



The Evidence on What Treatment Works: Clinical Guidelines and Evidence Reports

If you want access to the same documents that clinicians use to guide their treatment decisions, and if you want to know what the available evidence says on what works for treatment of eating disorders, you want to look at published clinical practice guidelines and medical journal articles called systematic reviews. The information in this document provides links to that information so you can look it over and take it with you to discuss the care plan with the physicians and others who will treat your family member.

This document discusses two types of evidence-based information used by clinicians in determining appropriate care for eating disorders: clinical practice guidelines and systematic reviews. We define below what an evidence-based clinical guideline and a systematic review are and provide links to the documents. If you review this information before meeting with the care team, it can help you have informed discussions about care plans with your loved one's care team.

Systematic Reviews of Clinical Studies

A systematic review is a comprehensive review and analysis of data from the available published clinical studies on existing methods of diagnosing and treating a disorder. Researchers start out with key clinical questions that they seek to answer, and then they perform a comprehensive search for published data to analyze to address the questions. Thus, the data for analysis are collected from as many published clinical studies as there are to address the question. The data are then pooled together statistically where possible and analyzed to figure out how well each treatment works and for whom it works best. Sometimes sufficient data are not available to conclusively answer a question. Knowing where the holes in the research are is important, because that knowledge will help in planning new research that hopefully will answer the questions about "what works?" Also, it's important to understand that some treatments may not have evidence available about how well they work. Therefore, your decisions about treatment may have to be based on considerations other than conclusive clinical evidence. A lot more research is needed about what works best in the field of eating disorders. That said, some information is available about how well some types of treatment work. Keep in mind that a lack of evidence doesn't mean that a treatment does not work—it just means no evidence is available to be able to conclude whether or not it works.

Following this section are links to two systematic reviews: one pertains to bulimia nervosa and pooled data together where possible on all the different treatments for bulimia eating disorders in general; the other systematic review did not pool data for analysis from groups of studies, but rather looked at individual studies on their own. Both systematic reviews were performed by very reputable research organizations: two U.S. Evidence-based Practice Centers of the U.S. Agency for Healthcare Research and Quality (AHRQ). Links to the *Executive Summary* and full *Evidence Reports* are provided.

Bulimia Nervosa: Efficacy of Available Treatments

A Systematic Review conducted by
ECRI Institute Evidence-based Practice Center

ECRI Institute's approach was unique in producing this evidence report and the bulimia nervosa resource guide. The focus of the work was driven by an external advisory committee of patients and family members affected by bulimia nervosa, clinicians and specialists from leading eating disorder treatment centers that treat eating disorders, scientists who conduct research on eating disorders, health insurance representatives, and others who affect patient care. ECRI Institute gratefully acknowledges the support of The Hilda & Preston Davis Foundation, which provided major funding for this evidence report and the family resource guide and Web site that emerged from the research. The approach was unique because of the intensive involvement of families and recovering patients in formulating the key questions and reviewing the family and patient information before publication.

Link to the Summary:

http://www.bulimiaguide.org/static/report_summary.pdf

Link to the Full Report:

http://www.bulimiaguide.org/static/report_complete.pdf





Management of Eating Disorders

A systematic review conducted by RTI International, University of North Carolina at Chapel Hill Evidence-based Practice Center

This systematic review of the literature focused on key questions concerning anorexia nervosa, bulimia nervosa, and eating disorders not otherwise specified (i.e., especially binge eating disorder) to address questions posed by the American Psychiatric Association and Laureate Psychiatric Clinic and Hospital through AHRQ. Funding was provided by AHRQ, the Office of Research on Women's Health at the National Institutes of Health, and the Health Resources and Services Administration. We received guidance and input from a Technical Expert Panel. This report was also published as four separate articles in the *International Journal of Eating Disorders* in 2007.

Link to the Executive Summary:

<http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat1b.section.14940>

Link to the Full Report:

<http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat1b.chapter.14937>

Berkman, N.D., C.M. Bulik, and K.N. Lohr. (2007). Outcomes of Eating Disorders: A Systematic Review of the Literature. *International Journal of Eating Disorders*, 40(4): 293-309

Brownley, K.A., N.D. Berkman, J.A. Sedway, K.N. Lohr, and C.M. Bulik. (2007). Binge Eating Disorder Treatment: A Systematic Review of Randomized Controlled Trials. *International Journal of Eating Disorders*, 40(4):337-348

Bulik, C.M., N.D. Berkman, K.A. Brownley, J.A. Sedway, and K.N. Lohr (2007). Anorexia Nervosa Treatment: A Systematic Review of Randomized Controlled Trials. *International Journal of Eating Disorders*, 40(4): 310-320.

Shapiro, J.R., N.D. Berkman, K.A. Brownley, J.A. Sedway, K.N. Lohr, and C.M. Bulik (2007). Bulimia Nervosa Treatment: A Systematic Review of Randomized Controlled Trials. *International Journal of Eating Disorders*, 40(4): 321-336

Clinical Practice Guidelines

A practice guideline is defined as a “systematically developed statement to assist practitioner and patient decisions about appropriate healthcare for specific clinical conditions.” The following four clinical practice guidelines have been published by reputable medical organizations and are available to the medical treatment team that is providing care to your child. We also provide summaries of these guidelines below. These guidelines were identified from the National Guideline Clearinghouse (www.guideline.gov).

- *Identifying and treating eating disorders*. American Academy of Pediatrics. <http://aappolicy.aappublications.org/cgi/content/full/pediatrics;111/1/204>
- *Practice guideline for the treatment of patients with eating disorders*. American Psychiatric Association. http://www.psych.org/MainMenu/PsychiatricPractice/PracticeGuidelines_1.aspx
- Finnish Medical Society Duodecim. *Eating disorders among children and adolescents*. http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=11035&nbr=&string=
- U.K. National Collaborating Centre for Mental Health (National Institute for Health and Clinical Excellence [NICE]). *Eating disorders. Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders*. <http://www.nice.org.uk/guidance/index.jsp?action=byType&type=2&status=3>



Eating disorders among children and adolescents

From the Finnish Medical Society Duodecim

BRIEF SUMMARY

Bibliographic Source

- Finnish Medical Society Duodecim. Eating disorders among children and adolescents. In: EBM Guidelines. Evidence-Based Medicine [Internet]. Helsinki, Finland: Wiley Interscience. John Wiley & Sons; 2007 Mar 28 [Various].

MAJOR RECOMMENDATIONS

The levels of evidence [A-D] supporting the recommendations are defined at the end of the “Major Recommendations” field.

Objectives

- Remember that eating disorders are very common among adolescent girls, and especially bulimic disorders are encountered in boys as well.
- One must remember to look for signs of an eating disorder; patients seldom report it themselves.
- The diagnosis and planning of treatment are the responsibility of special personnel.

Basic Rules

- An eating disorder refers to states in which food and nourishment have an instrumental and manipulative role: food has become a way to regulate the appearance of the body.
- The spectrum of eating disorders is vast. The most common disorders are anorexia nervosa and bulimia nervosa. In addition, incomplete clinical pictures and simple binge eating have become more general.
- Recently the international trend has been to put more emphasis on early reaction to the symptoms.
- Even small children can have different kinds of eating disorders that relate to difficulties in the relationships between the child and his/her caretaker.

Aetiology

- Currently, eating disorders are considered to be multifarious. Genetic and sociocultural factors and also individual dynamics all affect eating disorders.
- The typical age of onset is adolescence, when the body changes and grows.
- Anorexia nervosa typically emerges between 14 and 16 years of age or around the age of 18 years. Bulimia appears typically at the age of 19 to 20 years.
- Eating disorders are 10 to 15 times more common among girls than boys.
- Every 150th girl between the ages of 14 and 16 years suffers from anorexia nervosa.
- There is no epidemiologic data on the occurrence of bulimia, but it is considered to be more common than anorexia nervosa.

Diagnostic Criteria for Anorexia Nervosa

- The patient does not want to maintain his/her normal body weight.
- The patient's weight is at least 15% below that expected for age and height.
- The patient's body image is distorted.
- The patient is afraid of gaining weight.
- There is no other sickness that would explain the loss of weight.

Diagnostic Criteria of Bulimia Nervosa

- Desire to be thin, phobic fear of gaining weight.
- Persistent preoccupation with eating and an irresistible urge or compulsive need to eat.
- Episodes of binge eating (at least twice a week); control over eating is lost.
- After the episode of binge eating, the person attempts to eliminate the ingested food (e.g., by self-induced vomiting and by abuse of purgatives and diuretics).



