

CME ARTICLE

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CME Objectives

After completing this educational activity, participants practicing clinical psychiatry should be able to:

- List features shared by body dysmorphic disorder and obsessive-compulsive disorder (OCD).
- Describe differences between body dysmorphic disorder and OCD.
- Identify strategies to treat body dysmorphic disorder.

Statement of Need and Purpose

Recent research suggests that body dysmorphic disorder is part of the obsessive-compulsive spectrum, and physicians responding to CME surveys have requested updated information on the differential diagnosis of body dysmorphic disorder and OCD. This CME activity is designed to address the needs of physicians who have requested information on the diagnosis and treatment of these two disorders. There are no prerequisites for participating in this CME activity.

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Date of Original Release/Review

This article was published in January 2001 and is eligible for CME credit through January 31, 2002. The latest review of this material was November 2000.

Faculty Disclosure

In the spirit of full disclosure and in compliance with all ACCME Essential Areas and Policies, the faculty for this CME activity were asked to complete a full disclosure statement. The information received is as follows:

Drs. Bystritsky, Dunkin, Saxena, Tarlow, and Vapnik and Mss. Maidment and Winograd have no significant commercial relationships to disclose relative to the presentation.

Disclosure of Off-Label Usage

To the best of their knowledge, the authors of this article have determined that buspirone is not approved by the Food and Drug Administration for augmentation of serotonin reuptake inhibitor treatment for refractory OCD.

A Retrospective Review of Clinical Characteristics and Treatment Response in Body Dysmorphic Disorder Versus Obsessive-Compulsive Disorder

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Background: Although body dysmorphic disorder (BDD) has many features in common with obsessive-compulsive disorder (OCD) and is frequently comorbid with OCD, few studies have directly compared the 2 disorders. Although BDD and OCD respond to similar medications and cognitive-behavioral therapy (CBT), their response to treatment has never been directly compared.

Method: We studied 107 consecutive patients with DSM-III-R OCD (N = 96) or BDD (N = 11) treated openly for 6 weeks with intensive CBT, medication, and psychosocial rehabilitation, in a specialized partial hospitalization program for severely ill OCD patients. All patients were assessed, before and after treatment, with the Yale-Brown Obsessive Compulsive Scale (Y-BOCS), Hamilton Rating Scale for Depression (HAM-D), Hamilton Rating Scale for Anxiety (HAM-A), and Global Assessment Scale (GAS). Retrospectively, we compared the clinical characteristics, symptom severity, and response to treatment of BDD patients with those of OCD patients.

Results: BDD patients and OCD patients had similar sex ratio, age, treatment duration, prevalence of comorbid major depression, and pretreatment Y-BOCS and GAS scores. BDD patients had significantly higher pretreatment HAM-D and HAM-A scores. The proportions of patients treated with serotonin reuptake inhibitors and antipsychotics did not differ between groups. Both groups improved with treatment, with significant ($p < .001$) changes in Y-BOCS, HAM-D, HAM-A, and GAS scores. Change in Y-BOCS did not differ between groups, but changes in HAM-D and HAM-A were significantly greater in BDD patients than in OCD patients.

Conclusion: While BDD may be associated with greater severity of depressive and anxiety symptoms than OCD, this study suggests that BDD may respond to intensive, multimodal treatment.

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Body dysmorphic disorder (BDD), a disorder characterized by preoccupation with an imagined or slight defect in appearance, is more common than previously realized, affecting up to 2% of nonclinical population samples¹ and up to 12% of psychiatric outpatients.² BDD can be quite severe and potentially disabling, causing marked distress, severe social and occupational impairment, and high rates of comorbid mood disorders, suicide attempts, and hospitalization.^{3–5}

BDD is widely considered to be closely related to obsessive-compulsive disorder (OCD) and is considered an “obsessive-compulsive spectrum disorder”⁶ because it shares several features with OCD, such as intrusive, obsessional fears and compulsive rituals. In BDD (previously called *dysmorphophobia*⁷), the obsessional fears are about some imagined defect in the appearance, shape, or size of some body part. Common foci of distress include the face, nose, ears, eyes, skin, and hair, but can involve any body part.⁷ Compulsions include mirror-checking, skin-picking, camouflaging, repeated cosmetic surgeries, and avoidance of any situation in which the distressing body part might be seen. BDD also shares a similar sex ratio, early age at onset, and chronic course with OCD and has higher-than-expected rates of comorbidity with OCD.⁶ Moreover, BDD responds preferentially to the same type of treatments used for OCD: serotonin reuptake inhibitors (SRIs)^{8–10} and behavioral therapy with exposure and response prevention.^{11–13} However, BDD differs from OCD in important ways. BDD involves loss of insight

much more often than OCD. Up to half of patients with BDD develop delusional levels of belief of their somatic obsessions, firmly believing that their imagined problems are real,^{4,5} compared with only 10% to 15% of patients with OCD who are delusional.¹⁴

