



Bulimic eating disorders

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Background

The current diagnostic criteria for bulimia nervosa (BN) include recurrent episodes of binge eating characterized by eating, in a two-hour period or less, an amount that is larger than what most people would eat under similar circumstances, a loss of control over eating during a binge episode, and recurrent inappropriate compensatory behaviours to prevent weight gain. Common compensatory behaviours include self-induced vomiting, misuse of laxatives, diuretics, other medications, fasting, or excessive exercise. Binges and compensatory behaviours must occur on average twice a week for at least three months. Self-evaluation is also unduly influenced by body shape and weight. BN is typed as either purging or non-purging.

Very little is known about this disorder in young people. BN is thought to occur in 1% of the adolescent population with partial symptoms occurring in 3-6%. Boys make up 10% of the population. Mortality rates range from 0% to 6%. The age of onset is described as late adolescence; however, there are reports of purging in prepubertal children. The one Canadian survey of children between the ages of 9 to 14 years reports the prevalence of binge eating and purging, at least monthly, to be 0.2% in girls and 0.1% in boys. The only Canadian survey of adolescents suggests that rates of bulimic symptoms in girls range from 0.7% in 12-year-olds to 1.3% in 18-year-olds. No data exists for boys. More worrisome is that only 4% of adolescent girls with binge eating and 6% of girls with purging reported ever being assessed or treated for their difficulties.

Few clinical research studies have specifically focused on the medical complications of BN in children and adolescents. There are many serious consequences of bulimia, including hypokalemia associated with cardiac arrhythmias, muscle weakness, and decreased gastrointestinal motility, gastrointestinal difficulties, and dehydration resulting in dizziness,



syncope, weakness, and confusion, hypotension and tachycardia. The unique features of the developmental process of childhood and adolescence are critical in understanding these medical complications.

Currently the diagnostic criteria for children are identical to those in adults, although there is evidence that children may differ significantly in their presentation. Early detection is also important, as the longer these disorders persist, the harder they are to treat.

There is no Canadian data on incidence or prevalence, presentation, age of onset and medical complications of bulimia in children and little information on adolescents. Data collected through the CPSP is an efficient way to advance knowledge on how to best help these children overcome this serious, chronic and potentially life-threatening illness.

Objectives

- Determine a conservative incidence rate of children and young adolescents presenting to paediatricians with bulimic eating symptoms and behaviours.
- Describe the bulimic behaviours and the associated physical symptoms in children and adolescents on presentation to a paediatrician.
- Identify psychiatric co-morbid disorders that accompany bulimic eating disorders.
- Describe the current treatment planned and/or offered to these children.

Case definition

Report any new patient presenting between the ages of 5 and 18 years (up to the 18th birthday) with bingeing and/or purging behaviour:

- Bingeing is characterized by eating, in a two-hour period or less, an amount larger than what most people would eat under similar circumstances and a sense of loss of control over eating during the episode.
- Purging can include self-induced vomiting, misuse of laxatives, diuretics and other medications, and/or inappropriate compensatory behaviours, such as fasting or excessive exercising.

Exclusion criteria

Children who have biological causes for either bingeing or purging or who suffer from a psychotic disorder, or significant developmental delay.

Duration

March 2008 to February 2010

Expected number of cases

There are no reliable data on the incidence of bulimic symptoms in children in Canada. The prevalence data is of approximately 1% with only 4-6% of teens coming to medical attention. A current study in Britain examining eating disorders in children under 13 years of age has identified seven children with bulimic or binge eating symptoms and about five children with eating disorder not otherwise specified (EDNOS) that would likely be bulimic in the first year. Factoring for Canada a wider age range and a population of about 60% of the population of children of Britain, a minimum of 21 subjects would be expected to present yearly.



Bulimic eating disorders (continued)

Ethical approval

The Research Ethics Board, The Hospital for Sick Children

Analysis and publication

Descriptive summaries of demographic characteristics will be performed. Dichotomous variables will be summarized using percentages; normally distributed continuous variables will be summarized using means and standard deviations. Continuous variables that are not normally distributed will be summarized using medians and ranges. A latent class analysis will be undertaken to explore symptom clusters. This procedure has been established in an earlier study. Findings from the study will be presented at relevant conferences and will also be submitted for publication in a peer-reviewed journal within a year of completion.

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