Symptoms

- Anorexia nervosa generally starts gradually.
- Losing weight can either be very rapid or very slow. Generally the patients continue to go to school; they go on with their hobbies and feel great about themselves. Therefore, the families are usually surprised to find that their child suffers from malnutrition.
- A screening questionnaire is helpful in the assessment of patients with suspected eating disorders (each positive answer gives one point; two or more points suggest an eating disorder).
 1. Do you try to vomit if you feel unpleasantly satiated?
 2. Are you anxious with the thought that you cannot control the amount of food you eat?
 3. Have you lost more than 6 kg of weight during the last 3 months?
 4. Do you consider yourself obese although others say you are underweight?
 5. Does food/thinking of food dominate your life?
- Anorexic adolescents deny their symptoms, and it takes time and patience to motivate them to accept treatment.
- Somatic symptoms include the following:
 - Disappearance of menstruation
 - The slowing of metabolism, constipation
 - Slow pulse, low blood pressure
 - Flushed and cold limbs
 - Reduction of subcutaneous fat
- Bulimic adolescents are aware that their eating habits are not normal, but the habit causes so much guilt and shame that seeking treatment is not easy.
- Bulimia also causes physical symptoms, including the following:
 - Disturbances of menstruation
 - Disturbances in electrolyte and acid-alkali balances created by frequent vomiting
 - Damage to tooth enamel

Laboratory Findings

- In anorexia nervosa:
 - Slight anemia
 - Blood glucose levels on the lower border of normal
- In bulimia:
 - Hypokalemia
 - Increased serum amylase

Differential Diagnosis

- Severe somatic diseases, for example, brain tumors
- Psychiatric diseases — severe depression, psychosis, and drug use

Treatment

- If the symptoms correspond to the diagnostic criteria of anorexia nervosa, the situation should be discussed with the family before treatment is arranged.
- The adolescent and his/her family should be made aware of the seriousness of the disorder.
- Sometimes it takes time to motivate the patient to participate in the treatment.
- The treatment is divided into:
 - Restoring the state of nutrition
 - Psychotherapeutic treatment
- If the state of malnutrition is life threatening, the patient is first treated in a somatic ward, and thereafter the adolescent is guided into therapy if possible.
- The forms of psychotherapy vary: both individual and family therapy have brought results; in cases of bulimia cognitive therapy and medication (Lewandowski et al., 1997; Whittal, Agras, & Gould, 1999) [C] have been successful.
- With adolescents between the ages of 14 and 16 years, positive results have been obtained by treating the entire family. This is because the adolescent's symptoms are often connected with difficulties to “cut loose” from the family.
- With older patients, individual, supportive, and long-lasting treatment has been the best way to promote recovery.
- A prolonged state of malnutrition and insufficient outpatient care are reasons to direct a patient into forced treatment.



Medical Treatment

- A specialist should start all drug treatment.
- Different psychopharmaceuticals, for example, neuroleptics and antidepressants, have been tried in the treatment of anorexia nervosa. Controlled studies have proved them indisputably useful only if the disorder is linked to clear depression.
- Most research on the medical treatment of bulimia has concentrated on antidepressants (Bacaltchuk & Hay, 2003) [A], particularly fluoxetine, which has been found to decrease binge eating and vomiting for about two-thirds of bulimic patients.

Prognosis

- Early intervention improves prognosis.
- Eating disorders comprise a severe group of diseases that are difficult to treat. The prognosis for the near future of anorexic patients is good, but for the long term the prognosis is worse. The percentage of mortality is still 5% to 16%.
- Not enough follow-up research has been carried out on the prognosis of bulimia, but the disease is thought to last years.
- Bulimia can be associated with depression, self-destructiveness, alcohol or drug abuse, and other psychological problems.

Links

Link to Full Summary:

http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=11035&string=

Link to Full Guideline:

http://www.guideline.gov/summary/summary.aspx?doc_id=11035&nbr=005814

Click on www.ebm-guidelines.com and register for access



Eating disorders. Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa, and related eating disorders.

U.K. National Collaborating Centre for Mental Health

BRIEF SUMMARY

Bibliographic Source

- National Collaborating Centre for Mental Health. Eating disorders. Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. Leicester (UK): British Psychological Society; 2004. 260 p. [408 references]

MAJOR RECOMMENDATIONS

Evidence categories (I-IV) and recommendation grades (A-C) are defined at the end of the *Major Recommendations* field.

Care Across All Conditions

Assessment and Coordination of Care

C — Assessment of people with eating disorders should be comprehensive and include physical, psychological, and social needs and a comprehensive assessment of risk to self.

C — The level of risk to the patient's mental and physical health should be monitored as treatment progresses because it may change—for example, following weight gain or at times of transition between services in cases of anorexia nervosa.

C — For people with eating disorders presenting in primary care, general practitioners (GPs) should take responsibility for the initial assessment and the initial coordination of care. This includes the determination of the need for emergency medical or psychiatric assessment.

C — Where management is shared between primary and secondary care, there should be clear agreement among individual healthcare professionals on the responsibility for monitoring patients with eating disorders. This agreement should be in writing (where appropriate using the Care Program Approach) and shared with the patient and, where appropriate, his/her family and caregivers.

Providing Good Information and Support

C — Patients and, where appropriate, caregivers should be provided with education and information on the nature, course, and treatment of eating disorders.

C — In addition to the provision of information, family and caregivers may be informed of self-help groups and support groups, and offered the opportunity to participate in such groups where they exist.

C — Healthcare professionals should acknowledge that many people with eating disorders are ambivalent about treatment. Healthcare professionals should also recognize the consequent demands and challenges this presents.

Getting Help Early

There can be serious long-term consequences to a delay in obtaining treatment.

C — People with eating disorders seeking help should be assessed and receive treatment at the earliest opportunity.

C — Whenever possible patients should be engaged and treated before reaching severe emaciation. This requires both early identification and intervention. Effective monitoring and engagement of patients at severely low weight or with falling weight should be a priority.

Management of Physical Aspects

C — Where laxative abuse is present, patients should be advised to gradually reduce laxative use and informed that laxative use does not significantly reduce calorie absorption.

C — Treatment of both subthreshold and clinical cases of an eating disorder in people with diabetes is essential because of the greatly increased physical risk in this group.

C — People with type 1 diabetes and an eating disorder should have intensive regular physical monitoring, because they are at high risk of retinopathy and other complications.

C — Pregnant women with eating disorders require careful monitoring throughout the pregnancy and in the postpartum period.

C — Patients with an eating disorder who are vomiting should have regular dental reviews.

C — Patients who are vomiting should be given appropriate advice on dental hygiene, which should include avoiding brushing after vomiting; rinsing with a nonacid mouthwash after vomiting; and reducing an acid oral environment (for example, limiting acidic foods).

C — Healthcare professionals should advise people with eating disorders and osteoporosis or related bone disorders to refrain from physical activities that significantly increase the likelihood of falls.



Additional Considerations for Children and Adolescents

C — Family members, including siblings, should normally be included in the treatment of children and adolescents with eating disorders. Interventions may include sharing of information, advice on behavioral management, and facilitating communication.

C — In children and adolescents with eating disorders, growth and development should be closely monitored. Where development is delayed or growth is stunted despite adequate nutrition, pediatric advice should be sought.

C — Healthcare professionals assessing children and adolescents with eating disorders should be alert to indicators of abuse (emotional, physical and sexual) and should remain so throughout treatment.

C — The right to confidentiality of children and adolescents with eating disorders should be respected.

C — Health care professionals working with children and adolescents with eating disorders should familiarize themselves with national guidelines and their employers' policies in the area of confidentiality.

Identification and Screening of Eating Disorders in Primary Care and Non-Mental Health Settings

C — Target groups for screening should include young women with low body mass index (BMI) compared with age norms, patients consulting with weight concerns who are not overweight, women with menstrual disturbances or amenorrhea, patients with gastrointestinal symptoms, patients with physical signs of starvation or repeated vomiting, and children with poor growth.

C — When screening for eating disorders one or two simple questions should be considered for use with specific target groups (for example, “Do you think you have an eating problem?” and “Do you worry excessively about your weight?”).

C — Young people with type 1 diabetes and poor treatment adherence should be screened and assessed for the presence of an eating disorder.



Anorexia Nervosa

Management of Anorexia Nervosa in Primary Care

C — In anorexia nervosa, although weight and BMI are important indicators of physical risk they should not be considered the sole indicators (as they are unreliable in adults and especially in children).

C — In assessing whether a person has anorexia nervosa, attention should be paid to the overall clinical assessment (repeated over time), including rate of weight loss, growth rates in children, objective physical signs, and appropriate laboratory tests.

C — Patients with enduring anorexia nervosa not under the care of a secondary care service should be offered an annual physical and mental health review by their GP.

Psychological Interventions for Anorexia Nervosa

The delivery of psychological interventions should be accompanied by regular monitoring of a patient's physical state including weight and specific indicators of increased physical risk.

Common Elements of the Psychological Treatment of Anorexia Nervosa

C — Therapies to be considered for the psychological treatment of anorexia nervosa include cognitive analytic therapy (CAT), cognitive behavior therapy (CBT), interpersonal psychotherapy (IPT), focal psychodynamic therapy, and family interventions focused explicitly on eating disorders.