Although BDD has many features in common with OCD, few previous studies have directly compared the 2 disorders, and none have compared their response to specific treatments. Simeon et al.⁴ compared OCD patients with comorbid BDD (comprising 12% of the patients in the DSM-IV field trial for OCD) with OCD patients without BDD and found that comorbid patients had more anxious, impulsive, and schizotypal features than did patients with OCD alone. Insight was more impaired for BDD symptoms than for OCD symptoms. OCD patients with and without BDD did not differ in demographic characteristics or in the total severity of OCD symptoms, but OCD patients with comorbid BDD had significantly more sexual obsessions. No patients with BDD alone (without comorbid OCD) were included in that study. Treatment response was assessed only in a small subset of patients who underwent an undescribed treatment and was reported only in terms of global clinical improvement, not with specific symptom severity scales, and depressive symptoms were not assessed in that study.⁴ McKay and colleagues¹⁵ found that BDD patients were similar to OCD patients on severity measures of obsessions, compulsions, depressive symptoms, and cognitive symptoms of anxiety, but had higher levels of overvalued ideation and lower levels of physical anxiety symptoms. The authors did not assess treatment response in that report. Phillips et al.⁵ compared BDD patients with OCD patients and found that the 2 groups did not differ in sex ratio, most demographic variables, illness severity, or family history of most psychiatric disorders. BDD patients in their study were younger; had higher lifetime rates of major depression, social phobia, and psychotic disorders; were more likely to have suicidal ideation; and were less likely to be married than the OCD patients. However, neither the severity of depressive and anxiety symptoms nor treatment response was assessed in their study.

BDD has been described in the psychiatric literature as "extremely difficult to treat."¹⁶ As seen in OCD,¹⁷ clinical trials indicate that 40% to 50% of BDD patients may not have an adequate response to SRIs alone,^{5,10} and 20% to 30% may not respond to trials of cognitive-behavioral therapy (CBT) alone.^{11,12} Although not all studies agree, recent trials in OCD suggest that the combination of medications and CBT is superior to either modality alone.^{18,19} The same would be expected in BDD, but to our knowl-

edge, no studies to date have assessed the efficacy of multimodal treatment for BDD. Intensive treatment approaches combining aggressive medication management with daily CBT and psychosocial rehabilitation in a controlled setting have been found to be effective for severe and disabling OCD.^{20,21} Our group had previously found that over 70% of previously treatment-refractory OCD patients responded to treatment in the University of California Los Angeles (UCLA) OCD Partial Hospitalization Program (OCD PHP), a specialized partial hospitalization program for patients with severe and refractory OCD and related disorders that utilized the intensive, multimodal treatment approach.²¹ If the treatment-response characteristics of patients with severe BDD were similar to those of patients with severe OCD, similar effectiveness of intensive treatment would be expected in BDD patients. Therefore, we sought to compare the clinical characteristics, symptom severity, and response to treatment of BDD patients versus OCD patients treated with the same approach, combining medications and intensive CBT. On the basis of the previous studies reviewed above, we hypothesized that BDD patients and OCD patients would have similar severity of obsessive and compulsive symptoms, but that BDD patients would have higher rates of comorbid major depression, greater severity of depressive and anxiety symptoms, and poorer overall functioning. We further hypothesized that intensive, multimodal treatment would significantly improve symptoms and functioning in severely ill BDD patients, but to a lesser degree than in OCD patients.

SUBJECTS AND METHOD

Subjects were 107 consecutive patients with DSM-III-R OCD and/or BDD, treated openly between 1993 and 1997 in the UCLA OCD PHP. Compared with outpatient treatment, this program has the advantages of strict enforcement of compliance with medication and CBT, as well as massed exposure and response prevention on a daily basis. Eleven of the 107 patients (10%) met DSM-III-R criteria for BDD. For purposes of analysis, patients were retrospectively divided into 2 groups: BDD (N = 11) versus OCD (N = 96). Patients were included in the OCD group only if they met DSM-III-R criteria for OCD but did not have BDD symptoms. BDD patients who met DSM-III-R criteria for comorbid OCD (N = 7) were combined with BDD patients without comorbid OCD (N = 4) in the BDD group. Regardless of the presence or absence of comorbid OCD symptoms, all patients with BDD had treatment that focused primarily on their

specific BDD symptoms. Patients with the delusional variants of BDD or OCD were included because previous data suggest that these disorders encompass a range of insight from full awareness to delusional beliefs.^{6,14,22} The majority of the patients had failed to respond to outpatient trials of SRIs and at least one outpatient trial of exposure and response prevention.

Diagnoses were made by semistructured clinical interview, as well as with standardized screening and rating scales, including the Anxiety Disorders Interview Schedule-Revised (ADIS-R),²³ the Yale-Brown Obsessive Compulsive Scale (Y-BOCS),²⁴ and the Y-BOCS symptom checklist. The latter instrument also provided a listing of the specific OCD symptom factors present in each patient, including the obsessions and compulsions regarding harm and aggression, checking and repeating, contamination and cleaning, sex, hoarding and saving, religion/scruples, symmetry and order, somatic symptoms (including BDD symptoms), and miscellaneous symptoms. Patients presented with a wide range of comorbid diagnoses, including major depression, bipolar disorder, psychotic disorders, other anxiety disorders, and substance abuse disorders, that were addressed with medication but not symptom-specific behavioral therapy.

Symptom severity and level of functioning were assessed at entry into the program and at discharge. OCD symptom severity was measured with the Y-BOCS. Because patients in this study were treated between 1993 and 1997 (before the specifically modified BDD-YBOCS²⁵ was published), BDD symptoms were included on the Y-BOCS symptom checklist and their severity was also measured with the standard Y-BOCS. The severity of depressive and anxiety symptoms was measured by Hamilton Rating Scale for Depression (HAM-D)²⁶ and Hamilton Rating Scale for Anxiety (HAM-A).²⁷ Overall functioning was measured with the Global Assessment Scale (GAS).²⁸

As described in our previous report,²¹ all patients treated in the OCD PHP received intensive, daily CBT (in both individual and group settings) for several hours a day, primarily involving exposure and response prevention targeted to their individual obsessive fears and compulsive behaviors. For BDD patients, exposure and response prevention was individually tailored to each patient's dysmorphophobic symptoms and included repetitive imaginal and in vivo exposure to the distressing thoughts and fears each patient had about the specific body parts with which they were preoccupied; prevention of mirror-checking, grooming, skin-picking, and camouflaging rituals; and gradually increasing exposure to

anxiety-provoking social situations without hiding the relevant body parts.

All patients in the program also received medication and psychosocial rehabilitation. Medications included SRIs, as well as medications prescribed to augment the response to SRIs of BDD and OCD symptoms^{29,30} and treat comorbid disorders. These included buspirone, antipsychotics, antidepressants, mood stabilizers, and anxiolytics. Pharmacotherapy proceeded according to the algorithm for treatment-refractory OCD described in our previous report.²¹ Medication selection was based on diagnosis, clinical judgment of the study physicians (A.B., R.R., or S.S.), history of efficacy and tolerability, and patient preference. Psychosocial rehabilitation was based on the multimodal approach developed by Liberman and colleagues³¹ and included groups to educate patients about diagnoses, medications, and CBT as well as groups focusing on communication skills, anxiety management, vocational assessment, time management, and independent living skills. Our earlier data showed that more than 70% of OCD patients treated in the OCD PHP for an average of 6 weeks had clinically significant responses (as defined by > 25% decrease in Y-BOCS score and > 10-point increase in GAS score) and that treatment response was sustained over an 18-month follow-up period.²¹

Statistical Analysis

We retrospectively compared the clinical characteristics, symptom severity, and response to treatment of BDD patients versus OCD patients. Data were entered into a Microsoft Excel³² database and analyzed using SPSS statistical software (Chicago, Ill.). Fisher exact tests were used to compare the proportion of patients in each group who had comorbid major depression as well as the proportions treated with SRIs and antipsychotic medications. A series of 4 Student *t* tests for independent samples with equal variances were used to compare the pretreatment Y-BOCS, HAM-D, HAM-A, and GAS scores of BDD patients versus OCD patients. A series of 4 split-plot, repeated-measures multivariate analyses of variance (MANOVAs) were performed to analyze change with treatment in Y-BOCS, HAM-D, HAM-A, and GAS scores with time as the within-subjects factor and diagnosis of BDD versus OCD as the between-subjects factor. Repeated-measures MANOVAs were also performed on the obsessions and compulsions subscales of the Y-BOCS, making a total of 6 repeated-measures MANOVAs. All analyses are intent-to-treat with last observation carried forward. All subjects who completed at least the initial week of treatment were included in the analyses.

