressant) was added. The visual scenes decreased and were now intermittent. He was now fatigued, sleeping a lot and was hard to rouse in the morning. He had mood swings. When he was down or frustrated, his moods were extreme. He had gained twenty more pounds with the Zyprexa. Vitamins had been tried with no benefit but craniosacral therapy had helped with mood swings. He had a history of using antibiotics in the past.

Before the worsening of the tics, he was not moody. He was popular and was voted to student council. He was outgoing and was a smart kid. Now he was moody. He also had a symptom of obsessive compulsive disorder (a disorder in which people either think something or must do something over and over) that he needed to confess things, and he had to come to mother for this.

By the time I saw this patient his tics were under better control. He displayed no coprolalia at the first visit. When he was first seen he was taking Zyprexa and Paxil (an anti-depressant). He was having vocal and motor tics when seen and he had some thoughts of suicide. He was overweight and was seeing visual scenes of rage. He was 50 pounds overweight.

He started the anti-yeast diet and nystatin. When he came back four weeks later, his moods had leveled out, he had gotten off both his medications, and he had lost three pounds. He had more facial tics but other tics had not returned. He had had some nausea in trying to get off Paxil, but this was better now. He was still obsessive about confessing guilt. Sleep was alright He was taking nystatin 1/4 tsp. four times a day. On exam his mood was pleasant and he was laughing and smiling. He was blinking his eyes and moving some facial muscles and was moving his head a little. Neurological exam was normal except for the tics.

At this time he was off the medications, on the anti-yeast diet and nystatin, and had actually fewer tics now than while on the meds. I suggested that the treatment be continued. He came back at three months after the first visit and he was still following the diet except for eating a little chocolate on Sundays as a reward. His tics had increased a little with some coprolalia and some motor tics. Emotionally he was doing very well. He had lost about five pounds. He was confessing less often and to fewer things. He was sleeping reasonably well. On exam a few vocal tics were heard. He swung his arms occasionally and he was smiling.

He came back at six months after starting treatment and he said that he was doing fine in school (a Sept. appt.) He was doing well in football. He was keeping up with the other kids much better than last year, and he was getting along with his classmates. The teachers said that things were fine. He was still blinking his eyes and making a few vocal sounds. The force of his verbal tics had decreased, although his tics were worse with stress and varied from day to day. One teacher who had not known him previously had not noticed anything unusual. He was no longer apologizing for everything. On exam a few eyeblinks were noted. He was much thinner. No vocal tics were heard.

His parents sent me a Christmas card with the patient smiling in his football uniform.

At the next visit, a year after first being seen, his mother estimated his motor tics were down about 95% and his vocal tics are down 98%. He is no longer confessing to things. He has lost the weight he gained with the medications. At the appointment, some eyeblinking was observed but no other tics. He is on no psychiatric medications and the few tics he has are not interfering with his life.

Three months later, at his most recent visit, his mother reported that the vocal tics are gone and there are only occasional motor tics.

# **Tourette's Syndrome and Yeast**

Motor tics are repetitive motions of muscles which are only partially under voluntary control and may range from eye blinking to complicated motions of the trunk and arms. Vocal tics are the involuntary repetitive saying of words or short phrases, which can unfortunately include swear words. When both of these occur in the same person, the disorder is called Tourette's disorder. There is no known cure and the medicines used are "heavies" (anti-psychotic medicines which have many side effects).

I have treated several cases of Tourette's successfully using anti-yeast therapy and nystatin. This treatment clears out intestinal yeast. The yeast is making chemicals which slow the brain down. Why might this therapy be helpful? I offer the following thoughts.

For a tic to occur, a center in the brain must fire, triggering the muscles to move. In normal individuals, such centers do not fire involuntarily. The reason that these centers do not fire involuntarily is that most of the brain is devoted to keeping the brain centers ready to work but not actually working. The brain allows the part we want to be active to focus on what we want. For example, if I wish to reach out and pick something off a table, my arm and

hand move to pick it up. This motion does not take my whole brain to do. The rest of my brain is making sure that I focus only on what I want to do. At the same time, the brain is making sure that for example my legs do not move when I reach out with my arm. The majority of the brain is inhibitory; that is, it keeps most of the brain ready but not actually working unless that part of the brain is needed.

In Tourette's the inhibitory function is decreased, so a brain center, instead of being told to wait until needed, can simply fire and do what it does, such as blink an eye. The problem is partially that a center is too active, but it is also that the rest of the brain is not working properly. The rest of the brain should be inhibiting this overactive center but does not.

We can understand how this might be the case if there are toxic sedative chemicals slowing the brain down. The parts of the brain which keep other centers ready but not actually working are themselves slowed down. Then if another center wishes to fire, it is not being inhibited and it fires.

Where are these toxic sedative chemicals coming from? The intestinal yeast Candida produces a number of toxic alcohols and the coma producing chemical acetone. Sedative chemicals also are found in food. For example vinegar contains a chemical, ethyl acetate, which is sedative. Malt contain chemicals called pyrazines, which sedate and slow the brain down.

The clinical observations are that when the toxic sedative chemicals are removed, then the rest of the brain does its function of inhibition. Then these active centers also function only when they are supposed to. Then Tourette's symptoms diminish considerably.

#### **Treatment**

This understanding leads to a safe effective treatment for Tourette's disorder. This treatment is simply to clear out the intestinal Candida and to stop eating foods with sedative chemicals. Then the yeast will stop making sedative chemicals. Then the brain will no longer be slowed down, will work better and will inhibit active centers from firing.

The treatment consists of taking a non-absorbed medicine called nystatin. Nystatin kills intestinal yeast. The problem is that nystatin does not work well without changes of food choices. The reason is that in many foods there are chemicals which kill bacteria and feed the yeast. If these foods are left in the diet, even though nystatin kills the yeast, the yeast will keep growing back. Chemicals in the diet which kill bacteria will make room for the yeast, even if nystatin is taken. When foods containing these chemicals are excluded from the diet, then nystatin can go through and kill the yeast and

the yeast does not grow back. Then problems such as Tourette's disorder improve significantly. These same foods contain the toxic sedative chemicals.

The diet for *Candida* problems consists of removing fermented foods from the diet. The worst offenders are alcoholic beverages and non-alcoholic beer, vinegar, barley malt, chocolate, pickles, and aged cheese. I explain the diet very thoroughly, including how to implement the diet for children, in <u>An Extraordinary Power to Heal</u> and <u>Feast Without Yeast:4 Stages to Better Health</u>. Feast Without Yeast has more than 225 recipes that are easy to make and taste great! Our new cookbook, <u>Extraordinary Foods for the Everyday Kitchen</u> contains more than 125 additional new, original recipes and more than 60 menus to help you plan meals. <u>An Extraordinary Power to Heal</u> (2003) gives you detailed instructions, day by day and week by week, about how to eliminate toxic foods from your diets.

To order Feast Without Yeast, call 1-877-332-7899