C — Patient and, where appropriate, carer preference should be taken into account in deciding which psychological treatment is to be offered.

C — The aims of psychological treatment should be to reduce risk, to encourage weight gain and healthy eating, to reduce other symptoms related to an eating disorder, and to facilitate psychological and physical recovery.

Outpatient Psychological Treatments in First Episode and Later Episodes

C — Most people with anorexia nervosa should be managed on an outpatient basis, with psychological treatment (with physical monitoring) provided by a health care professional competent to give it and to assess the physical risk of people with eating disorders.

C — Outpatient psychological treatment and physical monitoring for anorexia nervosa should normally be of at least 6 months' duration.

C — For patients with anorexia nervosa, if during outpatient psychological treatment there is significant deterioration, or the completion of an adequate course of outpatient psychological treatment does not lead to any significant improvement, more intensive forms of treatment (for example, a move from individual therapy to combined individual and family work or day care or inpatient care) should be considered.

C — Dietary counselling should not be provided as the sole treatment for anorexia nervosa.

Psychological Aspects of Inpatient Care

C — For inpatients with anorexia nervosa, a structured symptom-focused treatment regimen with the expectation of weight gain should be provided in order to achieve weight restoration. It is important to carefully monitor the patient's physical status during refeeding.

C — Psychological treatment should be provided which has a focus both on eating behavior and attitudes to weight and shape and on wider psychosocial issues with the expectation of weight gain.

C — Rigid inpatient behavior modification programs should not be used in the management of anorexia nervosa.

Post-Hospitalization Psychological Treatment

C — Following inpatient weight restoration, people with anorexia nervosa should be offered outpatient psychological treatment that focuses both on eating behavior and attitudes to weight and shape and on wider psychosocial issues, with regular monitoring of both physical and psychological risk.

C — The length of outpatient psychological treatment and physical monitoring following inpatient weight restoration should typically be at least 12 months.

Additional Considerations for Children and Adolescents with Anorexia Nervosa

B — Family interventions that directly address the eating disorder should be offered to children and adolescents with anorexia nervosa.

C — Children and adolescents with anorexia nervosa should be offered individual appointments with a health care professional separate from those with their family members or carers.

C — The therapeutic involvement of siblings and other family members should be considered in all cases because of the effects of anorexia nervosa on other family members.

C — In children and adolescents with anorexia nervosa, the need for inpatient treatment and the need for urgent weight restoration should be balanced alongside the educational and social needs of the young person.



Pharmacological Interventions for Anorexia Nervosa

There is a very limited evidence base for the pharmacological treatment of anorexia nervosa. A range of drugs may be used in the treatment of comorbid conditions but caution should be exercised in their use given the physical vulnerability of many people with anorexia nervosa.

C — Medication should not be used as the sole or primary treatment for anorexia nervosa.

C — Caution should be exercised in the use of medication for comorbid conditions such as depressive or obsessive-compulsive features, as they may resolve with weight gain alone.

C — When medication is used to treat people with anorexia nervosa, the side effects of drug treatment (in particular, cardiac side effects) should be carefully considered because of the compromised cardiovascular function of many people with anorexia nervosa.

C — Health care professionals should be aware of the risk of drugs that prolong the QTc interval on the electrocardiogram (ECG) (for example, antipsychotics, tricyclic antidepressants, macrolide antibiotics, and some antihistamines). In patients with anorexia nervosa at risk of cardiac complications, the prescription of drugs with side effects that may compromise cardiac functioning should be avoided.

C — If the prescription of medication that may compromise cardiac functioning is essential, ECG monitoring should be undertaken.

C — All patients with a diagnosis of anorexia nervosa should have an alert placed in their prescribing record concerning the risk of side effects.

Physical Management of Anorexia Nervosa

Anorexia nervosa carries considerable risk of serious physical morbidity. Awareness of the risk, careful monitoring, and, where appropriate, close liaison with an experienced physician are important in the management of the physical complications of anorexia nervosa.

Managing Weight Gain

C — In most patients with anorexia nervosa, an average weekly weight gain of 0.5-1 kg in inpatient settings and 0.5 kg in outpatient settings should be an aim of treatment. This requires about 3,500 to 7,000 extra calories a week.

C — Regular physical monitoring, and in some cases treatment with a multi-vitamin/multi-mineral supplement in oral form, is recommended for people with anorexia nervosa during both inpatient and outpatient weight restoration.

C — Total parenteral nutrition should not be used for people with anorexia nervosa, unless there is significant gastrointestinal dysfunction.

Managing Risk

C — Health care professionals should monitor physical risk in patients with anorexia nervosa. If this leads to the identification of increased physical risk, the frequency of the monitoring and nature of the investigations should be adjusted accordingly.

C — People with anorexia nervosa and their carers should be informed if the risk to their physical health is high.

C — The involvement of a physician or pediatrician with expertise in the treatment of physically at-risk patients with anorexia nervosa should be considered for all individuals who are physically at risk.

C — Pregnant women with either current or remitted anorexia nervosa may need more intensive prenatal care to ensure adequate prenatal nutrition and fetal development.

C — Oestrogen administration should not be used to treat bone density problems in children and adolescents as this may lead to premature fusion of the epiphyses.

Feeding Against the Will of the Patient

C — Feeding against the will of the patient should be an intervention of last resort in the care and management of anorexia nervosa.

C — Feeding against the will of the patient is a highly specialized procedure requiring expertise in the care and management of those with severe eating disorders and the physical complications associated with it. This should only be done in the context of the Mental Health Act 1983 or Children Act 1989.

C — When making the decision to feed against the will of the patient, the legal basis for any such action must be clear.



Service Interventions for Anorexia Nervosa

This section considers those aspects of the service system relevant to the treatment and management of anorexia nervosa.

C — Most people with anorexia nervosa should be treated on an outpatient basis.

C — Where inpatient management is required, this should be provided within reasonable travelling distance to enable the involvement of relatives and carers in treatment, to maintain social and occupational links, and to avoid difficulty in transition between primary and secondary care services. This is particularly important in the treatment of children and adolescents.

C — Inpatient treatment should be considered for people with anorexia nervosa whose disorder is associated with high or moderate physical risk.

C — People with anorexia nervosa requiring inpatient treatment should be admitted to a setting that can provide the skilled implementation of refeeding with careful physical monitoring (particularly in the first few days of refeeding), in combination with psychosocial interventions.

C — Inpatient treatment or day patient treatment should be considered for people with anorexia nervosa whose disorder has not improved with appropriate outpatient treatment, or for whom there is a significant risk of suicide or severe self-harm.

C — Health care professionals without specialist experience of eating disorders, or in situations of uncertainty, should consider seeking advice from an appropriate specialist when contemplating a compulsory admission for a patient with anorexia nervosa, regardless of the age of the patient.

C — Health care professionals managing patients with anorexia nervosa, especially that of the binge purging sub-type, should be aware of the increased risk of self-harm and suicide, particularly at times of transition between services or service settings.

Additional Considerations for Children and Adolescents

C — Health care professionals should ensure that children and adolescents with anorexia nervosa who have reached a healthy weight have the increased energy and necessary nutrients available in their diet to support further growth and development.

C — In the nutritional management of children and adolescents with anorexia nervosa, carers should be included in any dietary education or meal planning.

C — Admission of children and adolescents with anorexia nervosa should be to age-appropriate facilities (with the potential for separate children and adolescent services), which have the capacity to provide appropriate educational and related activities.

C — When a young person with anorexia nervosa refuses treatment that is deemed essential, consideration should be given to the use of the Mental Health Act 1983 or the right of those with parental responsibility to override the young person's refusal.

C — Relying indefinitely on parental consent to treatment should be avoided. It is recommended that the legal basis under which treatment is being carried out should be recorded in the patient's case notes, and this is particularly important in the case of children and adolescents.

C — For children and adolescents with anorexia nervosa, where issues of consent to treatment are highlighted, health care professionals should consider seeking a second opinion from an eating disorders specialist.

C — If the patient with anorexia nervosa and those with parental responsibility refuse treatment, and treatment is deemed to be essential, legal advice should be sought in order to consider proceedings under the Children Act 1989.



Bulimia Nervosa

Psychological Interventions for Bulimia Nervosa

B — As a possible first step, patients with bulimia nervosa should be encouraged to follow an evidence-based self-help program.

B — Health care professionals should consider providing direct encouragement and support to patients undertaking an evidence-based self-help program, as this may improve outcomes. This may be sufficient treatment for a limited subset of patients.

A — Cognitive behavior therapy for bulimia nervosa (CBT-BN), a specifically adapted form of CBT, should be offered to adults with bulimia nervosa. The course of treatment should be for 16 to 20 sessions over 4 to 5 months.

C — Adolescents with bulimia nervosa may be treated with CBT-BN adapted as needed to suit their age, circumstances, and level of development, and including the family as appropriate.

B — When people with bulimia nervosa have not responded to or do not want CBT, other psychological treatments should be considered.

