

EATING DISORDERS REVIEW®

Current Clinical Information for the Professional Treating Eating Disorders



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UPDATE

Childhood Obesity: Help Not Always Accessible

When a child is obese, parents may go through a complex process of monitoring and self-help methods before seeking professional help. Once parents decide to seek medical help, they don't always find the assistance they need, according to an ongoing study at the University of Bristol, England. Results from the Avon Longitudinal Study of Parents and Children showed that some physicians are sympathetic and may offer parents tests and educational books and tapes; however, sometimes these aids never materialize. Other physicians tell parents to do nothing because their child will "grow out of it," while still others blame the mother for "making a fuss" over the child's weight. Other physicians simply aren't interested and offer no help. Dr. L. D. Edmonds reported these findings at the 13th European Childhood Obesity Workshop in Mesagne, Italy, last fall. Dr. Edmonds also noted that in contrast to the varying help given by physicians, pediatric dietitians were very helpful and supportive to both parents and child, but community dietitians tended to be less constructive—seeming to echo the overall range of positive, negative, or dismissive responses to childhood obesity from the medical community.

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National Conference Aims to Increase Awareness of Eating Disorders

By Mary K. Stein, Managing Editor

A national conference held in Washington, DC, in mid-April will attempt to increase awareness of eating disorders by creating a national agenda on eating disorders.

The conference, "Creating a National Eating Disorders Agenda: Integrating Research, Policy & Practice," to be held April 15-16 at the Holiday Inn—Washington, DC on the Hill, will enable participants to create recommendations for national public policies to meet the challenges posed by eating disorders. Dr. David Herzog, head of the Harvard Eating Disorders Center, Boston, and program committee chairman and president of the Eating Disorders Coalition for Research, Policy & Action (EDC), said one goal of the conference is to create a national dialog on policy recommendations by addressing eating disorders as a true public health concern.

Mark Herron, Executive Director of the EDC, said that the conference will bring together experts from the eating disorders community and numerous groups who often lobby for mental health, in addition to federal legislators and policy groups.

The conference is sponsored by the

EDC, which is headquartered in Washington, DC. This group's mission is to educate Congress and the federal government about the growing public health threat posed by eating disorders. One example is their sponsorship of periodic Congressional Briefings in the Senate and U.S.

House of Representatives. For example, last December Senators Hillary Rodham Clinton (D-NY) and Susan Collins (R-Me) were co-sponsors for a briefing, "American Realities: The Changing Face of Eating Disorders." At this briefing, speakers representing non-stereotypical client populations made the point that eating disorders affect a wide variety of Americans, young and old, male and female, and affect all ethnic groups. Other briefings have focused on inadequate insurance, lack of access to care, and the role of Congress in preventing eating disorders. Members include a broad representation from organizations such as the National Eating Disorders Association, the Anna Westin Foundation, Dads and Daughters, the National Eating Disorders Association, the Renfrew Center, and Remuda Ranch

Awards Dinner and Program

On April 15, a special awards dinner will recognize leaders in eating disorders prevention and education, research, treatment, and public policy. On April 16, plenary a three-track half-day program will offer plenary sessions and presentations highlighting research, treatment, education and prevention, as well as public policy. The conference will offer three tracks—research, treatment, and prevention and education, and is open to anyone with an interest in eating disorders is invited to attend.

Candlelight Vigil

On Saturday, April 17, the annual candlelight vigil, "Voices Not Bodies," for
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Improving Inpatient Care for Anorectic Patients

There is a continuing tug of war between clinicians and managed care groups over the design and duration of inpatient care for treatment of persons with anorexia nervosa. As a result, the chance that a patient with anorexia nervosa will be hospitalized often depends more on circumstances than on scientifically based factors, according to Dr. Walter Vandereycken, of Catholic Hospital, Leuven, Belgium (*Int J Eat Disord* 2003;34:409).

After reviewing the literature, Dr. Vandereycken found that increasing economic restraints through managed care policies limit the length of inpatient treatment, which creates an unhealthy cycle: Early discharge at a lower-than-ideal body weight leads to a higher likelihood of readmissions, which leads to increasing costs. Challenged by the reality of health care costs, therapists who work with seriously ill anorectic patients have to face difficult decisions, clinically and ethically, for which few clear-cut evidence-based guidelines exist. The author points to several crucial questions that remain to be answered. Some of those questions concern admission criteria for care, length of hospitalization, rate of weight gain, and guidelines for discharge.

