## Team Approach Aids Eating Disorder Recovery

BY JEFF EVANS
Senior Writer

BETHESDA, MD. — A multidisciplinary approach to treating eating disorder patients can help to prevent relapse when the treatment team works closely with family members and other concerned individuals, speakers from Johns Hopkins University said at the annual conference of the National Eating Disorders Association.

It's important to use the approach even when a multidisciplinary professional team is not available because of geographic isolation or because a patient has limited resources and insurance coverage, said Dr. Angela S. Guarda, director of the eating disorders program at Johns Hopkins Hospital in Baltimore.

To prevent relapse in patients with anorexia nervosa or bulimia after they return home, clinicians should incorporate strategies that address patient and family behaviors around shopping, eating, and food preparation, Dr. Guarda said. They also need to replace the time spent on eating disordered activities with more age-appropriate and functional behaviors.

The Hopkins program requires new patients to bring a close relative to the first appointment. After the end of the evaluation, the family member is invited to join the session, and the treatment plan is discussed with both the patient and family.

"We initially meet separately with the patient and the family to take a history and to address the issues that relate to the patient's eating disorder," said Josie Bodenstein, a social worker at Johns Hopkins. "The goal is to educate the family, to diffuse feelings of blame or responsibility for the eating disorder, to listen to their respective viewpoints, and to help parents become part of a unified team in assisting their child to change her behavior."

"Patients and families must understand that unless you change your behavior, you won't be able to correct your

eating disordered thoughts and feelings," Dr. Guarda said. "Treatment is a process of conversion—from seeing dieting as the answer to recognizing it as the problem."

Discussions with patients include making patients realize that it is normal to have ambivalent feelings toward change, to relapse on the road to recovery, and to be initially dissatisfied with the changes to their bodies. Body

dissatisfaction typically lags behind behavioral change by several months, Dr. Guarda said.

Despite the reluctance of some therapists to weigh patients for fear of encouraging focus on weight, it is critical to weigh patients at weekly office visits. "We are very explicit with patients that we require [weighins] in order to treat them. You don't treat hypertension without check-

ing a patient's blood pressure; why would we treat anorexia nervosa without checking weight?"

Many patients with eating disorders have problems with preparing meals and eating in social settings, which can be isolating and result in occupational and educational limitations. Eating disorders can "freeze" a person's developmental progress, resulting in impaired formation of identity and intimate relationships, and difficulty in separating from parents, according to Dr. Guarda.

"It's important to educate parents about grocery shopping," because eating disorder patients often want to be involved in planning family meals, the grocery shopping list, and anything related to food, said Sandra Kirckhoff, a nurse on the inpatient unit in the eating disorders program. Adolescent patients can request some nondiet foods, but they should not be in charge of doing the shopping or making menus or lists.

Families should try to eat balanced meals together at a table, with no one eating diet food. After-meal activi-

ties can help to prevent purging, strenuous exercise, or guilt from feeling full.

At various points during a patient's treatment, clinicians may have to assess the family's mealtime behavior, parenting skills, and assist them in setting firm but supportive limits on disordered behavior and to carry out the roles assigned to them by the treatment team. This may

involve having the family practice designing menus, going to the grocery store, and eating at a restaurant together. Family members must show a united front in setting limits on the patient's behavior and in following through with consequences, Ms. Bodenstein said.

"When lines get blurred, roles become unclear, and progress stalls or regresses; it can be helpful to use a

behavior contract ... to make explicit what everybody's role is," said Dr. Graham Redgrave, assistant director of the eating disorder program at Johns Hopkins.

During hospitalization, Hopkins clinicians do not allow any arguments over whether something should be eaten or not, Ms. Kirckhoff said. Nurses supervise meals and encourages patients to eat all of their food. Each patient is expected to eat like a normal weight, nondieter, to consume a range of foods, and to stop all exercise if on weight gain. Team sports and weight training are introduced after patients reach their target weight. The staff also teaches patients to determine appropriate portions for weight maintenance by eyeballing portions, not measuring them.

Clothes shopping is very important, especially after a patient has attained normal weight, Ms. Scott said. She instructs patients to get rid of all of their old clothes, especially those associated with the illness. New clothes should be appropriate for their age and size and neither baggy nor tight-fitting.