B — Interpersonal psychotherapy should be considered as an alternative to CBT, but patients should be informed it takes 8-12 months to achieve results comparable with CBT.

Pharmacological Interventions for Bulimia Nervosa

B — As an alternative or additional first step to using an evidence-based self-help program, adults with bulimia nervosa may be offered a trial of an antidepressant drug.

B — Patients should be informed that antidepressant drugs can reduce the frequency of binge eating and purging, but the long-term effects are unknown. Any beneficial effects will be rapidly apparent.

C — Selective serotonin reuptake inhibitors (SSRIs) (specifically fluoxetine) are the drugs of first choice for the treatment of bulimia nervosa in terms of acceptability, tolerability, and reduction of symptoms.

C — For people with bulimia nervosa, the effective dose of fluoxetine is higher than for depression (60 mg daily).

B — No drugs, other than antidepressants, are recommended for the treatment of bulimia nervosa.

Management of Physical Aspects of Bulimia Nervosa

Patients with bulimia nervosa can experience considerable physical problems as a result of a range of behaviors associated with the condition. Awareness of the risks and careful monitoring should be a concern of all health care professionals working with people with this disorder.

C — Patients with bulimia nervosa who are vomiting frequently or taking large quantities of laxatives (especially if they are also underweight) should have their fluid and electrolyte balance assessed.

C — When electrolyte disturbance is detected, it is usually sufficient to focus on eliminating the behavior responsible. In the small proportion of cases where supplementation is required to restore electrolyte balance, oral rather than intravenous administration is recommended, unless there are problems with gastrointestinal absorption.

Service Interventions for Bulimia Nervosa

The great majority of patients with bulimia nervosa can be treated as outpatients. There is a very limited role for the inpatient treatment of bulimia nervosa. This is primarily concerned with the management of suicide risk or severe self-harm.

C — The great majority of patients with bulimia nervosa should be treated in an outpatient setting.

C — For patients with bulimia nervosa who are at risk of suicide or severe self-harm, admission as an inpatient or day patient, or the provision of more intensive outpatient care, should be considered.

C — Psychiatric admission for people with bulimia nervosa should normally be undertaken in a setting with experience of managing this disorder.

C — Health care professionals should be aware that patients with bulimia nervosa who have poor impulse control, notably substance misuse, may be less likely to respond to a standard program of treatment. As a consequence treatment should be adapted to the problems presented.

Additional Considerations for Children and Adolescents

C — Adolescents with bulimia nervosa may be treated with CBT-BN adapted as needed to suit their age, circumstances, and level of development, and including the family as appropriate.



Treatment and Management of Atypical Eating Disorders Including Binge Eating Disorder

General Treatment of Atypical Eating Disorders

C — In the absence of evidence to guide the management of atypical eating disorders (eating disorders not otherwise specified) other than binge eating disorder, it is recommended that the clinician considers following the guidance on the treatment of the eating problem that most closely resembles the individual patient's eating disorder.

Psychological Treatments for Binge Eating Disorder

B — As a possible first step, patients with binge eating disorder should be encouraged to follow an evidence-based self-help program.

B — Health care professionals should consider providing direct encouragement and support to patients undertaking an evidence-based self-help program as this may improve outcomes. This may be sufficient treatment for a limited subset of patients.

A — Cognitive behavior therapy for binge eating disorder (CBT-BED), a specifically adapted form of CBT, should be offered to adults with binge eating disorder.

B — Other psychological treatments (interpersonal psychotherapy for binge eating disorder and modified dialectical behavior therapy) may be offered to adults with persistent binge eating disorder.

A — Patients should be informed that all psychological treatments for binge eating disorder have a limited effect on body weight.

C — When providing psychological treatments for patients with binge eating disorder, consideration should be given to the provision of concurrent or consecutive interventions focusing on the management of comorbid obesity.

C — Suitably adapted psychological treatments should be offered to adolescents with persistent binge eating disorder.

Pharmacological Interventions for Binge Eating Disorder

B — As an alternative or additional first step to using an evidence based self-help program, consideration should be given to offering a trial of an SSRI antidepressant drug to patients with binge eating disorder.

B — Patients with binge eating disorders should be informed that SSRIs can reduce binge eating, but the long-term effects are unknown. Antidepressant drug treatment may be sufficient treatment for a limited subset of patients.

DEFINITIONS:

Evidence Categories

I: Evidence obtained from a single randomized controlled trial or a meta-analysis of randomized controlled trials

IIa: Evidence obtained from at least one well-designed controlled study without randomization

IIb: Evidence obtained from at least one well-designed quasi-experimental study

III: Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies, and case-control studies

IV: Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

Recommendation Grades

Grade A — At least one randomized controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation (evidence level I) without extrapolation

Grade B — Well-conducted clinical studies but no randomized clinical trials on the topic of recommendation (evidence levels II or III); or extrapolated from level I evidence

Grade C — Expert committee reports or opinions and/or clinical experiences of respected authorities (evidence level IV) or extrapolated from level I or II evidence. This grading indicates that directly applicable clinical studies of good quality are absent or not readily available.

Patient Resources

The following is available:

- Eating disorders: anorexia nervosa, bulimia nervosa and related eating disorders. Understanding NICE guidance: a guide for people with eating disorders, their advocates and carers, and the public. London: National Institute for Clinical Excellence. 2004 Jan. 44 p.

Electronic copies: Available in English and Welsh in Portable Document Format (PDF) from the National Institute for Clinical Excellence (NICE) Web site (<http://www.nice.org.uk:80/>).

Print copies: Available from the National Health Service (NHS) Response Line 0870 1555 455. ref: N0407. 11 Strand, London, WC2N 5HR.

Links

Link to Complete Summary:

http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=5066&string=

Link to Complete Guideline:

http://www.bps.org.uk/downloadfile.cfm?file_uid=C1173310-7E96-C67F-D396-ADF1B891F5A3&ext=pdf



Identifying and treating eating disorders

American Academy of Pediatrics

BRIEF SUMMARY

Bibliographic Source(s)

- Identifying and treating eating disorders. *Pediatrics* 2003 Jan;111(1):204-11. [78 references] [PubMed](#)

Major Recommendations

1. Pediatricians need to be knowledgeable about the early signs and symptoms of disordered eating and other related behaviors.
2. Pediatricians should be aware of the careful balance that needs to be in place to decrease the growing prevalence of eating disorders in children and adolescents. When counseling children on risk of obesity and healthy eating, care needs to be taken not to foster overaggressive dieting and to help children and adolescents build self-esteem while still addressing weight concerns.
3. Pediatricians should be familiar with the screening and counseling guidelines for disordered eating and other related behaviors.
4. Pediatricians should know when and how to monitor and/or refer patients with eating disorders to best address their medical and nutritional needs, serving as an integral part of the multidisciplinary team.
5. Pediatricians should be encouraged to calculate and plot weight, height, and body mass index (BMI) using age- and gender-appropriate graphs at routine annual pediatric visits.
6. Pediatricians can play a role in primary prevention through office visits and community- or school-based interventions with a focus on screening, education, and advocacy.
7. Pediatricians can work locally, nationally, and internationally to help change cultural norms conducive to eating disorders and proactively to change media messages.
8. Pediatricians need to be aware of the resources in their communities so they can coordinate care of various treating professionals, helping to create a seamless system between inpatient and outpatient management in their communities.
9. Pediatricians should help advocate for parity of mental health benefits to ensure continuity of care for the patients with eating disorders.
10. Pediatricians need to advocate for legislation and regulations that secure appropriate coverage for medical, nutritional, and mental health treatment in settings appropriate to the severity of the illness (inpatient, day hospital, intensive outpatient, and outpatient).
11. Pediatricians are encouraged to participate in the development of objective criteria for the optimal treatment of eating disorders, including the use of specific treatment modalities and the transition from one level of care to another.

Links

Link to Full Summary:

http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=3589&string=

Link to Complete Guideline:

<http://aappolicy.aappublications.org/cgi/content/full/pediatrics;111/1/204>



Practice guideline for the treatment of patients with eating disorders

BRIEF SUMMARY

Bibliographic Source(s)

- American Psychiatric Association (APA). Practice guideline for the treatment of patients with eating disorders. 3rd ed. Washington (DC): American Psychiatric Association (APA); 2006 Jun. 128 p. [765 references]
- American Psychiatric Association. Treatment of patients with eating disorders, third edition. *Am J Psychiatry* 2006 Jul;163(7 Suppl):4-54. [PubMed](#)

Major Recommendations

Each recommendation is identified as meriting one of three categories of endorsement, based on the level of clinical confidence regarding the recommendation, as indicated by a bracketed Roman numeral after the statement. Definitions of the categories of endorsement are presented at the end of the “Major Recommendations” field.

