CANADIAN PAEDIATRIC SOCIETY CLINICAL PRACTICE GUIDELINE

AM 96-04

Eating disorders in adolescents: Principles of diagnosis and treatment

Eating disorders are complex illnesses that affect adolescents with increasing frequency. They rank as the third most common chronic illness in adolescent females (1), with an incidence of up to 5% (2,3), a rate that has increased dramatically over the past three decades. Two major subgroups of the disorders are recognized: a restrictive form, in which food intake is severely limited (anorexia nervosa), and a bulimic form, in which binge eating episodes are followed by attempts to minimize the effects of overeating via vomiting, catharsis, exercise or fasting (bulimia nervosa). Both anorexia nervosa and bulimia nervosa can be associated with serious biological, psychological and sociological morbidity, and significant mortality.

Although eating disorders occur most frequently in adolescents, reports in the scientific literature often combine findings from adolescents with those from adults or report exclusively on adult samples. Unique features of adolescents and the developmental process of adolescence are often critical considerations in determining the diagnosis, treatment or outcome of eating disorders. Consequently, adolescents need to be considered separately and differentiated from adult patients with eating disorders. This position statement addresses the key issues distilled from the scientific literature and represents a consensus of numerous specialists in adolescent medicine regarding the diagnosis and management of adolescents with eating disorders.

DIAGNOSIS

Diagnostic criteria for eating disorders such as described in DSM-IV (4) may not be entirely applicable to adolescents. The wide variability in the rate, timing and magnitude of both height and weight gain during normal puberty; the absence of menstrual periods in early puberty along with the unpredictability of menses soon after menarche; and the lack of psychological awareness regarding abstract concepts (such as self-concept, motivation to lose weight or affective states) owing to normative cognitive development limit the application of those formal diagnostic criteria to adolescents. In addition, clinical features such as pubertal delay, growth retardation or the impairment of bone mineral acquisition may occur at subclinical levels of eating disorders (5,6). The use of strict criteria may preclude the recognition of eating disorders in their early stages and subclinical form (a prerequisite for primary or secondary prevention), and may exclude some adolescents with significantly abnormal eating attitudes and behaviours, such as those who vomit or take laxatives regularly but do not binge (7-9). Finally, abnormal eating habits may result in significant impairment in health (10), even in the absence of fulfilment of formal criteria for an eating disorder. For all of these reasons, it is essential to diagnose eating disorders in adolescents in the context of the multiple and varied aspects of normal pubertal growth, adolescent development and the eventual attainment of a healthy adulthood rather than by merely applying formalized criteria.

Position: In clinical practice, the diagnosis of an eating disorder should be considered in an adolescent patient who engages in potentially unhealthy weight control practices and/or demonstrates obsessive thinking about food, weight, shape or exercise and not only in one who meets established diagnostic criteria. In such adolescents, an eating disorder should be considered if the teenager fails to attain or maintain a healthy weight, height, body composition or stage of sexual maturation for sex and age.

MEDICAL COMPLICATIONS

No organ system is spared the effects of eating disorders (11-15). Although the physical signs and symptoms occurring in a patient are primarily related to the weight control behaviours practised, the health care professional must consider their frequency, intensity and duration, as well as the biological vulnerability conferred by the sexual maturity of the patient. The majority of physical complications in adolescents with an eating disorder appear to improve with nutritional rehabilitation and recovery from the eating disorder, but some may be potentially irreversible. The long term consequences are still to be elucidated.

Medical complications in adolescents that are potentially irreversible include growth retardation if the disorder occurs before closure of the epiphyses (15-18); pubertal delay or arrest (6,16,17); and impaired acquisition of peak bone mass during the second decade of life (6,20,21), increasing the risk of osteoporosis in adulthood. These features emphasize the importance of medical management and ongoing monitoring by physicians who understand normal adolescent growth and development.

Just as we endorse early recognition of eating disorders through the use of broad developmentally appropriate criteria, we also endorse early intervention to prevent, limit or ameliorate medical complications, some of which are life-threatening. Adolescents who restrict food intake, vomit, purge or binge in any combination, with or without severe weight loss, require treatment even if they do not meet strict criteria for an eating disorder.

Position: Because of the potentially irreversible effects of an eating disorder on physical and emotional growth and development in adolescents, because of the risk of death and because of evidence suggesting improved outcome with early treatment, the threshold for intervention in adolescents should be lower than in adults. Ongoing medical monitoring should continue until the adolescent has demonstrated a return to both medical and psychological health.

NUTRITIONAL DISTURBANCES

Nutritional disturbances are a hallmark of eating disorders and are related to the severity and duration of dysfunctional dietary habits. Although abnormalities of minerals, vitamins and trace elements can occur, they generally are not clinically recognized (22). Deprivation of energy (calories) and protein on the other hand are especially important to identify because these elements are crucial to growth (23). Moreover, there is evidence that adolescents with eating disorders may be losing critical tissue components, such as muscle mass, body fat and bone mineral (5,21,24), during a phase of growth when dramatic increases in these elements should be occurring. Complete and ongoing assessment of nutritional status is the basis of management of nutritional disturbances in adolescents with eating disorders.