Table 1. Demographic Features and Treatment of Subjects With Body Dysmorphic Disorder (BDD) vs. Obsessive-Compulsive Disorder (OCD)^a

Variable	BDD (N = 11)	OCD (N = 96)
Age, y, mean \pm SD	32.5 \pm 8.5	34.3 \pm 12.8
Male/total N (% male)	5/11 (45.6)	55/96 (57.3)
Duration of treatment, d, mean \pm SD	34.6 \pm 21.2	40.5 \pm 37.0
Treated with SRIs, N (%)	9 (81.8)	77 (80.4)
Treated with antipsychotics, N (%)	4 (36.4)	31 (32.3)
Treated with intensive CBT, N (%)	11 (100)	96 (100)
Current comorbid major depression, N (%)	5 (45.6)	43 (44.8)

^aAbbreviations: CBT = cognitive-behavioral therapy, SRI = serotonin reuptake inhibitor.

RESULTS

BDD patients (N = 11) and OCD patients (N = 96) did not differ significantly in mean age, sex ratio, or mean duration of treatment (Table 1). The prevalence of comorbid major depression was similar for the 2 groups (5/11 vs. 43/96, Fisher exact test, $p = 1.000$). The proportion of patients treated with SRIs (9/11 vs. 77/96, Fisher exact test, $p = 1.000$) and antipsychotic medications (4/11 vs. 31/96, Fisher exact test, $p = .747$) also did not differ significantly between groups (see Table 1).

Pretreatment total Y-BOCS and GAS scores were very similar in the 2 groups, as were the obsessions and compulsions subscale scores (Table 2). However, BDD patients had significantly higher pretreatment scores on the HAM-D ($t = 2.83$, $df = 105$, $p = .006$) and HAM-A ($t = 3.23$, $df = 105$, $p = .002$) than did OCD patients, indicating greater severity of pretreatment depressive and anxiety symptoms. Repeated-measures MANOVAs indicated that both groups improved substantially with treatment, with highly significant main effects for time on Y-BOCS ($F = 162.28$, $df = 1,105$; $p < .001$), HAM-D ($F = 55.49$, $df = 1,105$; $p < .001$), HAM-A ($F = 68.22$, $df = 1,105$; $p < .001$), and GAS ($F = 73.54$, $df = 1,105$; $p < .001$) scores. Change in Y-BOCS score did not differ between groups (diagnosis \times time $F = 0.05$, $df = 1,105$; $p = .831$), but repeated-measures MANOVAs revealed significant diagnosis \times time interactions for HAM-D scores ($F = 7.51$, $df = 1,105$; $p = .007$) and HAM-A scores ($F = 9.77$, $df = 1,105$; $p = .002$), with significantly greater improvement in depressive and anxiety symptoms in BDD patients than in OCD patients. When the Y-BOCS obsessions and compulsions subscales were analyzed separately, repeated-measures MANOVA revealed highly significant main effects for time for each subscale ($F = 117.94$, $df = 1,105$;

$p < .001$ for obsessions; $F = 106.77$, $df = 1,105$; $p < .001$ for compulsions), but no significant diagnosis \times time interactions, indicating that both groups had significant improvements in both obsessions and compulsions with treatment. After treatment, BDD patients and OCD patients did not differ on any of the rating scales (see Table 2).

DISCUSSION

To our knowledge, this is the first published study directly comparing response to treatment in BDD versus OCD. Our results are consonant with previous studies showing that patients with BDD have similar levels of obsessive and compulsive symptom severity and overall functional impairment compared with patients with OCD,^{4,5,15} lending further support to the conceptualization of BDD as an obsessive-compulsive spectrum disorder. However, despite the fact that the small sample size of BDD patients limited the statistical power of this study, significant differences between the BDD and OCD groups were found in the severity of depressive and anxiety symptoms, as well as in the magnitude of response of those symptoms to treatment. Both BDD patients and OCD patients in this study were found to have robust improvements in obsessive, compulsive, depressive, and anxiety symptoms with treatment, suggesting that the combination of aggressive medication treatment, intensive CBT, and psychosocial rehabilitation can be effective for not only the core symptoms of these disorders but also a range of associated and comorbid affective syndromes.