1. Psychiatric Management

Psychiatric management begins with the establishment of a therapeutic alliance, which is enhanced by empathic comments and behaviors, positive regard, reassurance, and support [I]. Basic psychiatric management includes support through the provision of educational materials, including self-help workbooks; information on community-based and Internet resources; and direct advice to patients and their families (if they are involved) [II]. A team approach is the recommended model of care [I].

a. Coordinating Care and Collaborating with Other Clinicians

In treating adults with eating disorders, the psychiatrist may assume the leadership role within a program or team that includes other physicians, psychologists, registered dietitians, and social workers or may work collaboratively on a team led by others. For the management of acute and ongoing medical and dental complications, it is important that psychiatrists consult other physician specialists and dentists [II].

When a patient is managed by an interdisciplinary team in an outpatient setting, communication among the professionals is essential to monitoring the patient's progress, making necessary adjustments to the treatment plan, and delineating the specific roles and tasks of each team member [I].

b. Assessing and Monitoring Eating Disorder Symptoms and Behaviors

A careful assessment of the patient's history, symptoms, behaviors, and mental status is the first step in making a diagnosis of an eating disorder [II]. The complete assess-

ment usually requires at least several hours and includes a thorough review of the patient's height and weight history; restrictive and binge eating and exercise patterns and their changes; purging and other compensatory behaviors; core attitudes regarding weight, shape, and eating; and associated psychiatric conditions [II]. A family history of eating disorders or other psychiatric disorders, including alcohol and other substance use disorders; a family history of obesity; family interactions in relation to the patient's disorder; and family attitudes toward eating, exercise, and appearance are all relevant to the assessment [I]. A clinician's articulation of theories that imply blame or permit family members to blame one another or themselves can alienate family members from involvement in the treatment and therefore be detrimental to the patient's care and recovery [I]. It is important to identify family stressors whose amelioration may facilitate recovery [I]. In the assessment of children and adolescents, it is essential to involve parents and, whenever appropriate, school personnel and health professionals who routinely work with the patient [I].

c. Assessing and Monitoring the Patient's General Medical Condition

A full physical examination of the patient is strongly recommended and may be performed by a physician familiar with common findings in patients with eating disorders. The examination should give particular attention to vital signs, physical status (including height and weight), cardiovascular and peripheral vascular function, dermatological manifestations, and evidence of self-injurious behaviors [I]. Calculation of the patient's body mass index (BMI) is also useful (see <http://www.cdc.gov/nccdphp/dnpa/bmi/00binaries/bmi-tables.pdf> [for ages 2-20] and <http://www.cdc.gov/nccdphp/dnpa/bmi/00binaries/bmi-adults.pdf> [for adults]) [II]. Early recognition of eating disorder symptoms and early intervention may prevent an eating disorder from becoming chronic [I]. During treatment, it is important to monitor the patient for shifts in weight, blood pressure, pulse, other cardiovascular parameters, and behaviors likely to provoke physiological decline and collapse [I]. Patients with a history of purging behaviors should also be referred for a dental examination [I]. Bone density examinations should be obtained for patients who have been amenorrheic for 6 months or more [I].

In younger patients, examination should include growth pattern, sexual development (including sexual maturity rating), and general physical development [II]. The need for laboratory analyses should be determined on an individual basis depending on the patient's condition or the laboratory tests' relevance to making treatment decisions [I].



d. Assessing and Monitoring the Patient's Safety and Psychiatric Status

The patient's safety will be enhanced when particular attention is given to suicidal ideation, plans, intentions, and attempts as well as to impulsive and compulsive self-harm behaviors [I]. Other aspects of the patient's psychiatric status that greatly influence clinical course and outcome and that are important to assess include mood, anxiety, and substance use disorders, as well as motivational status, personality traits, and personality disorders [I]. Assessment for suicidality is of particular importance in patients with co-occurring alcohol and other substance use disorders [I].

e. Providing Family Assessment and Treatment

For children and adolescents with anorexia nervosa, family involvement and treatment are essential [I]. For older patients, family assessment and involvement may be useful and should be considered on a case-by-case basis [II]. Involving spouses and partners in treatment may be highly desirable [III].

2. Choosing a Site of Treatment

Services available for treating eating disorders can range from intensive inpatient programs (in which general medical care is readily available) to residential and partial hospitalization programs to varying levels of outpatient care (in which the patient receives general medical treatment, nutritional counseling, and/or individual, group, and family psychotherapy). Because specialized programs are not available in all geographic areas and their financial requirements are often significant, access to these programs may be limited; petition, explanation, and follow-up by the psychiatrist on behalf of patients and families may help procure access to these programs. Pretreatment evaluation of the patient is essential in choosing the appropriate treatment setting [I].

In determining a patient's initial level of care or whether a change to a different level of care is appropriate, it is important to consider the patient's overall physical condition, psychology, behaviors, and social circumstances rather than simply rely on one or more physical parameters, such as weight [I]. Weight in relation to estimated individually healthy weight, the rate of weight loss, cardiac function, and metabolic status are the most important physical parameters to be considered when choosing a treatment setting; other psychosocial parameters are also important [I]. Healthy weight estimates for a given individual must be determined by that person's physicians [I]. Such estimates may be based on historical considerations (often including that person's growth charts) and, for women, the weight at which healthy menstruation and ovulation resume, which may be higher than the weight at which menstruation and ovulation became impaired. Admission to or continuation of an intensive level of care (e.g., hospitalization) may be necessary when access to a less intensive level of care (e.g., partial hospitalization) is absent because of geography or a lack of resources [I].

Generally, adult patients who weigh less than approximately 85% of their individually estimated healthy weights have considerable difficulty gaining weight outside of a highly structured program [III]. Such programs, including inpatient care, may be medically and psychiatrically necessary even for some patients who are above 85% of their individually estimated healthy weight [I]. Factors suggesting that hospitalization may be appropriate include rapid or persistent decline in oral intake, a decline in weight despite maximally intensive outpatient or partial hospitalization interventions, the presence of additional stressors that may interfere with the patient's ability to eat, knowledge of the weight at which instability previously occurred in the patient, co-occurring psychiatric problems that merit hospitalization, and the degree of the patient's denial and resistance to participate in his or her own care in less intensively supervised settings [I].

Hospitalization should occur before the onset of medical instability as manifested by abnormalities in vital signs (e.g., marked orthostatic hypotension with an increase in pulse of 20 beats per minute (bpm) or a drop in standing blood pressure of 20 millimeters of mercury (mmHg), bradycardia <40 bpm, tachycardia >110 bpm, or an inability to sustain core body temperature), physical findings, or laboratory tests [I]. To avert potentially irreversible effects on physical growth and development, many children and adolescents require inpatient medical treatment, even when weight loss, although rapid, has not been as severe as that suggesting a need for hospitalization in adult patients [I].

Patients who are physiologically stabilized on acute medical units will still require specific inpatient treatment for eating disorders if they do not meet biopsychosocial criteria for less intensive levels of care and/or if no suitable less intensive levels of care are accessible because of geographic or other reasons [I]. Weight level per se should never be used as the sole criterion for discharge from inpatient care [I]. Assisting patients in determining and practicing appropriate food intake at a healthy body weight is likely to decrease the chances of their relapsing after discharge [I].

In shifting between levels of care, it is important to establish continuity of care [III]. If the patient is going from one treatment setting or locale to another, transition planning requires that the care team in the new setting or locale be identified and that specific patient appointments be made [I]. It is preferable that a specific clinician on the team be designated as the primary coordinator of care to ensure continuity and attention to important aspects of treatment [III].

Most patients with uncomplicated bulimia nervosa do not require hospitalization; indications for the hospitalization of such patients include severe disabling symptoms that have not responded to adequate trials of outpatient treatment, serious concurrent general medical problems (e.g., metabolic abnormalities, hematemesis, vital sign changes, uncontrolled vomiting), suicidality, psychiatric disturbances that would warrant the patient's hospitalization independent of the



eating disorder diagnosis, or severe concurrent alcohol or drug dependence or abuse [I].

Legal interventions, including involuntary hospitalization and legal guardianship, may be necessary to address the safety of treatment-reluctant patients whose general medical conditions are life threatening [I].

The decision about whether a patient should be hospitalized on a psychiatric versus a general medical or adolescent/pediatric unit should be made based on the patient's general medical and psychiatric status, the skills and abilities of local psychiatric and general medical staff, and the availability of suitable programs to care for the patient's general medical and psychiatric problems [I]. There is evidence to suggest that patients with eating disorders have better outcomes when treated on inpatient units specializing in the treatment of these disorders than when treated in general inpatient settings where staff lack expertise and experience in treating eating disorders [II].

Outcomes from partial hospitalization programs that specialize in eating disorders are highly correlated with treatment intensity. The more successful programs involve patients in treatment at least 5 days/week for 8 hours/day; thus, it is recommended that partial hospitalization programs be structured to provide at least this level of care [I].

