

# Two Subtypes of Food Refusal in Preteens Found

BY DOUG BRUNK  
San Diego Bureau

SAN DIEGO — The presence or absence of body image distortion can help clinicians identify two distinct groups of latency-age children who present with severe food refusal, Robyn S. Mehlenbeck, Ph.D., reported at the annual meeting of the Society for Developmental and Behavioral Pediatrics.

The finding is important because latency-age patients do not fit neatly into categories of anorexia or feeding disorder of early childhood, said Dr. Mehlenbeck of the department of psychiatry at Rhode Island Hospital, Brown Medical School, Providence, R.I.

"There's a lot of confusion about these kids who don't fit [a definition] and we really don't know what to call them, let alone what to do with them," she said, adding that there are no good estimates on the number of younger children with eating disorders.

She and her associates reviewed the medical charts of 44 patients, aged 6-12 years,

who presented with food refusal and restrictive eating habits to a day treatment program at Rhode Island Hospital between 1999 and 2003. The treatment program takes a multidisciplinary team approach, collaborating closely with families and community providers.

At intake, families completed questionnaires about behavioral and family functioning, and quality of life. The mean age of study participants was 10 years, and more than half of the participants were female (67%). Most were white (82%), and 30% were on public insurance. The average length of stay in the program was 21 days.

The investigators divided the children into two groups. The 16 children who presented with body image distortion were called the early onset anorexia (EOA) group, while the 28 who presented with no body image distortion were called the atypical eating disorder (AED) group.

The two groups of children did not differ in terms of gender, insurance type, or program length of stay, but children in the AED group were about 2 years younger than their EOA counterparts (a mean of 9.7 years vs. 11.4 years, respectively).

**The investigators divided the children into two distinct groups: early onset anorexia, which involved body image distortion, and atypical eating disorder.**

All eight children from minority backgrounds were in the atypical eating disorder group; the children in the AED group were more likely to come from single-parent households than were those in the early

onset anorexia group.

The two groups did not differ in terms of body mass index and most medical factors, but those in the EOA group were more likely to show cardiovascular compromise, exercise excessively, and have a family history of eating disorders, compared with the children in the AED group.

In addition, nearly 90% of the children in the EOA group had recent weight loss

prior to starting the treatment program, compared with about 50% of those in the AED group. Of the children who had weight loss, the mean loss was 19.7 pounds in the EOA group, compared with a mean of 8.3 pounds in the AED group.

On the flip side, children in the AED group were more likely than their EOA counterparts to be described by their parents as having a history of picky eating, poor appetite, sensitivity to textures, slow eating, and difficulty swallowing.

Dr. Mehlenbeck said that the treatment implications differ for these two groups of children. "We would treat AED kids more behaviorally, similar to kids with anxiety and behavior disorders," she said. "Treatment for kids with EOA would be similar to interventions for anorexia."

Identifying children with food refusal problems early "may help quite a bit," she added. "Collaboration is key. All of these kids need to be treated with a team format. So even if they're an outpatient, pediatricians should be working with a mental health worker who specializes in feeding or eating disorders, and a dietitian." ■

## Expert Sees Possible Link Between Strep Throat and Anorexia Nervosa

BY KATE JOHNSON  
Montreal Bureau

MONTREAL — Streptococcal pharyngitis may be a very occasional trigger for anorexia nervosa and other neuropsychiatric conditions and should be investigated in patients with sudden onset of psychiatric symptoms, Mae S. Sokol, M.D., said at an international conference sponsored by the Academy for Eating Disorders.

Identification of this cause of anorexia nervosa would not change treatment of the condition (although this possibility is being investigated), but it would alert patients and physicians to the need for more aggressive prevention and treatment of future strep infections, said Dr. Sokol of Creighton University in Omaha, Neb.

She said group A beta hemolytic streptococci (GABHS) have been linked with several illnesses known collectively as PANDAS (pediatric autoimmune neuropsychiatric disorder associated with streptococcus). The PANDAS classification also includes obsessive-compulsive disorder (OCD) and tic disorders such as Tourette's syndrome.

It is well recognized that rheumatic fever and Sydenham's chorea are streptococcus-triggered autoimmune attacks on cardiac cells and cerebral neurons, respectively. It also is

believed that PANDAS might be caused by similar attacks on basal ganglia cells, noted Dr. Sokol, who is also director of the eating disorders program at Children's Hospital in Omaha.