Although the prevalence of comorbid major depression was not significantly different between groups, BDD patients had greater pretreatment severity of depressive symptoms than did OCD patients. This finding differs somewhat from those of McKay and colleagues,¹⁵ who found depression severity to be slightly higher, but not significantly different, in BDD patients than OCD patients. One possible reason for the greater severity of depression in our sample was that it consisted of severely ill patients in a partial hospitalization setting, most of whom had failed prior trials of medication or CBT, whereas the patients in the study by McKay et al.¹⁵ were all outpatients. The McKay et al.¹⁵ study also used a different depression rating scale than our study. Our finding of significantly higher pretreatment anxiety scores in BDD patients than in OCD patients replicated the results of 2 previous studies.^{4,15} Taken together, these findings suggest that BDD is associated with a more severe affective disturbance than is OCD. The greater amount of anxiety

Table 2. Clinical Characteristics and Symptom Severity of Subjects With Body Dysmorphic Disorder (BDD) vs. Obsessive-Compulsive Disorder (OCD) Before and After Intensive Multimodal Treatment^a

Variable	BDD (N = 11)		OCD (N = 96)		BDD vs OCD ^b					
	Mean	SD	Mean	SD	Diagnosis		Time		Diagnosis × Time	
					F	p	F	p	F	p
Y-BOCS total										
Pretreatment	29.6	3.7	28.0	4.7	0.93	.338				
Posttreatment	16.9	5.1	15.8	5.9			162.28	.000	0.05	.831
Y-BOCS obsessions										
Pretreatment	14.8	2.1	14.2	2.5	1.50	.223				
Posttreatment	9.6	2.9	8.3	3.1			117.94	.000	0.35	.554
Y-BOCS compulsions										
Pretreatment	14.7	2.8	13.9	3.2	1.17	.281				
Posttreatment	8.4	3.6	7.3	3.4			106.77	.000	0.02	.887
HAM-D										
Pretreatment	24.7	7.1	17.9	7.6 ^c	3.43	.067				
Posttreatment	13.6	7.3	12.7	7.1			55.49	.000	7.51	.007
HAM-A										
Pretreatment	38.0	8.2	30.5	7.1 ^d	4.91	.029				
Posttreatment	26.7	7.3	25.5	6.5			68.22	.000	9.77	.002
GAS										
Pretreatment	45.8	11.5	50.5	10.8	0.45	.506				
Posttreatment	62.9	10.3	61.9	9.2			73.54	.000	2.90	.092

^aAbbreviations: GAS = Global Assessment Scale, HAM-A = Hamilton Rating Scale for Anxiety, HAM-D = Hamilton Rating Scale for Depression, Y-BOCS = Yale-Brown Obsessive Compulsive Scale.

^bEffects of diagnosis, time, and diagnosis × time interactions used repeated-measures multivariate analyses of variance, *df* = 1,105.

^cStudent *t* = 2.83, *df* = 105, *p* = .006.

^dStudent *t* = 3.23, *df* = 105, *p* = .002.

and depression in BDD may be due to poorer insight into the illness and a stronger belief that the imagined ugliness or defect is real.⁵

Contrary to our hypothesis that BDD symptoms would be less responsive to treatment, BDD symptoms and OCD symptoms responded equally well to open, multimodal treatment. Both groups had a mean 43% decrease in Y-BOCS score after treatment, similar to the magnitude of improvement seen in several previous studies of outpatients with BDD treated with either SRIs^{9,10} or CBT,^{11–13} even though many of our patients had failed trials of SRIs or outpatient CBT prior to admission into the OCD PHP. Our results indicate that, as found with patients with refractory OCD, patients with previously treatment-refractory BDD can improve significantly with intensive, multimodal treatment. The duration of treatment required to achieve improvement in symptoms and functioning (mean = 34.6 days) was relatively short compared with several previous treatment trials that have reported that up to 10 to 14 weeks of treatment may be required for many patients.^{11,29} While short-term responses in intensive treatment settings do not always translate into long-term responses when patients return to their usual environment, our previous data showed that the treatment response

of OCD patients treated in the UCLA OCD PHP for an average of 6 weeks was sustained over an 18-month follow-up period.²¹ Longitudinal follow-up studies of BDD patients to assess long-term symptomatic and functional outcome are currently underway to determine whether BDD patients will be similarly able to retain the improvements made in the program.