Patients who are considerably below their healthy body weight and are highly motivated to adhere to treatment, have cooperative families, and have a brief symptom duration may benefit from treatment in outpatient settings, but only if they are carefully monitored and if they and their families understand that a more restrictive setting may be necessary if persistent progress is not evident in a few weeks [III]. Careful monitoring includes at least weekly (and often two to three times a week) weight determinations done directly after the patient voids and while the patient is wearing the same class of garment (e.g., hospital gown, standard exercise clothing) [I]. In patients who purge, it is important to routinely monitor serum electrolytes [I]. Urine specific gravity, orthostatic vital signs, and oral temperatures may need to be measured on a regular basis [III].

In an outpatient setting, patients can remain with their families and continue to attend school or work. Inpatient care may interfere with family, school, and work obligations; however, it is important to give priority to the safe and adequate treatment of a rapidly progressing or otherwise unresponsive disorder for which hospital care might be necessary [I].

3. Choice of Specific Treatments for Anorexia Nervosa

The aims of treating anorexia nervosa are to 1) restore patients to a healthy weight (associated with the return of menses and normal ovulation in female patients, normal sexual drive and hormone levels in male patients, and normal physical and sexual growth and development in children

and adolescents); 2) treat physical complications; 3) enhance patients' motivation to cooperate in the restoration of healthy eating patterns and participate in treatment; 4) provide education regarding healthy nutrition and eating patterns; 5) help patients reassess and change core dysfunctional cognitions, attitudes, motives, conflicts, and feelings related to the eating disorder; 6) treat associated psychiatric conditions, including deficits in mood and impulse regulation and self-esteem and behavioral problems; 7) enlist family support and provide family counseling and therapy where appropriate; and 8) prevent relapse.

a. Nutritional Rehabilitation

The goals of nutritional rehabilitation for seriously underweight patients are to restore weight, normalize eating patterns, achieve normal perceptions of hunger and satiety, and correct biological and psychological sequelae of malnutrition [I]. For patients age 20 years and younger, an individually appropriate range for expected weight and goals for weight and height may be determined by considering measurements and clinical factors, including current weight, bone age estimated from wrist x-rays and nomograms, menstrual history (in adolescents with secondary amenorrhea), mid-parental heights, assessments of skeletal frame, and benchmarks from Centers for Disease Control and Prevention (CDC) growth charts (available at <http://www.cdc.gov/growthcharts/>) [I].

For individuals who are markedly underweight and for children and adolescents whose weight has deviated below their growth curves, hospital-based programs for nutritional rehabilitation should be considered [I]. For patients in inpatient or residential settings, the discrepancy between healthy target weight and weight at discharge may vary depending on patients' ability to feed themselves, their motivation and ability to participate in aftercare programs, and the adequacy of aftercare, including partial hospitalization [I]. It is important to implement refeeding programs in nurturing emotional contexts [I]. For example, it is useful for staff to convey to patients their intention to take care of them and not let them die even when the illness prevents the patients from taking care of themselves [III]. It is also useful for staff to communicate clearly that they are not seeking to engage in control battles and have no punitive intentions when using interventions that the patient may experience as aversive [I].

In working to achieve target weights, the treatment plan should also establish expected rates of controlled weight gain. Clinical consensus suggests that realistic targets are 2-3 pounds (lb)/week for hospitalized patients and 0.5-1 lb/week for individuals in outpatient programs [III]. Registered dietitians can help patients choose their own meals and can provide a structured meal plan that ensures nutritional adequacy and that none of the major food groups are avoided [I]. Formula feeding may have to be



added to the patient's diet to achieve large caloric intake [III]. It is important to encourage patients with anorexia nervosa to expand their food choices to minimize the severely restricted range of foods initially acceptable to them [III]. Caloric intake levels should usually start at 30-40 kilocalories/kilogram (kcal/kg) per day (approximately 1,000-1,600 kcal/day). During the weight gain phase, intake may have to be advanced progressively to as high as 70-100 kcal/kg per day for some patients; many male patients require a very large number of calories to gain weight [III].

Patients who require much lower caloric intakes or are suspected of artificially increasing their weight by fluid loading should be weighed in the morning after they have voided and are wearing only a gown; their fluid intake should also be carefully monitored [I]. Urine specimens obtained at the time of a patient's weigh-in may need to be assessed for specific gravity to help ascertain the extent to which the measured weight reflects excessive water intake [I]. Regular monitoring of serum potassium levels is recommended in patients who are persistent vomiters [I]. Hypokalemia should be treated with oral or intravenous potassium supplementation and rehydration [I].

Physical activity should be adapted to the food intake and energy expenditure of the patient, taking into account the patient's bone mineral density and cardiac function [I]. Once a safe weight is achieved, the focus of an exercise program should be on the patient's gaining physical fitness as opposed to expending calories [I].

Weight gain results in improvements in most of the physiological and psychological complications of semi-starvation [I]. It is important to warn patients about the following aspects of early recovery [I]: As they start to recover and feel their bodies getting larger, especially as they approach frightening, magical numbers on the scale that represent phobic weights, they may experience a resurgence of anxious and depressive symptoms, irritability, and sometimes suicidal thoughts. These mood symptoms, non-food-related obsessional thoughts, and compulsive behaviors, although often not eradicated, usually decrease with sustained weight gain and weight maintenance. Initial refeeding may be associated with mild transient fluid retention, but patients who abruptly stop taking laxatives or diuretics may experience marked rebound fluid retention for several weeks. As weight gain progresses, many patients also develop acne and breast tenderness and become unhappy and demoralized about resulting changes in body shape. Patients may experience abdominal pain and bloating with meals from the delayed gastric emptying that accompanies malnutrition. These symptoms may respond to pro-motility agents [III]. Constipation may be ameliorated with stool softeners; if unaddressed, it can progress to obstipation and, rarely, to acute bowel obstruction.

When life-preserving nutrition must be provided to a patient who refuses to eat, nasogastric feeding is preferable to intravenous feeding [I]. When nasogastric feeding is necessary, continuous feeding (i.e., over 24 hours) may be better tolerated by patients and less likely to result in metabolic abnormalities than three to four bolus feedings a day [III]. In very difficult situations, where patients physically resist and constantly remove their nasogastric tubes, feeding through surgically placed gastrostomy or jejunostomy tubes may be an alternative to nasogastric feeding [II]. In determining whether to begin involuntary forced feeding, the clinician should carefully think through the clinical circumstances, family opinion, and relevant legal and ethical dimensions of the patient's treatment [I]. The general principles to be followed in making the decision are those directing good, humane care; respecting the wishes of competent patients; and intervening respectfully with patients whose judgment is severely impaired by their psychiatric disorders when such interventions are likely to have beneficial results [I]. For cooperative patients, supplemental overnight pediatric nasogastric tube feeding has been used in some programs to facilitate weight gain [III].

With severely malnourished patients (particularly those whose weight is <70% of their healthy body weight) who undergo aggressive oral, nasogastric, or parenteral refeeding, a serious refeeding syndrome can occur. Initial assessments should include vital signs and food and fluid intake and output, if indicated, as well as monitoring for edema, rapid weight gain (associated primarily with fluid overload), congestive heart failure, and gastrointestinal symptoms [I]. Patients' serum levels of phosphorus, magnesium, potassium, and calcium should be determined daily for the first 5 days of refeeding and every other day for several weeks thereafter, and electrocardiograms should be performed as indicated [II]. For children and adolescents who are severely malnourished (weight <70% of healthy body weight), cardiac monitoring, especially at night, may be desirable [III]. Phosphorus, magnesium, and/or potassium supplementation should be given when indicated [I].

b. Psychosocial Interventions

The goals of psychosocial interventions are to help patients with anorexia nervosa 1) understand and cooperate with their nutritional and physical rehabilitation, 2) understand and change the behaviors and dysfunctional attitudes related to their eating disorder, 3) improve their interpersonal and social functioning, and 4) address comorbid psychopathology and psychological conflicts that reinforce or maintain eating disorder behaviors.

i. Acute Anorexia Nervosa

During acute refeeding and while weight gain is occurring, it is beneficial to provide anorexia nervosa



patients with individual psychotherapeutic management that is psychodynamically informed and provides empathic understanding, explanations, praise for positive efforts, coaching, support, encouragement, and other positive behavioral reinforcement [I]. Attempts to conduct formal psychotherapy with starving patients who are often negativistic, obsessive, or mildly cognitively impaired may be ineffective [II].

For children and adolescents, the evidence indicates that family treatment is the most effective intervention [I]. In methods modeled after the Maudsley approach, families become actively involved, in a blame-free atmosphere, in helping patients eat more and resist compulsive exercising and purging. For some outpatients, a short-term course of family therapy using these methods may be as effective as a long-term course; however, a shorter course of therapy may not be adequate for patients with severe obsessive-compulsive features or nonintact families [II].