When should a patient be treated in the hospital?

The American Psychiatric Association guidelines propose a list of criteria for 5 levels of care—the type of care is based on clinical judgment and availability of care. One problem is the clinician's perception of the cost/benefit of an inpatient treatment regardless of the financial implications. Of the 5 levels of care proposed by the APA guidelines, inpatient hospitalization is considered the last resort. The selection of treatment setting should depend on the priority and/or combination of goals/criteria. In addition, the availability of modes of care will be both a guiding and limiting factor.

Weight gain: how much and how quickly?

Low body weight at the beginning of treatment may predict poor outcome, and as several researchers have found, the speed of weight gain, especially in patients showing rapid weight increase in the hospital, indicates rapid loss of weight after discharge. The amount of time provided for weight stabilization is also important because the time of readmission was significantly related to the length of time that patients had maintained their target weight up to discharge. The shorter the stabilization time, the more likely the patient had to be readmitted within a short time (usually within 9 months after discharge).

When is the patient ready for discharge?

As the author notes, Japanese researchers have found that the duration of inpatient treatment is greatly affected by the severity of the disease and factors such as lower body weight, longer duration of illness, more previous hospitalizations, and older age at admission. In a German multisite study of 1,200 eating disorders patients treated in specialized centers, the median duration of hospitalization was 10 weeks, but most of the shorter-term inpatient programs were more intensive and expensive (Treasure and Kordy, 1998).

Israeli clinicians introduced a 4-step program in which the following occurs: 1) patients are given gradual and increasing exposure to daily activities in the community as they increase weight and return to the treatment unit overnight. 2) The patients undergo intensive group therapy that continues during all the stages of the inpatient treatment, day treatment, and follow-up. 3) After discharge, patients participate in a follow-up program conducted at the eating disorders unit itself with the same patients who were part of their group therapy while they were hospitalized. Nutrition counseling and psychiatric follow-up are

Design treatment for the individual and avoid prepackaged approaches.

provided at these sessions. 4) Attending an individual psychotherapy program as an outpatient is a prerequisite for admission to the follow-up sessions. After Fennig and colleagues added the new procedures, the relapse rate fell from 30% to 15% (*General Hospital Psychiatry* 2002;24:87).

Preplanning improves success

According to Dr. Vandereycken, the experience of hospitalization for patient, family, and clinician will be influenced by the decision-making process before admission. Ideally this process will involve the patient and her family, with frank discussion of the proposed treatment, reflecting a caring approach. It will make a huge difference if the hospitalization is perceived as a supportive part of recovery and not as evidence of failure on the part of the patient, her family, or the therapists.

Finally, too often most specialized inpatient programs for eating disorders use an integrated approach that is a preprogrammed package of components rather than one more suited to the individual's needs. One more improvement would be more flexible programs that better match individual patient variables (such as length and severity of illness and previous treatment history).

CBT is Effective for Post-Hospitalization Treatment of Anorexia Nervosa

Adults with anorexia nervosa (AN) have a high rate of relapse, continuing serious illness, and a mortality rate estimated at 5% per decade of follow-up. In what is believed to be the first empirical study of the efficacy of any form of psychotherapy for patients after inpatient treatment, Dr. Kathleen M. Pike and co-workers found cognitive behavioral therapy, or CBT, to be particularly effective for adults with AN (*Am J Psychiatry* 2003; 160:2046)

Patients were eligible to participate in the outpatient study if they had successfully completed inpatient treatment (defined as achieving at least 90% of ideal body weight) for at least 2 weeks, had

normalized eating, and lived within commuting distance of the hospital. Thirty-three women were selected for the study.

CBT or nutrition counseling

Two types of intervention were given: CBT or nutrition counseling, given in 50 sessions over the year after hospitalization. In both cases, the goal was to maintain the objectives achieved on the inpatient unit, to help patients improve and recover, and to prevent relapse.

The study participants were randomly assigned to their treatment group immediately before their first session in the outpatient trial, which was scheduled within one week after they successfully completed their hospitalization. The nutritional counseling intervention was manual-based and followed well-established principles of nutrition education and food exchanges. Treatment focused on specific dietary analyses and balanced meal planning.