A surprising finding was that BDD patients had significantly greater improvement in depressive and anxiety symptoms with treatment than experienced by OCD patients, although this may merely represent regression to the mean from the higher pretreatment depression and anxiety scores in BDD patients. GAS scores also improved significantly in both groups, suggesting that comprehensive treatment impacts not only psychiatric symptoms but also overall functioning. Other data from our program have shown that both subjective indices of quality of life and objective measures of general and social activity improved significantly in severely ill OCD patients treated in our program, independent of symptomatic improvement.³³

In addition to the small sample of BDD patients, this study had the usual limitations associated with a naturalistic case series. Therefore, caution must be exercised in making conclusions based on its results. Patients were not rated by independent, blinded raters, and treatments were administered openly and without standardization. However, the blend of medications and intensive CBT administered was virtually identical for BDD versus OCD patients. The same algorithm²¹ was followed for both groups. The proportion of patients treated with SRIs and antipsychotics was the same, as was the duration of treatment. CBT was administered to both patient groups by the same therapists, using the same techniques of exposure, response prevention, and cognitive restructuring. Furthermore, both groups of patients attended the same group meetings for psychosocial rehabilitation. Another limitation is that BDD symptoms were not rated independent of OCD symptoms, since the BDD-YBOCS, the instrument designed for that purpose, was not available until after

this study was done. However, validation studies of the Y-BOCS and BDD-YBOCS show that the 2 scales are highly correlated,²⁵ making it unlikely that our results would have differed significantly had the newer measure been used. Our use of the same scale for BDD and OCD symptoms did allow for a direct comparison of their response to treatment.

Controlled studies of either medication treatment¹⁰ or psychotherapy^{11,12} for BDD are very few in number; more will be required to establish which treatments are effective for the disorder. The results of the present, open study suggest that controlled studies of combined treatment utilizing medications and intensive CBT for refractory BDD are warranted. In summary, our results suggest that although BDD patients often present with a complex array of severe compulsive, depressive, and anxiety symptoms, they may respond well to a comprehensive, multimodal approach, very similar to that found effective for refractory OCD.

Drug name: buspirone (BuSpar).

REFERENCES

- Rich N, Rosen JC, Orosan PG. Prevalence of body dysmorphic disorder in non-clinical populations. Presented at the 26th annual convention of the Association for the Advancement of Behavior Therapy; Nov 2, 1992; Boston, Mass
- Zimmerman M, Mattia JI. Body dysmorphic disorder in psychiatric outpatients: recognition, prevalence, comorbidity, demographic, and clinical correlates. *Compr Psychiatry* 1998;39:265–270
- Veale D, Boocock A, Gournay K, et al. Body dysmorphic disorder: a survey of fifty cases. *Br J Psychiatry* 1996;169:196–201
- Simeon D, Hollander E, Stein DJ, et al. Body dysmorphic disorder in the DSM-IV field trial for obsessive-compulsive disorder. *Am J Psychiatry* 1995;152:1207–1209
- Phillips KA, Gunderson CG, Mallya G, et al. A comparison study of body dysmorphic disorder and obsessive-compulsive disorder. *J Clin Psychiatry* 1998;59:568–575
- Hollander E, Cohen LJ, Simeon D. Body dysmorphic disorder. *Psychiatr Ann* 1993;23:359–364
- Phillips KA. Body dysmorphic disorder: the distress of imagined ugliness. *Am J Psychiatry* 1991;148:1138–1149
- Hollander E, Liebowitz MR, Winchel R, et al. Treatment of body dysmorphic disorder with serotonin reuptake blockers. *Am J Psychiatry* 1989;146:768–770
- Phillips KA, Dwight MM, McElroy SL, et al. Efficacy and safety of fluvoxamine in body dysmorphic disorder. *J Clin Psychiatry* 1998;59:165–171
- Hollander E, Allen A, Kwon J, et al. Clomipramine vs desipramine cross-over trial in body dysmorphic disorder: selective efficacy of a serotonin reuptake inhibitor in imagined ugliness. *Arch Gen Psychiatry* 1999;56:1033–1039
- Veale D, Gournay K, Dryden W, et al. Body dysmorphic disorder: a cognitive behavioural model and pilot randomised controlled trial. *Behav Res Ther* 1996;34:717–729
- Rosen JC, Reiter J, Orosan P. Cognitive-behavioral body image therapy for body dysmorphic disorder. *J Consult Clin Psychol* 1995;63:263–269
- Neziroglu F, Yaryura-Tobias JA. A review of cognitive behavioral and pharmacological treatment of body dysmorphic disorder. *Behav Modification* 1997;21:324–340
- Foa EB, Kozak MJ. DSM-IV field trial: obsessive-compulsive disorder. *Am J Psychiatry* 1995;152:90–96
- McKay D, Neziroglu F, Yaryura-Tobias JA. Comparison of clinical characteristics in obsessive-compulsive disorder and body dysmorphic disorder. *J Anxiety Disord* 1997;11:447–454
- Munro A, Chmara J. Monosymptomatic hypochondriacal psychosis: a diagnostic checklist based on 50 cases of the disorder. *Can J Psychiatry* 1982;27:374–376
- Greist JH, Jefferson J, Koback KA, et al. Efficacy and tolerability of serotonin transport inhibitors in obsessive-compulsive disorder: a meta-analysis. *Arch Gen Psychiatry* 1995;52:53–60
- Hohagen F, Winkelmann G, Rasche-Rauchle H, et al. Combination of behaviour therapy with fluvoxamine in comparison with behaviour therapy and placebo: results of a multicentre study. *Br J Psychiatry* 1998;173(suppl 35):71–78
- Simpson HB, Gorfinkle KS, Liebowitz MR. Cognitive-behavioral therapy as an adjunct to serotonin reuptake inhibitors in obsessive-compulsive disorder: an open trial. *J Clin Psychiatry* 1999;60:584–590
- Calvocoressi L, McDougle CI, Wasylink S, et al. Inpatient treatment of severe obsessive-compulsive disorder. *Hosp Community Psychiatry* 1993;44:1150–1154
- Bystritsky A, Munford PR, Rosen RM, et al. A preliminary study of partial hospital management of severe obsessive-compulsive disorder. *Psychiatr Serv* 1996;47:170–174
- Eisen JL, Rasmussen SA. Obsessive compulsive disorder with psychotic features. *J Clin Psychiatry* 1993;54:373–379
- DiNardo PA, Barlow DH. Anxiety Disorders Interview Schedule-Revised (ADIS-R). New York, NY: Graywinds Publications; 1989
- Goodman WK, Price LH, Rasmussen SA, et al. The Yale-Brown Obsessive Compulsive Scale, 1: development, use, and reliability. *Arch Gen Psychiatry* 1989;46:1006–1011
- Phillips KA, Hollander E, Rasmussen SA, et al. A severity rating scale for body dysmorphic disorder: development, reliability, and validity of a modified version of the Yale-Brown Obsessive Compulsive Scale. *Psychopharmacol Bull* 1997;33:17–22
- Hamilton M. Diagnosis and rating scale for depression. *Br J Psychiatry* 1960;3:76–79
- Hamilton M. A rating scale for anxiety. *J Neurol Neurosurg Psychiatry* 1960;23:56–62
- Endicott J, Spitzer RL, Fleiss JL, et al. The Global Assessment Scale: a procedure for measuring overall severity of psychiatric disturbance. *Arch Gen Psychiatry* 1976;33:766–771
- Phillips KA. Pharmacologic treatment of body dysmorphic disorder. *Psychopharmacol Bull* 1996;32:597–605
- Goodman WK. Obsessive-compulsive disorder: diagnosis and treatment. *J Clin Psychiatry* 1999;60(suppl 18):27–32
- Lieberman RP, DeRisi WJ, Mueser KT. Social Skills Training for Psychiatric Patients. New York, NY: Pergamon Press; 1989
- Microsoft Excel User's Guide. Redmond, Wash: Microsoft Corp; 1993
- Bystritsky A, Saxena S, Maidment KM, et al. Quality-of-life changes among patients with obsessive-compulsive disorder in a partial hospitalization program. *Psychiatr Serv* 1999;50:412–414

CME POSTTEST

A Retrospective Review of Clinical Characteristics and Treatment Response
in Body Dysmorphic Disorder Versus Obsessive-Compulsive Disorder

Instructions

Participants may receive up to 1 hour of Category 1 credit toward the American Medical Association Physician's Recognition Award by reading the CME article and correctly answering at least 70% of the questions in the posttest that follows.