Position: The evaluation and ongoing management of nutritional disturbances in adolescents with eating disorders should take into account the specific nutritional requirements of patients in the context of pubertal development and activity level.

PSYCHOSOCIAL DISTURBANCES

Eating disorders that develop during adolescence interfere with adjustment to pubertal development (25) and the accomplishment of the developmental tasks necessary to become a healthy functioning adult. Social isolation and family conflicts arise at a time when families and peers ought to provide a milieu to support development (1,26). Issues related to self-concept, self-esteem, autonomy, separation from the family, the capacity for intimacy, affective disorders (eg, depression and anxiety) and substance abuse should be addressed in a developmentally appropriate manner (27).

All patients should be evaluated for co-morbid psychiatric illness, including disorders of anxiety, depression, dissociation and behaviour. Because adolescents usually live at home or interact with their families on a daily basis, the role of the family should be explored during both evaluation and treatment.

Position: All adolescents with an eating disorder should be evaluated for co-morbid psychiatric illness. Mental health intervention for adolescents with eating disorders should address not only the psychopathology characteristics of eating disorders, but also the accomplishment of the developmental tasks of adolescence and the specific psychosocial issues central to this age group. For most adolescents, family therapy should be considered as an important part of treatment.

TREATMENT GUIDELINES

Because of the complex biopsychosocial aspects of eating disorders in adolescents, the assessment and ongoing management of these conditions appear to be optimal with an interdisciplinary team consisting of professionals from medical, nursing, nutritional and mental health disciplines (27). Physical and occupational therapy may be useful adjuncts to treatment. Health care providers should have specific experience in treating eating disorders as well as expertise in working with adolescents and their families. They should be knowledgeable about normal adolescent physical and emotional development.

Both in-patient and out-patient treatments need to be available to adolescents with eating disorders (27,28). Factors that would justify in-patient treatment include significant malnutrition, physiological or physical evidence of medical compromise (such as vital sign instability, dehydration or electrolyte disturbances) even in the absence of significant weight loss, arrested growth and development, failure of out-patient treatment, acute food refusal, uncontrollable binging, vomiting or purging, family dysfunction that prevents effective treatment, and acute medical or psychiatric emergencies (28). The goals

of treatment are the same in a medical or psychiatric inpatient unit, a day program or out-patient setting: to help the adolescent achieve and maintain both physical and psychological health.

The expertise and dedication of the members of a treatment team who work specifically with adolescents and their families are more important than the particular setting. In fact, traditional settings such as a general psychiatric ward may be less appropriate than an adolescent medical unit, if one of the latter is available (18,28-30). Some evidence suggests that the outcome for patients treated in adolescent medicine units (both out-patient and in-patient) may be better than that of those treated in traditional psychiatric settings with adult patients (28-30). Smooth transition from in-patient to out-patient care can be facilitated by an interdisciplinary team that provides continuity of care in a comprehensive, coordinated, developmentally oriented manner. Health care specialists with an interest in adolescents are familiar with working not only with the patient, but also with the family, school, coaches and other agencies or individuals who are important influences on healthy adolescent development. Given the evidence that eating disorders can be associated with relapse, recurrence, crossover and the later development of other psychiatric disorders, treatment should be of sufficient frequency, intensity and duration to provide effective intervention.

Position: Adolescents with eating disorders require evaluation and treatment focused on biological, psychological and social features of these complex, chronic health conditions. Assessment and ongoing management should be interdisciplinary and is best accomplished by a team consisting of medical, nursing, nutritional and mental health disciplines. Treatment should be provided by health care providers who have expertise in managing adolescent patients with eating disorders and are knowledgeable about normal adolescent physical and psychological development. Hospitalization of an adolescent with an eating disorder is necessary in the presence of malnutrition, clinical evidence of medical or psychiatric decompensation or failure of out-patient treatment. Ongoing treatment should be delivered with appropriate frequency, intensity and duration.

BARRIERS TO CARE

Interdisciplinary treatment of eating disorders can be time-consuming, relatively prolonged and extremely costly. Lack of access to appropriate interdisciplinary teams or insufficient treatment can result in chronicity, social or psychiatric morbidity, and even death. Some provincial plans limit access to private care resources such as nutrition visits or mental health visits. Absent or low reimbursement rates for psychosocial services results in fewer qualified persons being willing to care for teenagers and young adults with eating disorders.

Some older adolescents are no longer eligible for treatment or coverage because of provincial medical insurance rules. Thus, withdrawal from treatment can occur at an age when leaving home, unemployment or temporary employment is the norm. Some institutions have age limit policies that negatively affect treatment and limit access to care during the transition from paediatric to adult care.

Legislation should provide reimbursement for intervention by multiple disciplines for adolescents with eating disorders. Coverage should ensure that for adolescents, treatment should be dictated by the severity and range of the clinical situation. The promotion of size acceptance and healthy lifestyles, introduction of prevention programs for high risk adolescents, and strategies for early diagnosis and intervention should be encouraged.

Position: Health care reforms should include provisions that address the needs of adolescents with eating disorders and ensure that they not be denied access to care because of absent or inadequate health care coverage.

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The recommendations in this Clinical Practice Guideline do not indicate an exclusive course of treatment or procedure to be followed. Variations, taking into account individual circumstances, may be appropriate.