CBT was given in a manual-based method consistent with recommendations specific to CBT for anorexia nervosa. Study physicians met with the patients monthly to monitor their medical condition. Antidepressant medication was continued throughout the outpatient trial and monitored by the study physician.

The patients were released from the study if their weight fell below a body mass index of 17.5 kg/m², or about 80% of ideal body weight for more than 10 days; if the subject's medical condition was affected by exacerbation of anorexia nervosa to the point where inpatient care was once again required; or after exacerbation of non-eating-disorder psychopathology (such as attempted suicide) required additional care.

And, after a year...

The findings offered preliminary support for the use of CBT in the post-hospitalization treatment of adult anorexia nervosa. The criteria for relapse were met by 53% of the patients in the nutrition-counseling group, compared with 22% of those in the CBT group. Three women in the CBT group relapsed due to weight loss, and one relapsed because of weight loss and increased suicidality. In the nutrition-counseling group, 5 women relapsed because of weight loss and 3 were

referred for alternative care because of severe depression, including active suicidal ideation in 2 subjects. The number of patients who dropped out early (defined as patients who discontinued treatment before session 10), was higher for those receiving nutrition counseling (3 of 15, or 20%) than for those receiving CBT (0).

A significantly higher percentage of women in the CBT group (44%, or 8 of 18) than in the nutrition-counseling group (7%, or 1 of 15) met modified Morgan-Russell criteria for a "good outcome." However, the authors point out that one of the limitations of these criteria is that they do not cover related psychological and behavioral variables that are core criteria in anorexia nervosa. Thus, a person could have met the study criteria for a good outcome but still not be free of weight concerns, shape concerns, or eating behavior.

'Full recovery' better among the CBT group

To counter this, the authors established an operational definition of full recovery by using the Eating Disorder Examination interview. Patients had to meet the criteria for good outcome and eating attitudes and weight concerns had to be less than one standard deviation above the mean of a comparison group without eating disorders, and binge eating or purging behaviors had to be absent. Using these criteria, 17% of the women in the CBT group met the criteria for "full recovery," compared with none of the individuals in the nutrition-counseling group.

At the time they were randomly assigned to CBT or nutrition counseling, 17 women were taking antidepressants; all the medications were begun on the inpatient unit because significant disturbances of mood continued despite weight restoration. The authors also attempted to determine if antidepressants affected outcome. No significant medication effects were identified for nutrition counseling; the findings among the CBT treatment group suggested a medication effect: 7 of the 8 patients who met the criteria for "good outcome" were receiving medication, compared to 4 of the 10 who did not meet the criteria for good outcome.

The Interpersonal World of Patients with Eating Disorders: Still a Frontier

Surprisingly little is known about the interpersonal world of a patient with eating disorders, according to a team of Swedish researchers. Better understanding of this world might improve their diagnosis and treatment (*Psychology and Psychotherapy Theory: Theory, Research, and Practice* 2003; 76:337).

The Swedish researchers defined “interpersonal” not only as interactions between self and others but also included the process of introjection, in which these interactions are internalized. More than 50 years ago, Sullivan (1953) argued that self-image is a guiding force in a person’s perceptions and interpretations of interactions with others; he also reasoned that a person’s self-image is based on how others have treated him or her.

Dr. Caroline Björck and co-workers at the Karolinska Institute in Stockholm used the Structural Analysis of Social Behavior (SASB), a questionnaire developed in 1974 (*Psychol Rev* 1974; 81:392), to study 830 patients participating in the Co-ordinated Evaluation and Research at Specialized Units for Eating Disorders in Sweden (CO-RED) project. This longitudinal naturalistic study follows patients treated at 15 specialist treatment centers for eating disorders across Sweden. All subjects had completed the SASB at their initial assessment.

Twenty-one percent of the subjects had diagnoses of anorexia nervosa (AN), 39% had bulimia nervosa (BN), 6% had binge eating disorder (BED), and 34% had eating disorders not otherwise specified (EDNOS). Patients ranged in age from 14 to 54 years (mean: 24.9 years), and body mass index ranged from 10.4 to 54.0 (mean was 20.6). Twelve males were included. A group of 104 normal control participants was drawn from a student population in Uppsala, Sweden, and a third comparison group included 26 students with subclinical depression. The researchers compared patients with controls, patients with other patients, and between-group comparisons of self-image, and finally studied the pos-

sible confounding influences on general psychopathology on self-image.