## Various Factors Alter Eating Disorder Brain Function, Behavior

BY JEFF EVANS
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BETHESDA, MD. — A complex set of predisposing, precipitating, and perpetuating factors appears to play a major role in driving the behavioral and neurochemical changes of patients with anorexia or bulimia, Craig Johnson, Ph.D., said at the annual conference of the National Eating Disorders Association.

"A belief system develops, and from that belief system, behaviors emerge. When those behaviors emerge, that also starts to alter the psychology and physiology of the patient and can set up these perpetuating factors so that they feed back on the predisposing and precipitating factors," said Dr. Johnson, founder and director of the eating disorders program at the Laureate Psychiatric Clinic and Hospital in Tulsa, Okla.

The factors that serve to perpetuate an eating disorder may have little to do with why the illness is continuing. The structural and functional changes to neurochemical pathways in the brain that occurred as a result of the eating disorder behavior will continue to reinforce whatever stimulation was gained from the behavior, he said.

"Without exception, patients that we're taking care of entered into these behaviors to try to fix something in themselves. It was a self-improvement strategy. They thought they were doing a good thing. They were doing the same things they saw encouraged

throughout our culture," Dr. Johnson said.

"Eating disorders are as heritable, have the same level of relative risk, and look to be as genetically mediated as the other major psychiatric illnesses," Dr. Johnson said. If a relative has anorexia nervosa, other members of the family are 12 times as likely to develop the disorder than members of the general population; if one family member has bulimia nervosa, other members are four times as likely to have it.

About two-thirds of eating disorder patients have a comorbid diagnosis of anxiety or depression, which predates the onset of the eating disorder in about half of such patients, he said. Some patients also have an impaired ability to work with different sets of challenges on neuropsychological tests, although this measure is not correlated with intelligence. These test results "make sense, in terms of what we see happening to them when they move into increasing levels of complexity developmentally, starting with puberty."

Although he and his colleagues are seeing gender, ethnic, and socioeconomic drift in the epidemiology of anorexia nervosa and bulimia, Dr. Johnson said they are still illnesses that primarily affect white females.

Girls who drop below about 17% body fat lose the secondary sexual characteristics associated with puberty and flatten out their hormone profiles so that they don't "feel" the effects of puberty, he said.

"One of the things we want to know as

soon as we can is where the menstrual threshold is. At what point with our weight restoration are we going to be sending them clearly on the other side of puberty?" he said. If patients do not stay in treatment long enough to restore their weight past the menstrual threshold, they will not have dealt adequately with their phobic fear of menstruation, he said.

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Patients with bulimia nervosa often report that bingeing on carbohydrate-rich food calms them down, which may be the result of increased blood levels of tryptophan, an amino acid that can pass the blood-brain barrier and is synthesized into serotonin; treatment with SSRIs may make this effect even more pronounced by increasing the amount of serotonin available at synapses, Dr. Johnson said.

Vomiting also causes a sedating effect in bulimic patients because of the release of vasopressin. An autoaddiction to the vasopressin release may explain why binges become smaller and vomiting becomes disproportionate to the volume of food.

Excessive exercise also seems to be a reinforcing and possibly anorexia-inducing behavior. "Running seems to have a unique interaction with restricting behavior that essentially stimulates something very, very toxic for patients that have the more severe forms of the illness. We've found that very few patients are able to successfully return to running in our treatment program."

Functional MRI studies of the brains of

anorexic patients and healthy controls have revealed striking differences in dopamine pathways, suggesting that patients with the disorder do not discriminate between positive and negative feedback and have a blunted response to pleasurable stimuli, noted Dr. Walter Kaye, in a separate presentation during the same session at the conference.

During a gambling task in which participants could win or lose money, trials in which patients with anorexia nervosa won money produced brain activity similar to that of control patients during winning trials, but anorexic patients who lost money also had brain activity similar to that of controls who won money, said Dr. Kaye, research director of the eating disorder program at the University of Pittsburgh.

In a separate fMRI study, the taste of sugar produced blunted responses in the insula (the primary taste cortex) of recovered anorexic patients, compared with healthy controls. Unlike in the healthy patients, however, there was no correlation between the taster's rating of pleasantness and the insula's response to sugar in recovered anorexic individuals, he noted.

Before these data can be used to develop new treatments, it would be useful for patients to understand that this temperament is wired into their brains and that they might be able to learn to modulate their feelings and thoughts and develop adaptive coping strategies, said Dr. Kaye, also of the University of California, San Diego.