1. Read each question carefully and circle the answer on the Registration form.
2. Type or print the registration information in the spaces provided, and complete the evaluation.
3. Send the Registration Form along with a check, money order, or credit card payment in the amount of \$10 to the address or fax number listed on the Registration Form.

4. For a credit certificate to be issued, answers must be postmarked by the deadline shown on the CME Registration Form. After that date, correct answers to the posttest will be printed in the next issue of the *Journal*.

All replies and results are confidential. Answer sheets, once graded, will not be returned. Unanswered questions will be considered incorrect and so scored. Your exact score can be ascertained by comparing your answers with the correct answers to the posttest, which will be printed in the *Journal* issue after the submission deadline. The Physicians Postgraduate Press, Inc. Office of Continuing Medical Education will keep only a record of participation, which indicates the completion of the activity and the designated number of Category 1 credit hours that have been awarded.

1. A common symptom of body dysmorphic disorder (BDD) is:
 - a. Repetitive hand-washing
 - b. Repetitive bingeing and purging
 - c. Repetitive mirror-checking
 - d. Repetitive hair-pulling
 2. The type of psychotherapy found to be preferentially effective for BDD is:
 - a. Interpersonal psychotherapy
 - b. Psychodynamic psychotherapy
 - c. Interoceptive exposure to physiologic cues
 - d. Exposure and response prevention
 3. BDD has not been found to respond to:
 - a. Serotonin reuptake inhibitors
 - b. Electroconvulsive therapy
 - c. Cognitive-behavioral therapy
 - d. Intensive, multimodal treatment
 4. Multimodal treatment that combines medications and cognitive-behavioral therapy:
 - a. Appears to be more effective for severe obsessive-compulsive disorder (OCD) than either modality alone
 - b. Ameliorates OCD symptoms but not depressive symptoms
 - c. Ameliorates OCD symptoms but does not improve overall functioning
 - d. Does not help patients who have previously failed outpatient behavioral therapy
 5. BDD patients have been found to differ significantly from OCD patients in:
 - a. Impairment of insight
 - b. Age at onset
 - c. Scores on the Yale-Brown Obsessive Compulsive Scale
 - d. Male-female prevalence ratio
 6. This study found significant, pretreatment differences between OCD patients and BDD patients in:
 - a. Severity of obsessions
 - b. Severity of compulsions
 - c. Severity of anxiety symptoms
 - d. Overall functional impairment
 7. In this study:
 - a. OCD symptoms improved more than BDD symptoms.
 - b. BDD symptoms improved more than OCD symptoms.
 - c. Compulsions improved, but obsessions did not.
 - d. BDD and OCD symptoms responded equally well.
 8. In this sample of BDD patients treated with intensive, multimodal treatment, all of the following occurred, except:
 - a. BDD symptoms improved significantly.
 - b. Obsessions improved, but compulsions did not.
 - c. Depressive symptoms improved significantly.
 - d. Anxiety symptoms improved significantly.
- Note:** Because the expiration date for *The Journal of Clinical Psychiatry* CME activities has been extended from 6 months to 1 year, no answers will be published until July 2001.

CME REGISTRATION/EVALUATION

A Retrospective Review of Clinical Characteristics and Treatment Response
in Body Dysmorphic Disorder Versus Obsessive-Compulsive Disorder

Circle the one correct answer for each question.

- | | |
|------------|------------|
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| 2. a b c d | 6. a b c d |
| 3. a b c d | 7. a b c d |
| 4. a b c d | 8. a b c d |

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- Did the method of presentation hold your interest and make the material easy to understand? ☐ Yes ☐ No
- Achievement of educational objectives:
 - Enabled me to list features shared by body dysmorphic disorder and obsessive-compulsive disorder. ☐ Yes ☐ No
 - Enabled me to describe differences between body dysmorphic disorder and obsessive-compulsive disorder. ☐ Yes ☐ No
 - Enabled me to identify strategies to treat body dysmorphic disorder. ☐ Yes ☐ No
- Did this CME activity provide a balanced, scientifically rigorous presentation of therapeutic options related to the topic, without commercial bias? ☐ Yes ☐ No
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