Results and implications

When compared with the normal patients, those with eating disorders clearly had more negative self-images. When the different diagnostic groups were compared, anorexics were found to be significantly more self-controlling, self-blaming, and self-hating than were patients with BN, BED, or EDNOS. Patients with BED were significantly more self-affirming than bulimic patients and less self-controlling than patients with EDNOS.

Patients with BED presented with less negative self-images compared to patients in the other groups. They also rated themselves as more self-emancipated, more self-affirming and more self-loving than the other patient groups. However, this doesn’t necessarily mean that patients with positive interpersonal styles are easier to treat than those with negative interpersonal style. Sociable patients may tend to evoke cooperative and trusting responses from the treatment staff, which in turn could reinforce patients’ underlying tendencies toward social conformity and thereby hinder change. When applied to BED patients, this might help explain why some readily comply with treatment but make few changes in behavior.

The negative interpersonal profiles of eating disorder patients in general and anorexics in particular may be a sign of considerable risk for development of negative reaction to psychotherapy. A patient’s subjective sense of suffering and despair over her symptoms from an eating disorder, while at the same time coupled with resistance to treatment, can be puzzling and problematic. This could be a reflection of the patient’s negative self-image, according to the authors. This might be a case where the patient is not being imperious to treatment itself but may be acting to defend and maintain a negative self-image. This may be distressing but also allows her to make sense

of the world around her.

Finally, Dr. Björck and colleagues stress that the significant differences reported between diagnostic groups once again underscored the importance of taking into account patients’ interpersonal profiles when planning psychotherapeutic treatment.

New Software Used to Test Body Shape Preferences

A distorted perception of body size and shape is a key factor in both anorexia nervosa and bulimia nervosa, but this is often hard to define. Previous attempts to do so have used methods like distorting a video image by stretching or compressing a figure on the X or Y axis.

Dr. M. J. Toe and colleagues at Newcastle University, in Newcastle Upon Tyne, UK, have developed computer software that they feel more realistically reflects the way fat is added or lost from the body (*Br J Psychology* 2003; 94:501). Unlike many body image software programs, which allow images to be stretched or compressed, the British software system uses biometric data based on real body shapes. According to the authors, this method also allows individual body parts to be altered separately, and thus it’s possible to determine if the patient is overestimating or underestimating a particular body part.

Another bonus, according to the authors, is that it is possible to calculate the apparent body mass index (BMI) of the modified pictures using the perimeter-area ratio—this allows comparison of the actual BMI with that calculated for the patient’s estimated and ideal bodies.

Putting the software to the test

When the software was tested on 30 anorexic patients, 30 bulimic patients, and 137 control observers, all three groups tended to overestimate their body size, but not significantly so. Both the control and bulimic observers preferred an “ideal body” with a BMI of 20, which is at the lower end of the “normal” BMI range. However, the anorexics chose an “ideal body” with a BMI of 15, which is on the borderline between emaciated and underweight BMI categories.

Predicting Bulimic Episodes Based on Family Conflicts

Stressful family interactions can predict bulimic symptoms among teenage girls, according to the results of a recent study (*Int J Eat Disord* 2003; 34:450).

Although many theories have been proposed to explain how family interactions influence bulimic behaviors, these theories have not been tested empirically. Similarly, studies have not yet determined whether individual variations in bulimic patterns can be explained by individual perceptions of family interaction, particularly levels of family conflict and emotional expression.

Several studies have shown a connection between daily stressors and binge eating among adult bulimics. For example, Shaye (1989) showed that some adults with bulimia who are forced to break their diet early in the day consume more sweets than do individuals who are allowed to maintain their diets throughout the day. This pattern was reported only in individuals who were stressed. In addition, adults with bulimia nervosa recalled that they experienced one or more hassles in the 60 minutes before binge eating but that they did not encounter hassles before a regular snack or meal (*J Consult Clin Psychology* 1987; 55:534).

Study used multiple daily questionnaires

Dr. Deborah M. Okon and associates at Pacific Graduate School of Psychology, Palo Alto, CA, and the University of New Mexico, Albuquerque, tested the stressor theory in 20 girls with clinically diagnosed bulimia.

