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Psychiatry Research 135 (2005) 165–170

PSYCHIATRY RESEARCH

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Relationship between bipolar illness and binge-eating disorders☆

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Received 19 May 2003; accepted 6 April 2004

Abstract

In this study we describe the frequency of eating disorders (EDs) in a group of bipolar (BP) patients. We evaluated a sample of 51 outpatients, diagnosed as having BP I disorder on the basis of the Structured Clinical Interview for DSM-IV (SCID). Each of these subjects was administered the Binge Eating Disorder Clinical Interview (BEDCI) to determine the presence of binge eating disorder (BED) or bulimia nervosa (BN). Of the 51 BP patients, 14 (9 BED, 5 BN) met criteria for an ED. Most patients developed binge eating coincident with the first episode of BP disorder or after the onset of it. This was true for those who developed BED as well as BN, and involved both manic and depressive phases. All BN patients were women (5/5), and family history of binge eating was present in 80% of BN subjects, but only in 22.2% of BED and 29.7% of non-ED BP patients. We found a high frequency of concordance between BP illness and binge eating problems in our sample of BP patients. Given the temporal sequence of the mood disorder, which generally preceded the ED, we suggest a model in which the ED evolves due to modulation of emotions with food, as well as use of medications to treat BP disorder that disrupt hunger and satiety mechanisms. Given differences in gender distribution and family history, cultural and familial influences may also be significant in the minority of BP binge-eating patients who develop BN.

Keywords: Bulimia nervosa; Affective disorder; Family history; Mania; Depression

1. Introduction

Questions have been raised about the relationship of eating disorders (EDs) to mood disorders (MDs) for over 25 years (Cantwell et al., 1977). Evidence for this relationship has been derived from the prominent affective symptoms in anorexia nervosa (AN) and bulimia nervosa (BN), frequent co-morbid affective syndromes (Garfinkel et al., 1995, 1996), and family

☆ An earlier version of this report was presented at a meeting entitled "Disturbo Bipolare e Comorbidità: Strategie Cliniche e Terapeutiche," Bormio, Italy, March 12–16, 2001, and at the Second International Forum on Mood and Anxiety Disorders, Monte Carlo, November 28 to December 1, 2001.

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0165-1781/$ - see front matter © 2005 Elsevier Ireland Ltd. All rights reserved.
doi:10.1016/j.psychres.2004.04.014

history data (Piran et al., 1985), as well as investigations examining the course of the EDs (Toner et al., 1986). Much of this literature has focused on depression; there has been little understanding of the relationship between bipolar (BP) disorder and the EDs. What is also known is that people affected by BN share a high rate of comorbidity with BP disorder type II (Mury et al., 1995; Simpson et al., 1992; Sullivan et al., 1995). Kruger et al. (1996), conversely, examined BP patients (43 with BP disorder type I, 18 with BP disorder type II) and found 13% met DSM-IV (American Psychiatric Association, 1994) criteria for BED, and a further 15% exhibited a partial binge-eating syndrome.

In the present communication, we describe a group of BP I patients and the frequency of EDs in this population. We decided to investigate this sample because affective symptomatology in these patients is generally so severe as to overshadow the possible underlying ED. Moreover, the overeating of BP patients is very often assumed to be a consequence of medications that can play a significant role in disrupting hunger and satiety mechanisms. We intended to investigate whether overeating is due mainly to medication or to affective symptomatology. We report a high frequency of concordance between BP I and ED, and given the temporal sequence of the mood disorder generally preceding the ED, we suggest a model in which the ED evolves due to modulation of emotions with food, as well as the use of medications that treat BP disorder, which disrupt hunger and satiety mechanisms. Given differences in gender distribution and family history, we suggest that cultural and familial influences are significant in the minority of BP binge-eating patients who develop BN.

2. Methods

2.1. Participants

We evaluated a sample of 51 outpatients (29 males, age 40.9±2.4 years; 22 females, age 40.3±2.6 years). All were diagnosed as having BP I disorder by experienced clinicians using the Structured Clinical Interview for DSM-IV (SCID) (First et al., 1997). Each of these subjects was moreover administered the semistructured Clinical Interview for BED (BEDCI) (Spitzer et al., 1994) to determine the presence or absence of BED in greater detail. The diagnosis of BN was made by clinicians experienced in treating these conditions, again using the BEDCI.

The subjects were all ambulatory patients attending a mood disorders clinic at Santa Chiara Hospital, the primary teaching hospital of the University of Pisa. All patients were treated in a naturalistic fashion, with medications and dosages decided on the basis of clinical judgment. At various times, it was often necessary to use one or two mood stabilizers and atypical neuroleptics or antidepressants, as described for relapse prevention of BP disorder (Post et al., 1998). Patients had been ill for 13.7±9.4 years (range 1–43) at the time of assessment for this study.

Demographic data were recorded for each subject, including age, sex, marital status, level of education, body mass index (present and highest ever), age of onset of binge eating, age of onset of BP disorder, family history of binge eating, and medications used to treat the mood disorder. These data were collected from a combination of direct inquiry and review of the patient's record. After complete description of the study to the subjects, written informed consent was obtained.

2.2. Statistics

The data were categorical in nature and were therefore subjected to chi-square analysis. The Kruskal–Wallis nonparametric test was used for the analysis of age and age of onset.

3. Results

Of the 51 BP patients, 14 met criteria for an ED. Nine met DSM-IV criteria for current or lifetime BED. A further five patients met DSM-IV criteria for BN; of these, three were of the purging type and two non-purging (Table 1).

Table 1
Sample of 51 bipolar (BP) patients

BP patients without ED − 37 (72.5%)	
BP patients with ED − 14 (27.5%)	BP with BED current or lifetime − 9 (17.7%)
	(3 BN-Purging Type, 2 BN-Non Purging Type) −5 (9.8%)