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An open-label study of escitalopram in body dysmorphic disorder

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Abstract

Body dysmorphic disorder (BDD) is a relatively common and impairing disorder. Selective serotonin reuptake inhibitors (SRIs) appear selectively efficacious for BDD, but pharmacotherapy research is limited, and escitalopram has not been studied. Fifteen subjects with BDD were treated with escitalopram and assessed with reliable and valid measures. BDD symptoms significantly improved ($P < 0.001$), and 73.3% ($n = 11$) of subjects were responders. Of the subjects, 46.7% were very much improved, and 33.3% were much improved. Depressive symptoms, delusionality, functioning and quality of life also significantly improved. Escitalopram was well tolerated. These preliminary data suggest that escitalopram is safe and efficacious for BDD.

Keywords

body dysmorphic disorder; dysmorphophobia; delusional disorder; escitalopram; pharmacotherapy; treatment

Introduction

Body dysmorphic disorder (BDD), a distressing or impairing preoccupation with an imagined or slight defect in appearance, is a severe and relatively common disorder (Phillips, 2001). Patients with BDD have marked impairment in functioning, notably poor quality of life and high suicidality rates (Phillips, 2001). However, the treatment of BDD treatment has received little investigation.

Only five systematic, prospective pharmacotherapy studies have been carried out in BDD. In a double-blind cross-over trial ($n = 29$), clomipramine was more efficacious than desipramine (Hollander *et al.*, 1999). In a placebo-controlled study ($n = 67$), fluoxetine was more efficacious than placebo (Phillips *et al.*, 2002). Three open-label studies [two with fluvoxamine ($n = 15$ and $n = 30$) (Perugi *et al.*, 1996; Phillips *et al.*, 1998) and one with citalopram ($n = 15$) (Phillips and Najjar, 2003)] found that a majority of patients improved. There are no studies of escitalopram for BDD.

Methods

Fifteen outpatients participated (46.7% female, $n = 7$; mean age 37.6 ± 8.8 years). Inclusion/exclusion criteria were standard for pharmacotherapy efficacy studies (Phillips *et al.*, 2002). Subjects were aged 18–65 years, had current DSM-IV BDD, a score of ≥ 20 on the Yale–Brown Obsessive Compulsive Scale Modified for BDD (BDD-YBOCS), and no past escitalopram treatment. They took no other psychotropics, and could not begin psychotherapy during the study or have begun it within the past 3 months; individuals receiving cognitive behavioural

therapy were excluded. Eleven of the 15 subjects had received a selective serotonin reuptake inhibitor (SRI) in the past; seven had received an SRI trial considered minimally adequate for BDD (Phillips, 2002). Four of these seven subjects had responded to an SRI. The hospital Institutional Review Board approved the study, and all subjects provided their written informed consent.

Reliable and valid measures were used. The BDD-YBOCS, which assesses current BDD severity, was the primary outcome measure; $\geq 30\%$ decrease in score (an empirically derived cutpoint) determined treatment response (Phillips *et al.*, 1997). The Brown Assessment of Beliefs Scale assessed delusional of appearance beliefs and categorized subjects as delusional or nondelusional, using an empirically derived cutpoint (Eisen *et al.*, 1998). Other measures were the Structured Clinical Interview for DSM-IV-TR Patient Edition (First *et al.*, 2002), which diagnosed BDD, Clinical Global Impressions (CGI) scale (National Institute of Mental Health, 1985), Hamilton Rating Scale for Depression (24-item) (Miller *et al.*, 1985), Global Assessment of Functioning (GAF) scale (First *et al.*, 2002), Social and Occupational Functioning Assessment Scale (SOFAS) (American Psychiatric Association, 1994), and LIFE Psychosocial Functioning Scale (Keller *et al.*, 1987). The SF-36 (Ware, 1993) and Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q) (Endicott *et al.*, 1993) assessed quality of life. Higher scores reflect greater severity on symptom measures. On functioning and quality of life measures, lower scores are poorer, except for the LIFE.

After a medical evaluation, subjects received unblinded escitalopram for 12 weeks: 10 mg/day for 2 weeks, then 20 mg/day for 2 weeks, and then 30 mg/day. The BDD-YBOCS, CGI, BABS and HAM-D were performed at baseline, weekly for 4 weeks, and then every other week. The other measures were completed at baseline and endpoint. Medication compliance was assessed by tablet count. Pulse, blood pressure and side-effects were evaluated at each visit. Reported side-effects are those considered possibly, probably, or almost certainly related to the medication.

Analyses are intent-to-treat with last observation carried forward. Baseline and subsequent scores on continuous study measures were compared with repeated-measures analysis of variance (using the Huynh–Feldt statistic when the assumption of sphericity was not met) or paired *t*-tests. All tests were two-tailed; the alpha level was $P < 0.05$.

Results

Fourteen (93.3%) subjects completed the study. BDD-YBOCS scores decreased significantly between baseline and endpoint (Table 1 and Fig. 1); 73.3% ($n = 11$) of subjects responded. On the BDD-CGI, almost one-half of subjects were very much improved, and one-third were much improved. The delusional of appearance beliefs (BABS score) significantly decreased, with mean scores in the poor range at baseline and good range at endpoint. Four of four subjects with delusional BDD beliefs at baseline responded to escitalopram, and seven of 11 subjects with nondelusional BDD beliefs at baseline responded. Depressive symptoms, functioning, and quality of life also significantly improved, as did suicidality, as assessed by the HAM-D suicide item ($F = 3.6$, $P = 0.001$). The mean endpoint escitalopram dose was 28.0 ± 6.5 mg/day, and the mean time to BDD response was 4.7 ± 3.7 weeks (range 1–12 weeks). Adverse events occurring in 10% or more of subjects were fatigue ($n = 6$), insomnia ($n = 5$), nausea ($n = 4$), sexual dysfunction ($n = 4$), dizziness ($n = 2$), dry mouth ($n = 2$), jaw ache ($n = 2$), jitteriness ($n = 2$) and blurred vision ($n = 2$). Side-effects were generally mild or moderate and often transient. One subject dropped out of the study because of insomnia. The only serious adverse event was medical hospitalization for complications of liposuction, occurring in one subject.

Discussion

The present study is the first to investigate the efficacy and tolerability of escitalopram in BDD, and found significant improvement across numerous domains. It is notable that almost one-half (46.7%) of patients were very much improved on the BDD-CGI. Previous BDD studies have reported rates of 15% with fluoxetine, 30% with fluvoxamine, and 40% with citalopram (Phillips *et al.*, 1998, 2002, 2003). BDD responded relatively quickly (4.7 ± 3.7 weeks), which is similar to a study with citalopram (4.6 ± 2.6 weeks) (Phillips and Najjar, 2003). By contrast, the mean time to response in other SRI studies was 6–9 weeks (Phillips, 2002). However, these comparisons should be made with caution because no study has directly compared different SRIs, and such studies are needed to further examine the time to response and the degree of response.

Of note, delusional patients were as likely to improve as nondelusional patients, which is consistent with previous BDD studies (Phillips, 2002). Functioning and quality of life also significantly improved after only 12 weeks of treatment, as in previous studies (Phillips, 2002). SF-36 and Q-LES-Q scores were markedly poor at baseline (mean of 1.8 SD poorer compared to the general population or community norms) (Endicott *et al.*, 1993; Ware, 1993); at study termination, mean scores were only 0.2 SD poorer. It is possible that functioning and quality of life may have further improved with continued treatment.

The study limitations include a small sample size, unblinded assessment of treatment outcome, and the lack of a comparison/control group. Placebo-controlled trials of escitalopram and other medications are greatly needed in BDD because few treatment studies of this severe disorder have been conducted.

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References

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th edn. Washington, DC: American Psychiatric Association; 1994.
- Eisen JL, Phillips KA, Baer L, Beer DA, Atala KD, Rasmussen SA. The Brown Assessment of Beliefs Scale: reliability and validity. *Am J Psychiatry* 1998;155:102–108. [PubMed: 9433346]
- Endicott J, Nee J, Harrison W, Blumenthal R. Quality of Life Enjoyment and Satisfaction Questionnaire: a new measure. *Psychopharmacol Bull* 1993;29:321–326. [PubMed: 8290681]
- First, MB.; Spitzer, RL.; Gibbon, M.; Williams, JBW. Structured clinical interview for DSM-IV-TR axis I disorders, research version, patient edn (SCID-I/P). New York, New York: Biometrics Research, New York State Psychiatric Institute; 2002.
- Hollander E, Allen A, Kwon J, Aronowitz B, Schneidler J, Wong C, et al. Clomipramine versus desipramine crossover trial in body dysmorphic disorder: selective efficacy of a serotonin reuptake inhibitor in imagined ugliness. *Arch Gen Psychiatry* 1999;56:1033–1039. [PubMed: 10565503]
- Keller MB, Lavori PW, Friedman B, Nielsen E, Endicott J, McDonald-Scott P, et al. The Longitudinal Interval Follow-up Evaluation: a comprehensive method for assessing outcome in prospective longitudinal studies. *Arch Gen Psychiatry* 1987;44:540–548. [PubMed: 3579500]
- Miller IW, Bishop S, Norman WH, Maddever H. The modified Hamilton Rating Scale for depression: reliability and validity. *Psychiatry Res* 1985;14:131–142. [PubMed: 3857653]
- National Institute of Mental Health. Rating scales and assessment instruments for use in pediatric psychopharmacology research. *Psychopharmacol Bull* 1985;21:839.