"We hypothesize that the immune system may look at the basal ganglia cells in the brain and mistakenly attack those cells, which may cause patients to have abnormal thoughts about food and weight," she said in an interview at the conference.

Why this damage to basal ganglia cells manifests sometimes as anorexia and other times as OCD, Tourette's, or infantile autism is not known, she said.

"Since the basal ganglia are also involved with emotion, we think this area of the brain may be affected slightly differently with each condition. Another theory is that maybe we are seeing the same thing in children with PANDAS anorexia and children with PANDAS OCD—only in the PANDAS anorexia, the obsessions are about food and weight, whereas in PANDAS OCD they are about other things. What's common in all these patients is a sense of perfectionism after they become ill," Dr. Sokol explained.

She presented her study of 21 children and adolescents with possible PANDAS anorexia. The subjects met some or all of the following criteria:

► Presence of anorexia meeting DSM-IV criteria.

► Prepubertal onset of anorexia. This was present in 10 of the 21 participants. Participants ranged in age from 10.5 to 18 years at enrollment, with symptom onset at 9.7-16 years.

► Acute onset/exacerbation of their anorexia symptoms. This occurred in 19 of the 21 participants.

► Association with GABHS infection: anorexia onset or exacerbation within 1 day to 6 months of strep infection. This occurred in all participants.

► Increased psychiatric symptoms, not exclusively during the strep illness. Present in all participants.

► Concomitant neurologic abnormalities, such as choreiform movements, motor hyperactivity, or adventitious movements. This occurred in only two participants but has been reported more frequently in PANDAS OCD.

Dr. Sokol said physicians who suspect PANDAS anorexia should try to confirm laboratory strep tests, although at this stage treatment recommendations would be no different for this group.

However, identification of an infection-triggered anorexia could alert physicians and patients to the need for more aggressive prevention strategies such as the use of prophylactic antibiotics (which is still under investigation) and to the importance of influenza vaccination, which can decrease vulnerability to strep, she said. ■

## PTSD Found in 16% of Teens A Year After Organ Transplant

BY TIMOTHY F. KIRN  
Sacramento Bureau

LOS ANGELES — Adolescents who have experienced a significant, life-threatening illness can develop posttraumatic stress disorder, according to a study of 104 transplant patients.

The study found that 1 year after a transplant procedure, 16% of the patients met all criteria for a posttraumatic stress disorder (PTSD) diagnosis, and 14% met two of the three criteria, said Margaret L. Stuber, M.D., at the annual meeting of the Society for Adolescent Medicine.

Other studies have documented PTSD responses to childhood cancer, diabetes, and burns, said Dr. Stuber, professor of psychiatry at the University of California, Los Angeles.

The purpose of the current study was to try to tease out what specific factors lead to PTSD. Hence, the study included and compared kidney, heart, and liver transplant patients—that is, patients with conditions with very different courses and prognoses.

The study found the patients had similar risk factors for PTSD, regardless of the type of transplant the patients had had. The factors associated with an adolescent developing PTSD were medical complications and the experience of an acute illness (rather than a chronic one), meaning it is uncertainty, anxiety,

and what Dr. Stuber called "disruption of expectations" that triggers the PTSD reaction.

Demographics did not seem to play a significant role in determining risk for PTSD, he noted.

Other studies have found that PTSD can have a negative impact on a patient's compliance with his or her medical regimen. One report describing six non-compliant patients with PTSD indicated that treating them for PTSD improved their adherence to medical therapy.

Overall, the work in this field also suggests general anxiety level is an important predictor of the risk that an adolescent will develop PTSD. Dr. Stuber thus recommended focusing on general anxiety level as a risk factor for PTSD. "[It] is essential we find out what the patient's subjective experience is," he said. "I would screen for anxiety."

Symptoms of PTSD include recurrent and distressing recollections of the traumatic event, avoidance, and increased arousal.

Avoidance may entail efforts to stay away from reminders of the event but can also manifest as an inability to recall important aspects of the event, diminished interest in activities, feelings of detachment from others, and a restricted range of affect. Features of increased arousal can be sleep problems, irritability, a lack of concentration, hypervigilance, and an exaggerated startle response. ■