Most inpatient-based nutritional rehabilitation programs create a milieu that incorporates emotional nurturance and a combination of reinforcers that link exercise, bed rest, and privileges to target weights, desired behaviors, feedback concerning changes in weight, and other observable parameters [II]. For adolescents treated in inpatient settings, participation in family group psychoeducation may be helpful to their efforts to regain weight and may be equally as effective as more intensive forms of family therapy [III].

ii. *Anorexia Nervosa after Weight Restoration*

Once malnutrition has been corrected and weight gain has begun, psychotherapy can help patients with anorexia nervosa understand 1) their experience of their illness; 2) cognitive distortions and how these have led to their symptomatic behavior; 3) developmental, familial, and cultural antecedents of their illness; 4) how their illness may have been a maladaptive attempt to regulate their emotions and cope; 5) how to avoid or minimize the risk of relapse; and 6) how to better cope with salient developmental and other important life issues in the future. Clinical experience shows that patients may often display improved mood, enhanced cognitive functioning, and clearer thought processes after there is significant improvement in nutritional intake, even before there is substantial weight gain [II].

To help prevent patients from relapsing, emerging data support the use of cognitive-behavioral psychotherapy for adults [III]. Many clinicians also use interpersonal and/or psychodynamically oriented individual or group psychotherapy for adults after their weight has

been restored [II]. For adolescents who have been ill <3 years, after weight has been restored, family therapy is a necessary component of treatment [I]. Although studies of different psychotherapies focus on these interventions as distinctly separate treatments, in practice there is frequent overlap of interventions [III].

It is important for clinicians to pay attention to cultural attitudes, patient issues involving the gender of the therapist, and specific concerns about possible abuse, neglect, or other developmental traumas [III]. Clinicians need to attend to their countertransference reactions to patients with a chronic eating disorder, which often include beleaguering, demoralization, and excessive need to change the patient [I]. At the same time, when treating patients with chronic illnesses, clinicians need to understand the longitudinal course of the disorder and that patients can recover even after many years of illness [I]. Because of anorexia nervosa's enduring nature, psychotherapeutic treatment is frequently required for at least 1 year and may take many years [I].

Anorexics and Bulimics Anonymous and Overeaters Anonymous are not substitutes for professional treatment [I]. Programs that focus exclusively on abstaining from binge eating, purging, restrictive eating, or excessive exercising (e.g., 12-step programs) without attending to nutritional considerations or cognitive and behavioral deficits have not been studied and therefore cannot be recommended as the sole treatment for anorexia nervosa [I]. It is important for programs using 12-step models to be equipped to care for patients with the substantial psychiatric and general medical problems often associated with eating disorders [I].

Although families and patients are increasingly accessing worthwhile, helpful information through online web sites, newsgroups, and chat rooms, the lack of professional supervision within these resources may sometimes lead to users' receiving misinformation or create unhealthy dynamics among users. It is recommended that clinicians inquire about a patient's or family's use of Internet-based support and other alternative and complementary approaches and be prepared to openly and sympathetically discuss the information and ideas gathered from these sources [I].

iii. *Chronic Anorexia Nervosa*

Patients with chronic anorexia nervosa generally show a lack of substantial clinical response to formal psychotherapy. Nevertheless, many clinicians report seeing patients with chronic anorexia nervosa who, after many years of struggling with their disorder, experience substantial remission, so clinicians are justified in maintaining and extending some degree



of hope to patients and families [II]. More extensive psychotherapeutic measures may be undertaken to engage and help motivate patients whose illness is resistant to treatment [II] or, failing that, as compassionate care [I]. For patients who have difficulty talking about their problems, clinicians have reported that a variety of nonverbal therapeutic methods, such as the creative arts, movement therapy programs, and occupational therapy, can be useful [III]. Psychosocial programs designed for patients with chronic eating disorders are being implemented at several treatment sites and may prove useful [II].

c. Medications and Other Somatic Treatments

i. *Weight Restoration*

The decision about whether to use psychotropic medications and, if so, which medications to choose will be based on the patient's clinical presentation [I]. The limited empirical data on malnourished patients indicate that selective serotonin reuptake inhibitors (SSRIs) do not appear to confer advantage regarding weight gain in patients who are concurrently receiving inpatient treatment in an organized eating disorder program [I]. However, SSRIs in combination with psychotherapy are widely used in treating patients with anorexia nervosa. For example, these medications may be considered for those with persistent depressive, anxiety, or obsessive-compulsive symptoms and for bulimic symptoms in weight-restored patients [II]. A U.S. Food and Drug Administration (FDA) black box warning concerning the use of bupropion in patients with eating disorders has been issued because of the increased seizure risk in these patients. Adverse reactions to tricyclic antidepressants and monoamine oxidase inhibitors (MAOIs) are more pronounced in malnourished individuals, and these medications should generally be avoided in this patient population [I]. Second-generation antipsychotics, particularly olanzapine, risperidone, and quetiapine, have been used in small series and individual cases for patients, but controlled studies of these medications are lacking. Clinical impressions suggest that they may be useful in patients with severe, unremitting resistance to gaining weight; severe obsessional thinking; and denial that assumes delusional proportions [III]. Small doses of older antipsychotics such as chlorpromazine may be helpful prior to meals in very disturbed patients [III]. Although the risks of extrapyramidal side effects are less with second-generation antipsychotics than with first-generation antipsychotics, debilitated anorexia nervosa patients may be at a higher risk for these than expected. Therefore, if these medications are used, it is recommended that patients be carefully monitored for extrapyramidal symptoms and akathisia [I]. It is also important to routinely monitor patients for

potential side effects of these medications, which can result in insulin resistance, abnormal lipid metabolism, and prolongation of the QTc interval [I]. Because ziprasidone has not been studied in individuals with anorexia nervosa and can prolong QTc intervals, careful monitoring of serial electrocardiograms and serum potassium measurements is needed if anorexic patients are treated with ziprasidone [I]. Antianxiety agents used selectively before meals may be useful to reduce patients' anticipatory anxiety before eating [III], but because eating disorder patients may have a high propensity to become dependent on benzodiazepines, these medications should be used routinely only with considerable caution [I]. Pro-motility agents such as metoclopramide may be useful for bloating and abdominal pains that occur during refeeding in some patients [III]. Electroconvulsive therapy (ECT) has generally not been useful except in treating severe co-occurring disorders for which ECT is otherwise indicated [I].

Although no specific hormone treatments or vitamin supplements have been shown to be helpful [I], supplemental calcium and vitamin D are often recommended [III]. Zinc supplements have been reported to foster weight gain in some patients, and patients may benefit from daily zinc-containing multivitamin tablets [II].

ii. *Relapse Prevention*

Some data suggest that fluoxetine in dosages of up to 60 mg/day may help prevent relapse [II]. For patients receiving cognitive-behavioral therapy (CBT) after weight restoration, adding fluoxetine does not appear to confer additional benefits with respect to preventing relapse [II]. Antidepressants and other psychiatric medications may be used to treat specific, ongoing psychiatric symptoms of depressive, anxiety, obsessive-compulsive, and other comorbid disorders [I]. Clinicians should attend to the black box warnings in the package inserts relating to antidepressants and discuss the potential benefits and risks of antidepressant treatment with patients and families if such medications are to be prescribed [I].

iii. *Chronic Anorexia Nervosa*

Although hormone replacement therapy (HRT) is frequently prescribed to improve bone mineral density in female patients, no good supporting evidence exists either in adults or in adolescents to demonstrate its efficacy [II]. Hormone therapy usually induces monthly menstrual bleeding, which may contribute to the patient's denial of the need to gain further weight [II]. Before estrogen is offered, it is recommended that efforts be made to increase weight and achieve resumption of normal menses [I]. There is



no indication for the use of bisphosphonates such as alendronate in patients with anorexia nervosa [III]. Although there is no evidence that calcium or vitamin D supplementation reverses decreased bone mineral density, when calcium dietary intake is inadequate for growth and maintenance, calcium supplementation should be considered [I], and when the individual is not exposed to daily sunlight, vitamin D supplementation may be used [I]. However, large supplemental doses of vitamin D may be hazardous [I].

4. Choice of Specific Treatments for Bulimia Nervosa

The aims of treatment for patients with bulimia nervosa are to 1) reduce and, where possible, eliminate binge eating and purging; 2) treat physical complications of bulimia nervosa; 3) enhance patients' motivation to cooperate in the restoration of healthy eating patterns and participate in treatment; 4) provide education regarding healthy nutrition and eating patterns; 5) help patients reassess and change core dysfunctional thoughts, attitudes, motives, conflicts, and feelings related to the eating disorder; 6) treat associated psychiatric conditions, including deficits in mood and impulse regulation, self-esteem, and behavior; 7) enlist family support and provide family counseling and therapy where appropriate; and 8) prevent relapse.

a. Nutritional Rehabilitation Counseling

A primary focus for nutritional rehabilitation is to help the patient develop a structured meal plan as a means of reducing the episodes of dietary restriction and the urges to binge and purge [I]. Adequate nutritional intake can prevent craving and promote satiety [I]. It is important to assess nutritional intake for all patients, even those with a normal body weight (or normal BMI), as normal weight does not ensure appropriate nutritional intake or normal body composition [I]. Among patients of normal weight, nutritional counseling is a useful part of treatment and helps reduce food restriction, increase the variety of foods eaten, and promote healthy but not compulsive exercise patterns [I].

b. Psychosocial Interventions

It is recommended that psychosocial interventions be chosen on the basis of a comprehensive evaluation of the individual patient that takes into consideration the patient's cognitive and psychological development, psychodynamic issues, cognitive style, comorbid psychopathology, and preferences as well as patient age and family situation [I]. For treating acute episodes of bulimia nervosa in adults, the evidence strongly supports the value of CBT as the most effective single intervention [I]. Some patients who do not respond initially to CBT may respond when switched to either interpersonal therapy (IPT) or fluoxetine [II] or other modes of treatment such

as family and group psychotherapies [III]. Controlled trials have also shown the utility of IPT in some cases [II].

