Anorexia Nervosa 6 Years After Onset:  
Part I. Personality Disorders  

I. Carina Gillberg, Maria Råstam, and Christopher Gillberg

Fifty-one adolescent-onset anorexia nervosa (AN) cases recruited after community screening were compared with 51 age-, sex-, and school-matched cases with regard to personality disorders and autism-spectrum disorders (ASD)/empathy disorders at age 21 years. All 102 cases had originally been examined at a mean age of 16 years, slightly over a year after the reported onset of the eating disorder. Structured Clinical Interview for DSM-III-R (SCID) interviews were performed by a psychiatrist blind to the original eating disorder diagnosis. Most of the former AN cases were recovered with respect to weight, but the outcome in social areas was restricted. Personality disorders coded on axis II in the DSM-III-R and empathy disorders were much more common in the AN group than in the comparison (COMP) group. Obsessive-compulsive (OCD) and avoidant personality disorders were particularly common. Obsessive-compulsive behaviors showed a high degree of stability over time and were unrelated to weight problems. Together with empathy disorder, they tended to predict outcome better than the eating disorder as such. It is concluded that in some cases, AN may be seen to reflect but one axis I diagnosis occurring in the life of an individual with a chronic personality disorder.

NOREXIA NERVOSA (AN) is a common eating disorder, usually with adolescent onset, affecting more than 1% of females and 0.1% of males under the age of 18 years.1,2 There is considerable evidence that premorbid constitutional/personality factors may play an important role in the pathogenesis of the disorder or at least in the expression of symptoms associated with the eating disorder.3-6 There is also an expanding literature on the comorbidity patterns of AN, particularly relating to other eating, affective, and anxiety disorders.7-9 It is clear that AN sometimes develops into bulimia nervosa. A very high rate of comorbid depression in AN has also been repeatedly demonstrated.10,11

It has been reasonably well established that certain personality traits are overrepresented in AN populations. Dally3 drew attention to the high prevalence of obsessions and compulsions in the AN population. However, it is only recently that operationalized criteria12,13 and structured instruments for diagnosing personality disorders—e.g., the Personality Disorder Examination (PDE)14 and the Structured Clinical Interview for DSM-III-R (SCID)15—have appeared. The personality disorders grouped in cluster C of the DSM-III-R13—avoidant, dependent, obsessive-compulsive (OCD), and passive-aggressive—were found to be exceptionally common in a study by Halmi et al.,9 in which the PDE was used. No non-eating-disordered group was included for comparison, and the interviewers were not blind as to the presence of the eating disorder. However, three quarters of the eating disorder sample were reevaluated approximately 3 months after the initial assessment by raters blind to the results obtained at the original study, and the overall rate with which personality disorders were diagnosed remained essentially unchanged. Avoidant personality disorder, diagnosed after SCID interview, was also more common in the clinically referred AN group than in a control group in the study by Casper.5 Råstam6 reported that DSM-III-R OCD occurred in 29% of AN cases drawn from the general population, as compared with 4% of non-AN comparison cases matched for age, sex, and school. Diagnoses were made by a rater blind to the eating disorder status on the basis of case notes prepared from structured interviews covering personality variables and personality disorders. Gillberg and Råstam16 further suggested that a subgroup of cases with AN might have underlying autistic-like conditions with severe restrictions of social interaction, communication, and imagination, behavior, and interest patterns.

From the University of Göteborg, Child Neuropsychiatry Clinic, Annedals Clinics, Göteborg, Sweden.

Supported in part by grants to I.C.G. from the Swedish Medical Research Council, to M.R. from the Swedish Social Research Council, the Sven Jerring Foundation, and the Wilhelm and Martina Lundgren Foundation, and to C.G. from the Fulbright Commission, the Wilhelm and Martina Lundgren Foundation, and the Sunnerdahl Foundation.

Address reprint requests to Christopher Gillberg, M.D., University of Göteborg Child Neuropsychiatry Clinic, Annedals Clinic, S-41345 Göteborg, Sweden.