Twice each morning, afternoon, and evening for one week, the girls participating in the study completed a set of questionnaires about their current activity, affect, and bulimic behaviors whenever they were contacted via pager. Then twice daily, at midday and late evening, they completed a second set of questionnaires that included the

Eating Disorders. World Psychiatric Association Series: Evidence and Experience in Psychiatry

Mario Maj, Katherine Halmi, Juan José López-Ibor, and Norman Sartorius (eds.), Volume 6. John Wiley and Sons, 2003, 435 pp., \$135

While some might initially find the price to be off-putting (used copies go for about \$85.00 on the Amazon Books website) this excellent book is worth noting for several reasons. The World Psychiatric Association is well known for producing a series of distinguished volumes on various psychiatric topics, and the one addressing eating disorders is no exception.

Each chapter has been rigorously written by outstanding clinicians and has been expertly peer-reviewed. But the significant feature that makes this book different from other texts is that every one of these chapters is accompanied by 11 to 15 highly informative 2- to 3-page "critiques" by an additional large, multinational cadre of significant eating disorders authorities. Thus, you can participate in a world-class seminar complete with erudite discussions that alone come close to being worth the price of the book.

current activity items as well as questions about the frequency and extent of daily hassles. Patients reported that they spent less than 2 minutes filling out each form.

To study bulimic behavior, a modified version of the 9-item Binge Scale measured the frequency and duration of binges and purges as well as feelings such as depression, and feeling out of control, before the binge and after the binge. Six times daily participants reported all binge/purge behaviors that occurred since the last time they were paged.

Family hassles and bulimic symptoms

As the researchers had predicted, the girls' perception of their family environment helped explain individual differences in bulimic symptoms by clarifying the relationship between family hassles and bulimic symptoms.

The six chapters cover classification, diagnosis, and co-morbidities; epidemiology and cultural aspects; physical complications and physiological aberrations; pharmacological treatment; psychological interventions; and the economic and social burden of eating disorders.

The discussants take up where the authors leave off—summarizing and underlining key issues, raising new questions, pointing out gaps in the literature, and explicating uncovered theoretical and clinical implications, controversies, alternative explanations, and perspectives. They underscore where future research and clinical thinking should venture, and point out limitations that may never be adequately addressed. So, readers who study the text and commentaries gain an almost Talmudic experience.

All the sections deserve special recognition, but I'll simply mention the particularly lively discussions concerning classification—entailing what the core issues are in understanding eating disorders and regarding economic and social burdens, relatively unstudied aspects of the field. My mentioning these two is not to slight the others. All of these chapters and discussions are well worth chewing on.

—J.Y.

For the teens who perceived their family as having a high level of conflict, 40% of the variability in bulimic episodes that occurred between 6 pm and midnight was explained by family hassles experienced between 2 pm and 10 pm. Similarly, 42% of the variability in symptoms was explained for participants who perceived their family as low in emotional expressiveness.

The authors feel that their study provides support for family systems theorists who argue that a child's symptoms must be considered in the context of their family system. According to the authors, the study results also suggest the need for more research focusing on adolescents with diagnosable eating disorders, and indirectly supports therapies that decrease the bulimic symptoms among teens by changing the family's interactions.

Ghrelin: A Helpful Marker and Hunger Stimulator as Well

The recent discovery of ghrelin, an amino acid peptide, has added to our understanding of the body's control of food intake and energy balance. Ghrelin, which is secreted mainly by the stomach and duodenum, stimulates hunger and promotes food ingestion. In contrast, leptin, another endogenous protein, increases satiety and reduces food consumption.

Results of two recent studies have shown that ghrelin can be a helpful marker of nutritional status among patients with obesity and anorexia nervosa, and that bulimia nervosa causes a profound dysregulation of this peptide.

A marker among obese and anorexic patients

In the first study, at the Hospital Infantil Universitario Nino Jesus, in Madrid, Dr. Leandro Soriano-Guillen and colleagues studied the effects of dietary intervention among 16 prepubertal children who were obese, 16 anorexic adolescents, and 41 healthy controls (21 were prepubertal and 20 were in Tanner growth stage 5). The researchers analyzed plasma ghrelin levels and their correlation with plasma levels of leptin, insulin, and insulin-like growth-factor-binding proteins 1 and 2 (*J Pediatr* 2004;144:36).

At diagnosis, ghrelin levels were significantly decreased in obese children (52% of control levels) and significantly increased in adolescents with anorexia nervosa (64% of control levels). After dietary intervention, ghrelin increased in obese patients without reaching control levels even after a 50% reduction in body mass index (BMI). In adolescents with AN, ghrelin levels normalized after a 25% increase in BMI. Ghrelin levels correlated negatively with the BMI and positively with IGFBP-1 levels in controls but not in obese patients or in patients with AN.

Ghrelin's effect is blunted among patients with BN

In the second study, Dr. Palmiero Monteleone and colleagues at the University of Naples, Italy, compared the response of ghrelin and leptin to a meal in two groups—untreated women with bulimia nervosa and normal controls.

Nine symptomatic drug-free bulimic women and 12 age-matched healthy women ingested a meal of 1,207 kcal (60% carbohydrate, 23% fat, 17% protein) at 12 noon.

The bulimic women were all of the purging subtype, with binge episodes always followed by self-induced vomiting; none abused laxatives or exercised excessively. Three had a past history of anorexia nervosa, 2 had concomitant generalized anxiety disorder, and 3 had an Axis II diagnosis of borderline personality disorder. Control women were within 15% of their ideal body weight, had normal diets and no family history of mental disorders.

Blood samples were collected before, and then 45, 60, 90, 120, and 180 minutes after the meal. Plasma levels of ghrelin, leptin, insulin, and glucose were measured. Glucose and insulin levels were of interest because these substances have been claimed to modulate ghrelin secretion in response to food intake.

Results

There were no significant differences between the bulimic patients and the control women in age, body weight, BMI, body fat mass and body lean mass. In addition, pre-meal levels of ghrelin, leptin, insulin, and glucose did not differ between the groups.

The ghrelin response to food intake was significantly blunted in the bulimic patients, and postprandial profiles of circulating leptin, insulin, and glucose were not significantly different between patients and controls.

The authors reported that, just as with other studies, food consumption dramatically decreased plasma ghrelin concentrations in healthy subjects. In untreated symptomatic bulimic women, the suppression of circulating ghrelin by food intake was significantly blunted.

The authors note that study results suggest that ghrelin is a starvation-related hormone that functions as an indicator of short-term changes in energy balance. Therefore, its suppression after food ingestion may represent a peripheral signal involved in the regulation of a meal size by reducing hunger and/or increasing satiety. Therefore, finding a blunted

response of circulating ghrelin to food in symptomatic bulimics would support impaired suppression of the drive to eat following a meal that could be responsible for an increased food consumption and binge eating among this group of patients. Laboratory studies of humans suggest that bulimic patients have diminished satiety responses to meals (Walsh et al, 1989) that, on the basis of the results of the study, could be mediated at least in part by impaired suppression of ghrelin secretion.

Precise mechanisms are still a mystery

The mechanisms underlying the altered ghrelin response to food in bulimia nervosa are not known. But, could altered glucose or insulin responses to a meal cause a blunted ghrelin response in bulimic patients? The authors didn't observe any difference in postprandial plasma glucose and insulin levels between bulimic patients and controls.

Another suggested theory is that the disordered eating particularly chronic fasting-gorging behavior of bulimic women, impairs the ghrelin sensitivity to acute changes in energy intake. Despite the large amount of calories ingested during binge episodes, bulimics regurgitate a relatively large amount of calories through vomiting and may use prolonged starvation to reduce their daily caloric intake. Since insulin and glucose are believed to be involved in the postprandial mechanisms by suppressing ghrelin production, repeated abrupt decrements following chronic purging episodes may damage the sensitivity of ghrelin-producing cells to these physiological regulators. Then, even if bulimics have normal postprandial levels of circulating insulin and glucose, their sensitivity to food-induced ghrelin suppression could be impaired. The absence of changes in leptin levels immediately after food consumption lends support to the idea that leptin is not involved in regulating meal size and postprandial satiety.

The study shows for the first time that the ghrelin response to food consumption is significantly blunted in symptomatic bulimics, whereas the short-term leptin response is preserved. These find-

ings support the authors' theory that in BN a profound dysregulation of some peripheral regulatory mechanisms is involved in both short-term and long-term regulation of feeding behavior and energy balance.