In clinical practice, many practitioners combine elements of CBT, IPT, and other psychotherapeutic techniques. Compared with psychodynamic or interpersonal therapy, CBT is associated with more rapid remission of eating symptoms [I], but using psychodynamic interventions in conjunction with CBT and other psychotherapies may yield better global outcomes [III]. Some patients, particularly those with concurrent personality pathology or other co-occurring disorders, require lengthy treatment [III]. Clinical reports suggest that psychodynamic and psychoanalytic approaches in individual or group format are useful once bingeing and purging improve [III].

Family therapy should be considered whenever possible, especially for adolescent patients still living with their parents [II] or older patients with ongoing conflicted interactions with parents [III]. Patients with marital discord may benefit from couples therapy [II].

A variety of self-help and professionally guided self-help programs have been effective for some patients with bulimia nervosa [I]. Several innovative online programs are currently under investigation and may be recommended in the absence of alternative treatments [III]. Support groups and 12-step programs such as Overeaters Anonymous may be helpful as adjuncts in the initial treatment of bulimia nervosa and for subsequent relapse prevention, but they are not recommended as the sole initial treatment approach for bulimia nervosa [I].

Issues of countertransference, discussed above with respect to the treatment of patients with anorexia nervosa, also apply to the treatment of patients with bulimia nervosa [I].

c. Medications

i. Initial Treatment

Antidepressants are effective as one component of an initial treatment program for most bulimia nervosa patients [I], with SSRI treatment having the most evidence for efficacy and the fewest difficulties with adverse effects [I]. To date, fluoxetine is the best studied of these and is the only FDA-approved medication for bulimia nervosa. Sertraline is the only other SSRI that has been shown to be effective, as demonstrated in a small, randomized controlled trial. In the absence of therapists qualified to treat bulimia nervosa with CBT, fluoxetine is recommended as an initial treatment [I]. Dosages of SSRIs higher than those used for depression (e.g., fluoxetine 60 mg/day) are more effective in treating bulimic symptoms [I]. Evidence from a small open trial suggests fluoxetine may be useful for adolescents with bulimia [II].



Antidepressants may be helpful for patients with substantial concurrent symptoms of depression, anxiety, obsessions, or certain impulse disorder symptoms or for patients who have not benefited from or had only a suboptimal response to appropriate psychosocial therapy [I]. Tricyclic antidepressants and MAOIs have been rarely used with bulimic patients and are not recommended as initial treatments [I]. Several different antidepressants may have to be tried sequentially to identify the specific medication with the optimum effect [I].

Clinicians should attend to the black box warnings relating to antidepressants and discuss the potential benefits and risks of antidepressant treatment with patients and families if such medications are to be prescribed [I].

Small controlled trials have demonstrated the efficacy of the anticonvulsant medication topiramate, but because adverse reactions to this medication are common, it should be used only when other medications have proven ineffective [III]. Also, because patients tend to lose weight on topiramate, its use is problematic for normal or underweight individuals [III].

Two drugs that are used for mood stabilization, lithium and valproic acid, are both prone to induce weight gain in patients [I] and may be less acceptable to patients who are weight preoccupied. However, lithium is not recommended for patients with bulimia nervosa because it is ineffective [I]. In patients with co-occurring bulimia nervosa and bipolar disorder, treatment with lithium is more likely to be associated with toxicity [I].

ii. Maintenance Phase

Limited evidence supports the use of fluoxetine for relapse prevention [II], but substantial rates of relapse occur even with treatment. In the absence of adequate data, most clinicians recommend continuing antidepressant therapy for a minimum of 9 months and probably for a year in most patients with bulimia nervosa [III]. Case reports indicate that methylphenidate may be helpful for bulimia nervosa patients with concurrent attention-deficit/hyperactivity disorder (ADHD) [III], but it should be used only for patients who have a very clear diagnosis of ADHD [I].

iii. Combining Psychosocial Interventions and Medications

In some research, the combination of antidepressant therapy and CBT results in the highest remission rates; therefore, this combination is recommended initially when qualified CBT therapists are available [II]. In addition, when CBT alone does not result in a substantial reduction in symptoms after 10 sessions, it is recommended that fluoxetine be added [II].

iv. Other Treatments

Bright light therapy has been shown to reduce binge frequency in several controlled trials and may be used as an adjunct when CBT and antidepressant therapy have not been effective in reducing bingeing symptoms [III].

5. Eating Disorder not Otherwise Specified

Patients with subsyndromal anorexia nervosa or bulimia nervosa who meet most but not all of the DSM-IV-TR criteria (e.g., weight >85% of expected weight, binge and purge frequency less than twice per week) merit treatment similar to that of patients who fulfill all criteria for these diagnoses [II].

a. Binge Eating Disorder

i. Nutritional Rehabilitation and Counseling

Behavioral weight control programs incorporating low- or very-low-calorie diets may help with weight loss and usually with reduction of symptoms of binge eating [I]. It is important to advise patients that weight loss is often not maintained and that binge eating may recur when weight is gained [I]. It is also important to advise them that weight gain after weight loss may be accompanied by a return of binge eating patterns [I]. Various combinations of diets, behavior therapies, interpersonal therapies, psychodynamic psychotherapies, non-weight-directed psychosocial treatments, and even some “nondiet/health at every size” psychotherapy approaches may be of benefit for binge eating and weight loss or stabilization [III]. Patients with a history of repeated weight loss followed by weight gain (“yo-yo” dieting) or patients with an early onset of binge eating may benefit from following programs that focus on decreasing binge eating rather than on weight loss [II].

There is little empirical evidence to suggest that obese binge eaters who are primarily seeking weight loss should receive different treatment than obese individuals who do not binge eat [I].

ii. Other Psychosocial Treatments

Substantial evidence supports the efficacy of individual or group CBT for the behavioral and psychological symptoms of binge eating disorder [I]. IPT and dialectical behavior therapy have also been shown to be effective for behavioral and psychological symptoms and can be considered as alternatives [II]. Patients may be advised that some studies suggest that most patients continue to show behavioral and psychological improvement at their 1-year follow-up [II]. Substantial evidence supports the efficacy of self-help and guided self-help CBT programs and their use as an initial step in a sequenced treatment program



[I]. Other therapies that use a “nondiet” approach and focus on self-acceptance, improved body image, better nutrition and health, and increased physical movement have been tried, as have addiction-based 12-step approaches, self-help organizations, and treatment programs based on the Alcoholics Anonymous model, but no systematic outcome studies of these programs are available [III].

iii. Medications

Substantial evidence suggests that treatment with antidepressant medications, particularly SSRI antidepressants, is associated with at least a short-term reduction in binge eating behavior but, in most cases, not with substantial weight loss [I]. The medication dosage is typically at the high end of the recommended range [I]. The appetite-suppressant medication sibutramine is effective for binge suppression, at least in the short term, and is also associated with significant weight loss [II].

The anticonvulsant medication topiramate is effective for binge reduction and weight loss, although adverse effects may limit its clinical utility for some individuals [II]. Zonisamide may produce similar effects regarding weight loss and can also cause side effects [III].

iv. Combining Psychosocial and Medication Treatments

For most eating disorder patients, adding antidepressant medication to their behavioral weight control and/or CBT regimen does not have a significant effect on binge suppression when compared with medication alone. However, medications may induce additional weight reduction and have associated psychological benefits [II]. Adding the weight loss medication orlistat to a guided self-help CBT program may yield additional weight reduction [II]. Fluoxetine in conjunction with group behavioral treatment may not aid in binge cessation or weight loss but may reduce depressive symptoms [II].

b. Night Eating Syndrome

Progressive muscle relaxation has been shown to reduce symptoms associated with night eating syndrome [III]. Sertraline has also been shown to reduce these symptoms [II].

Definitions:

The three categories of endorsement are as follows:

- [I] Recommended with substantial clinical confidence
- [II] Recommended with moderate clinical confidence
- [III] May be recommended on the basis of individual circumstances

Links

Link to Full Summary:

http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=9318&string=

Link to Complete Guideline:

http://www.psychiatryonline.com/pracGuide/pracGuideTopic_12.aspx

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