Copyright © 1995 by W.B. Saunders Company 0010-440X/95/3601-0004$3.00/0
It has been suggested that one reason for the strong AN concordance across monozygotic twin pairs as compared with dizygotic twin pairs\(^\text{17}\) could be an inherited personality type (e.g., OCD) that predisposes to the ritualistic behavior and insistence on routine and sameness associated with restricting eating disorders of the AN type.\(^\text{18}\)

The present study sets out to analyze (1) the prevalence of DSM-III-R personality disorders in a representative group of adolescent-onset AN cases; (2) the stability of personality disorders over a 6-year period after reported AN onset; (3) the contribution of operationally defined empathy disorders and autism-spectrum disorders (ASD) to AN and the overlap of such disorders with some of the personality disorders; and finally, (4) the interaction between axis II (personality disorder) and axis I (current psychiatric syndrome) diagnoses. The companion report (part II) analyzes the comorbidity patterns as reflected in DSM-III-R axis I diagnoses.

**METHOD**

**Material**

Twenty-three females (including one case ascertained as meeting criteria for DSM-III-R AN who refused participation in the postscreening neuropsychiatric part of the study) and two males constituted the total population of individuals born in 1970 and developing AN under the age of 18 years. Details of the epidemiological study have been published previously.\(^\text{16,19}\) In the first report, reference is made only to 20 cases diagnosed under age 16 years, but the population was later evaluated to age 18 years and five further cases had onset at age 16 or 17 years. Our findings correspond to a population prevalence of AN in those aged 17 years and under of 1.08% for females and 0.09% for males and a population-corrected female to male ratio of 11.6:1. The Göteborg study of AN is the only clear population study—comprising a reasonable number of cases—in the field. Because every single teenager was examined without his/her clothes on, had his/her growth chart scrutinized in detail, and was evaluated for more than 1 year by the same school nurse, and because 99.7% of the whole population completed an AN screening questionnaire, we believe that we have not missed AN cases in this population.

The population group (22 females and two males plus the female who refused in-depth study) was contrasted with another population screening sample of AN cases (26 females and one male) who were reported to the research team by school health nurses and doctors, pediatricians, and child psychiatrists during the follow-up period for the original population group. This sample was less comprehensive than the original one, but it was not a clinically referred group. In fact, more than one third of this group did not consult medical or psychiatric services for the eating disorder. We have estimated that the latter sample comprises approximately 60% of all AN cases in their birth cohort.

All 51 AN cases in this study met DSM-III-R criteria for the disorder. Forty-eight of these met or had met such criteria already at the first diagnostic study, but three were classified as partial at that time. However, these three cases later met full DSM-III-R criteria.

The groups will be referred to as (1) AN total-1 (the 17 females, excluding the one who refused participation in the neuropsychiatric study, and two males in the first population group who had onset of AN before age 16 years), (2) AN total-2 (the five females belonging to the first population group who had onset of AN at age 16 or 17 years), and (3) AN screen (the 26 females and one male with teenage-onset AN that were reported during the follow-up period for groups 1 and 2). This group was similar with regard to illness duration and age of onset to groups 1 and 2. However, more cases were reported to be in contact with treatment facilities in this subgroup. This is not surprising, given that interest in treatment increased and intensive efforts at referring for treatment increased during the follow-up period for the original population group as a direct consequence of the research project as such. The collapsed AN total-1 and AN total-2 groups will be referred to as the AN total group. The AN total and AN screen groups will often be pooled as the AN group in this report because they have been compared with regard to several hundred background measures (relating to aspects of development, personality, physical illness, family situation, family interaction, etc.) and found to be similar in virtually all aspects other than treatment received. The AN total-1 group was referred to as the AN-P group and the collapsed AN total-2 and AN screen group as the AN-M group in a previous publication\(^\text{6}\) analyzing the premorbid personality disorder pattern in the present samples.

The AN group will be compared throughout with a sex-, age-, and school-matched group of 51 cases recruited at the time of the original diagnostic study, referred to as the COMP group.

There were no dropouts from the follow-up study, and all 102 individuals assigned for study were seen personally and examined in accordance with the procedure described below.

**Age of Onset**

The mean age of AN onset was 14.3 years (95% confidence interval, 13.9 to 14.7).

**Age at First Examination**

The mean age at first examination was 16.1 years (95% confidence interval, 15.7 to 16.5) in the AN total group, 16.0 years (95% confidence interval, 15.5 to 16.5) in the AN screen group, and 16.0 years (95% confidence interval, 15.5 to 16.5) in the COMP group.

**Age at Follow-up Study**

The mean age at follow-up examination was 21.0 years (95% confidence interval, 20.5 to 21.4) in the AN group and 20.8 years (95% confidence interval, 20.3 to 21.3) in the
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات