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Drug use disorders in Japanese eating disorder patients

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Abstract

A previous questionnaire study suggested that drug use disorder (DUD: abuse/dependence on drugs, other than alcohol) in Japanese eating disorder (ED) patients was less prevalent than in Western countries, although eating and drug use disorders have spread simultaneously in Western countries. However, the precise prevalence and comorbidity features remain unknown. Subjects consisted of 62 patients with anorexia nervosa restricting type; 48 patients with anorexia nervosa binge eating/purging type; and 75 patients with bulimia nervosa purging type. The Japanese version of the Structured Clinical Interview for DSM-III-R; the Structured Clinical Interview for DSM-III-R Personality Disorders; and the supplement module of the Schedule for Affective Disorders and Schizophrenia-Lifetime version were used for the interview. Sixteen (8.6%, 95% CI=4.6–12.7%) patients had lifetime diagnoses of DUD. Drugs were solvent fumes or benzodiazepines, and only one patient had been dependent on methamphetamine. More than half of the patients with lifetime DUD diagnoses were multi-impulsivitists. On multivariate analysis, DUD was significantly linked with childhood parental loss, history of conduct disorder and borderline personality disorder. Thus, the prevalence of DUD in Japanese ED patients was indeed lower than that in Western countries. However, similar comorbidity was found in ED patients with DUD compared with that of those in Western countries. The current study suggests that ED and DUD have different origins, although they share the feature of impulsivity. Further study in the general population is needed to clarify these issues.

Keywords: Substance use disorders; Eating disorders; Bulimia nervosa; Impulsivity; Borderline personality disorder

1. Introduction

Relatively high rates of comorbid substance use disorders (SUD) have been consistently noted in women with bulimia nervosa and anorexia nervosa binge eating/purging type (Holderness et al., 1994) and in the first- and second-degree relatives of these patients (Lilenfeld et al., 1997) in Western countries.

Laessle et al. (1989) reported that 5% of restricting anorexics, none of the bulimic anorexics and 24% of bulimic patients had lifetime diagnoses of drug abuse/dependence. Halmi et al. (1991) reported that 8% had a history of alcohol abuse, 13% had a history of cannabis abuse and 2% had a history of amphetamine abuse in a 10-year follow-up study of former anorexic inpatients.

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Herzog et al. (1992) found that 7% of patients with anorexia nervosa, 17% of patients with anorexia nervosa and bulimia nervosa, and 12% of patients with bulimia nervosa had lifetime diagnoses of drug abuse. Bushnell et al. (1994) reported 32% of a clinical sample with bulimia and 24% of the general population of females with bulimia nervosa had a lifetime diagnosis of drug abuse/dependence, whereas only 6% of the general population of females did. Deep et al. (1995) found that 29% of long-term recovered anorexic patients had a lifetime alcohol/substance abuse/dependence diagnosis. Brewerton et al. (1995) found substance abuse disorder involving any drug in 12 (20%) of 59 bulimia nervosa patients who participated in a medication trial. Wiederman and Pryor (1996) reported that 3% of anorexic patients and 17.8% of bulimic patients had used amphetamines; 1.5% anorexic patients and 12.5% of bulimic patients had used cocaine; and 2.2% of anorexic patients and 13.8% of bulimic patients had used tranquilizers. This high comorbidity of SUD with eating disorder (ED), especially among bulimic patients, leads some researchers to propose the addictive process, and that both are forms of addiction (Szmukler and Tantam, 1984; Vandereycken, 1990).

However, our previous questionnaire survey in Japanese eating disorder patients found that very few patients had used solvent fumes (these are usually called 'thinner' in Japan) or tranquilizers and none had abused hard drugs such as amphetamine or heroin (Nagata et al., 2000). Therefore, the prevalence of drug use disorders (DUD, defined as substance abuse/dependence other than alcohol in this article) in eating disorder patients seems to be much lower than that in Western countries.

Moreover, the prevalence of DUD among the general adolescent population in Western countries seems to be much higher than in Japan. In a questionnaire survey of high school students, only 3.4% of teenage male and 2.6% of teenage female alcohol drinkers had ever inhaled solvent fumes in the past, and 1.6% of male drinkers and 0.6% of female drinkers were currently abusing (Matsushita et al., 1996). In addition, only 0.2% of non-alcohol-drinking high school students in Japan had ever inhaled solvent fumes (Matsushita et al., 1996). Conversely, 14.6% of high school students had sniffed glue, inhaled aerosol spray cans, or inhaled other paints or spray to get high during their lifetime (i.e. lifetime inhalant use) by a US nationwide survey (Kann et al., 2000). Even among the Japanese general population, drug use experiences were extremely rare. In another study, 0.2% of Japanese, 8.3% of Japanese Americans, and 11.3% of white Americans had used any illicit drugs (marijuana, cocaine, methamphetamine, heroin, etc.) during the previous 1 month (Fukui et al., 1998; National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, 2001). Therefore, a preliminary household survey in Japan suggested that the prevalence of drug abuse in Japan seems to be much lower than that in the USA. However, the reason remains unknown. The gap between Japanese and Japanese-American individuals might suggest that environmental factors strongly influence the prevalence of drug abuse behaviors. The differences in comorbidity features and childhood life events of eating disorder patients with and without DUD may provide some hints.

Most previous studies compared clinical features such as Axis I and II disorder between eating disorder patients with and without alcohol abuse/dependence. Bulik et al. (1994) compared scores on the Tridimensional Personality Questionnaire in normal weight bulimic patients with alcohol abuse/dependence with those in bulimics without alcohol abuse, and found significantly higher scores of novelty seeking in bulimic patients with alcohol abuse than in their non-abusing counterparts. Bulik et al. (1997) also compared Axis I and Axis II disorders; clinical features; personality; and temperament characteristics in bulimic nervosa with and without comorbid lifetime alcohol dependence. Bulimic women with comorbid alcohol dependence reported a higher prevalence of suicide attempts; anxiety disorders; other substance dependence; conduct disorder; and personality disorders (especially borderline and histrionic), as well as higher scores on novelty seeking, impulsivity and immature defenses. However, there were few differences in the severity of bulimic symptoms. Dansky et al. (2000) reported that the