NATIONAL CONFERENCE

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eating disorders awareness will be held near the Capitol reflecting pool. From 4 pm to 7 pm that day, the program will feature a 30-minute body movement workshop with audience participation. Another presentation will be *The Thin Line*, a 30-minute story of one girl's struggle with her eating disorder and the struggles of those close to her to understand and to help. A second feature is the *Mind/Body Dialogues*, based on the principles of self-exploration, revelation, and outspokenness. This play is loosely based on the format of *The Vagina Monologues* by Eve Ensley. *The Mind/Body Dialogues* examines relationship that people from a wide cross-section of backgrounds have with their bodies. *The Dialogues* was written by Jennifer Campbell and Jessica Cunningham of the Massachusetts Eating Disorder Association, Inc.

Evening Guest Speaker

That evening, Jessica Weiner, speaker, performer, and author, will be the featured speaker. Weiner is author of *A Very Hungry Girl*, and founder of the ACT OUT Ensemble, a national touring theatre company based in Indianapolis. Her social action plays have covered such topics as eating disorders, relationships, school violence, date rape, and hate crimes.

Better Insurance Coverage a Goal

Even as more effective treatments are being uncovered for anorexia nervosa and bulimia nervosa, clinicians, patients, and their families are finding insurance coverage to be limited. One of the policy priorities of the EDC is to urge Congress to pass legislation that would mandate appropriate coverage for these serious conditions. Data show that health insurers provide an average of 10 to 15 sessions for people with eating disorders when at least 40 may be needed. A study

by Dr. Ruth Striegel-Moore and colleagues found that the incidence of patients given an eating disorder diagnosis was only about one-tenth of that seen in samples of the general public. This suggested that many people who need treatment aren't getting it, according to Dr. Striegel-Moore (*Int J Eat Disord* 2000; 27:381). The researchers also found that the average length of treatment provided, 26 inpatient and 16 outpatient—days per year for anorexia nervosa and 12 days for bulimia nervosa, was much lower than that recommended by the American Psychiatric Association.

To address the gaps in treatment, the Coalition is working to pass the Mental Health Equitable Treatment Act (S. 1832), which would require insurers to cover mental illness in the same way that they cover physical illnesses. Currently, insurers can set limits on the number of sessions covered. The Coalition also is working to urge the Centers for Disease Control and Prevention to develop more accurate statistics on mortality rates for eating disorders. According to Jeanine Cogan, PhD, past director of the Coalition, and currently its principal investigator, the figures are underreported because death certificates don't cite eating disorders as a cause of death.

Executive Director Marc Lerro said that the group plans to post a final report summarizing the results from the conference on the Internet. He added that the report from the conference will be available for purchase later in print form and on CD-ROM.

Starvation's Long-term Effects

In a study that has implications for patients with anorexia nervosa, researchers recently went back as far as the Second World War to evaluate the long-term effects of starvation during periods of growth. They discovered that starvation with chronic stress, especially just before or during puberty, has long-term adverse consequences, especially upon the heart (*BMJ* 2004; 328: 11).

From September 8, 1941 to January 27, 1944, citizens in Leningrad (now St. Petersburg), Russia faced starvation as German troops blocked supplies during the

Siege of Leningrad. The population of Leningrad at that time was 2.9 million, including a half million children. The average daily ration for citizens was 460 kcal per day.

During the siege, 630,000 people died from hunger-related causes, most during the winter of 1941-42. Dr. Pär Sparén, at the Karolinska Institute, Stockholm, and co-workers studied 5000 men born 1916 to 1935 who lived in Leningrad; 3905 of the men had lived in Leningrad during the siege.

Three to six decades after the siege, men who had been in the siege around the age of puberty had blood pressures a mean of 3.3 mmHg higher than normal. This group also had a higher rate of death from ischemic heart disease and stroke, including hemorrhagic stroke. Lifestyle and socioeconomic factors did not confound the association between death from cardiovascular disease and siege exposure.

Starvation at puberty increased risk

Starvation around the time of puberty (ages 9-15) was more strongly associated with high systolic blood pressure and strokes in adult life than was starvation at other ages. According to the authors, this casts new light on the long-term effects of severe malnutrition in early life. The researcher chose the age limit of 9 years on the basis of Marshall and Tanner's work, where the "fat spurt" was considered to be the earlier sign of or trigger of puberty that is visible before age 10.

Heart abnormalities in anorexic patients

Studies of patients with anorexia nervosa report several cardiovascular abnormalities, especially reduction of ventricular mass, valve dysfunctions, and EKG abnormalities. Damage to the myocardial fibers has been documented in obese patients on very-low-calorie diets. In addition, endocrine changes accompany self-starvation occurring around the time of puberty (Marshall and Tanner, *Human Growth, a comprehensive treatise*, Plenum Press, 1986, pp. 171-209).

The authors concluded that starvation around the time of puberty might increase the risk of future cardiovascular disease.

QUESTIONS & ANSWERS

The Female Athlete Triad

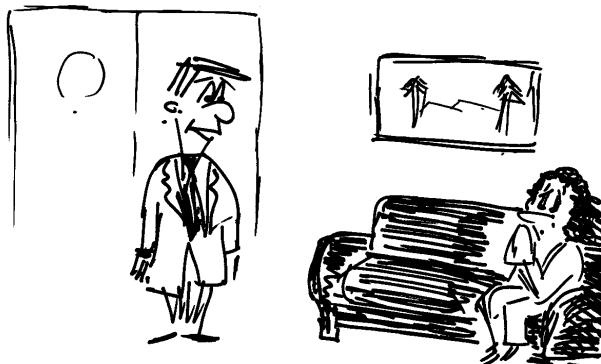
Q I've heard of the "Female Athlete Triad" of disordered eating, amenorrhea, and osteoporosis. Don't all these women have anorexia nervosa? (B.E. Syracuse, N.Y.)

A Although many of the core signs and symptoms of the Female Athlete Triad overlap with those of anorexia nervosa, not every female with the "athlete triad" technically qualifies for the diagnosis of anorexia nervosa. However, this may often be splitting hairs, since all these women would at least qualify for a diagnosis of "eating disorders not otherwise specified" if they didn't make the exact criteria for anorexia nervosa. In most cases, the distinction might occur if the athlete has not lost enough weight to bring her below 85% of what would be her expected weight. It has been suggested that these diagnostic criteria should be applied more flexibly, since athletes often have increased lean body mass. Since the prevalence of eating disorders in some groups of female athletes has been estimated at between 15% to 62%, these syndromes are relatively common, particularly in sports that emphasize leanness such as gymnastics (Kazis and Iglesias, *Adolescent Medicine* 14: 87, 2003). Whenever the female athlete triad is noted, assessment for the severity of eating disorder and proper behavioral and dietary interventions are indicated to prevent further deterioration of health, particularly skeletal health.

—J.Y.

Nibbles by Hunter

INTENSIVE CARE



"Yes, he died.. But at least he'll never have to watch his weight again."

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Can Nutritional Supplements Boost Fluoxetine's Efficacy Among Patients with AN?

Selective serotonin reuptake inhibitors seem to be ineffective for ill, malnourished patients with anorexia nervosa. However, these agents may be effective in preventing relapse after weight is restored. Dr. N.C. Barbarich and a team at the University of Pittsburgh Medical School recently tested the theory that nutritional supplements might improve the effects of fluoxetine in underweight AN patients (*Int J Eat Disord* 2004; 35:10).

Twenty-six AN patients participated in a double-blind, placebo-controlled study where they were given either nutritional supplements or a nutritional placebo along with their regular fluoxetine regimen. The nutritional supplement included tryptophan (the precursor of serotonin), vitamins, minerals, and a number of essential fatty acids believed to influence serotonin pathway function.

Supplements made no difference

There was no significant difference in weight gain between the subjects treated with the supplements and fluoxetine versus those treated with fluoxetine and a nutritional placebo. In addition, there were no significant differences between groups in mean changes in anxiety or obsessive and compulsive symptoms.

The authors note that supplements are no substitute for adequate nutrition and are ineffective in boosting the efficacy of fluoxetine in underweight anorexic patients.

IN THE NEXT ISSUE

Insurance Parity for Patients with Eating Disorders: An Ongoing Challenge

Health insurance often provides only a fraction of the coverage that eating disorders patients actually need. What can patients, families, and clinicians do to improve the situation? Some guidelines from national patient advocacy groups, and a look at the progress of legislation aimed at improving the level of care.

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- Eating Disorders in Black and White Women
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