- Perugi G, Giannotti D, Di Vaio S, Frare F, Sacttoni M, Cassano GB. Fluvoxamine in the treatment of body dysmorphic disorder (dysmorpho-phobia). *Int Clin Psychopharmacol* 1996;11:247–254. [PubMed: 9031991]
- Phillips, KA. Body dysmorphic disorder. In: Phillips, KA., editor. *Somatoform and factitious disorders*. Washington, DC: American Psychiatric Publishing; 2001.
- Phillips KA. Pharmacologic treatment of body dysmorphic disorder: review of the evidence and a recommended treatment approach. *CNS Spectrums* 2002;7:453–460. [PubMed: 15107767]
- Phillips KA, Najjar F. An open-label study of citalopram in body dysmorphic disorder. *J Clin Psychiatry* 2003;64:715–720. [PubMed: 12823088]
- Phillips KA, Hollander E, Rasmussen SA, Aronowitz BR, DeCaria C, Goodman WK. A severity rating scale for body dysmorphic disorder. *Psychopharmacol Bull* 1997;33:17–22. [PubMed: 9133747]
- Phillips KA, Dwight MM, McElroy SL. Efficacy and safety of fluvoxamine in body dysmorphic disorder. *J Clin Psychiatry* 1998;59:165–171. [PubMed: 9590666]
- Phillips KA, Albertini RS, Rasmussen SA. A randomized placebo-controlled trial of fluoxetine in body dysmorphic disorder. *Arch Gen Psychiatry* 2002;59:381–388. [PubMed: 11926939]
- Ware, JE, Jr. *SF-36 health survey manual and interpretation guide*. Boston, Massachusetts: The Health Institute, New England Medical Center; 1993.

Fig. 1. Yale–Brown Obsessive Compulsive Scale modified for Body Dysmorphic Disorder (BDD-YBOCS) scores over time in 15 subjects with body dysmorphic disorder treated with escitalopram. There was a significant time effect [$F(3.7, 52.3) = 15.9, P < 0.001$]; all observations represent last observation carried forward.

Table 1
Scores for study measures in 15 subjects with body dysmorphic disorder treated with escitalopram

Measure	Baseline	Week 12/endpoint	Statistic	P
BDD-YBOCS	30.3 ± 5.7	14.7 ± 9.0	F = 15.9	< 0.001
CGI Improvement (BDD)		46.7% (n = 7)		
Very much improved		33.3% (n = 5)		
Much improved				
CGI Improvement (global)		46.7% (n = 7)		
Very much improved		40.0% (n = 6)		
Much improved		6.9 ± 5.2	F = 12.9	< 0.001
Brown Assessment of Beliefs Scale ^a	15.3 ± 4.7		F = 5.4	< 0.001
Hamilton Depression Rating Scale	18.1 ± 8.7	5.3 ± 4.7	t = -5.7	0.001
Global Assessment of Functioning	48.9 ± 9.2	70.7 ± 16.1	t = -6.2	< 0.001
SOFAS	52.9 ± 12.7	75.4 ± 18.4	t = 6.3	< 0.001
LIFE Global Social Adjustment	3.7 ± 0.8	2.3 ± 1.3	t = -4.9	< 0.001
SF-36 Mental health	39.4 ± 19.2	68.6 ± 13.8	t = -5.2	< 0.001
SF-36 Social functioning	38.5 ± 27.7	76.9 ± 20.9	t = -4.9	< 0.001
SF-36 Role limitations – emotional	35.9 ± 39.6	89.7 ± 21.0	t = -5.2	< 0.001
Q-LES-Q ^b	53.2 ± 16.3	72.5 ± 13.6	t = -5.2	< 0.001

BDD-YBOCS, Yale-Brown Obsessive Compulsive Scale Modified for Body Dysmorphic Disorder; CGI, Clinical Global Impressions Scale; SOFAS, Social and Occupational Functioning Assessment Scale; LIFE, Longitudinal Follow-Up Evaluation; SF-36, Medical Outcomes Study 36-Item Short Form Health Survey; Q-LES-Q, Quality of Life Satisfaction and Enjoyment Questionnaire. Data are mean ± standard deviation, or % (n); data presented use the last observation carried forward.

^aThe mean Brown Assessment of Beliefs Scale score is in the poor insight range at baseline and the good range at endpoint.

^bConverted scores for the Q-LES-Q Short Form are reported.