

## Body Dysmorphic Disorder: More than Meets the Eye

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**SUMMARY** Body dysmorphic disorder is a relatively common yet long unrecognized problem affecting mainly adolescents and young adults of both sexes. It is an obsessive disease of such intensity that it interferes with daily activities. Patients typically focus on imagined major defects in the face, nose, skin or hair. Patients often seek multiple physician assessment, but body dysmorphic disorder may be disabling and even life-threatening as a result of depression and suicidal ideation. Treatment with serotonin reuptake inhibitors and cognitive behavioral therapy may be beneficial in many patients.

**KEY WORDS:** obsessive disease; body dysmorphic disorder; dysmorphophobia

## INTRODUCTION

Long unrecognized, body dysmorphic disorder (BDD) is a relatively common problem affecting mainly adolescents and young adults of both sexes. It manifests as an unreasonable obsession with the appearance of any part of the body with such intensity that it interferes with daily activities. The face, nose, skin and hair are the most common areas of concern. As a result, patients often seek treatment from dermatologists and plastic surgeons in their search for an imaginary cure, which often remains unfulfilled. It is important that they be identified and referred to health care specialists, as this disorder may be disabling and even life-threatening, leading to depression and an increased rate of suicide if untreated (1,2). Treatment with selective serotonin reuptake inhibitors (SSRIs) and cognitive behavioral therapy (CBT) has been demonstrated to be successful in many cases.

## DEFINITION

First classified as dysmorphophobia within atypical somatoform disorders, BDD was not formally labeled as such until 1987 in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R), and criteria were only recently clarified in DSM-IV in 1994 (3). It is defined as an obsessive and irrational preoccupation with a slight or imaginary defect in one's physical appearance, to such a degree that it interferes with social, occupational or other activities. It is often associated with other conditions such as social anxiety, depressive, obsessive-compulsive and eating disorders (4,5). Delusions may be present in the more severe subtypes. It is mandatory to exclude any other mental disorder that could explain the preoccupation.

## PREVALENCE

Underdiagnosed and under-recognized for years, BDD affects 1% to 2% of the US population, involving both sexes, with an onset usually before the age of 18 (6,7). In a comparative survey of German and American college students, 5.3% and 4% of participants, respectively, satisfied the criteria for BDD. Poor body image significantly correlated to poor self-esteem, anxiety, depression, and obsessive-compulsive symptoms (8,9). It is overly represented in some groups. Up to 10% of patients with anxiety or depressive disorders are affected (10). Many patients will seek a cosmetic or surgical procedure to improve their perceived defect. Phillips *et al.* (11) found a prevalence of 10% to 14% in a screening of such clinics.

## PATHOPHYSIOLOGY

Research supports a disturbance in serotonin activity which may also be found in obsessive-compulsive disorders as well as eating disorders such as anorexia nervosa and bulimia.

## CLINICAL PRESENTATION

Teenagers tend to be self-conscious of their appearance, but in individuals with BDD, slight defect in a body part is blown out of proportion and becomes an obsession, causing significant distress, leading to time-consuming compulsive behaviors and interfering with daily activities. Many are reluctant to admit their concerns, as insight is often poor and some are delusional. They tend to be shy and overly absorbed with the area of concern. Nearly all patients suffer some impairment in functioning as a result of their symptoms, some to a debilitating degree, which can lead to repeated hospitalizations, depression and suicide (12). A nonexistent or slight flaw of the face is often the primary complaint. In a study of children and adolescents, Albertini and Phillips (13) showed that the skin and the hair were the main areas of focus in 61% and 55%, respectively. The slightest blemish, whether freckles or a mole, mild acne, minor scars or wrinkles induce disproportionate anxiety and disruption in their self-esteem, which may bring them to seek care of a dermatologist, cosmetic or plastic surgeon (14). The hair is also a major area of concern, from too little on the head to too much on the face and body, as well as the shape and size of the nose, face or any other body part, breast, genitalia as well muscle mass in boys. In boys and men, it may be expressed as an obsession to build muscles and may lead to the intake

of anabolic steroids (15). In dermatology practice, it may manifest as a preoccupation with acne and excoriated acne or skin picking (16). About one third of patients report compulsive skin picking for hours a day, at times with tweezers, pins, needles or even razor blades, causing considerable damage at times. Some are unwilling to describe the perceived deformity and will only refer to their "ugliness".

Comparing themselves to others, they become convinced that the defect is immediately obvious not only to themselves but to anybody who looks at them, even though it is barely or not noticeable. They spend a considerable amount of time compulsively trying to hide the perceived defect with make-up, clothing, or hair styling, comparing it to others, checking in the mirror or avoiding mirrors. BDD has been shown to highly correlate with lower self-esteem, obsessive-compulsive activities, depression and somatization (17). If unrecognized by practitioners, patients may go from one cosmetic surgery or procedure to another, in their frustrated search for unattainable results. In one study, dermatologic, dental or surgical procedures had been sought and performed in 36% of cases, all with a poor outcome (12). Most patients suffer impairment in their social life, job or academic career. BDD induces marked distress and anxiety, and may lead to social phobia and isolation from fear of negative evaluation, obsessive-compulsive behaviors, delusions and intrusive thoughts about one's ugliness, depression, suicide and repeated psychiatric hospitalizations (18,19). Comorbidities such as marked social phobia, depression and links to eating disorders are often present. In adults with BDD, major depression is present in 60% of cases and 80% have a history of depression (20,21). It has been shown that BDD may precede anorexia nervosa in up to 25% of patients, but it is important to differentiate the two, even if both are associated (22-24).

## ETIOLOGY

The cause of BDD is unknown (25,26), but genetics as well as a number of factors may precipitate its onset in predisposed individuals. Genetic factors are believed to play a role. Although no specific gene has been found, a predisposition to anxiety, perfectionism and obsessive-compulsive behaviors has been noted in some families. People with BDD tend to have unrealistic expectations of themselves and others. They may lack the sense of identity and become angry or even

violent at times, in particular with physicians caring for them, as their search for a solution goes unfulfilled (14). A destabilizing event such as puberty, family problems, or a new environment may be a trigger. Some may suffer from overprotective families, while others may feel abandoned, lonely, and misunderstood. At some point, pressure may have come from friends or peers. Some may feel insecure, isolated, with few or no friends for fear of rejection.

The media may also contribute to this perception by continuously projecting images of happiness and success associated with supposedly perfect faces and bodies of tightly screened models.

## DIAGNOSIS

BDD often goes unrecognized and undiagnosed as patients try their best to keep their concerns undiscovered from shame and embarrassment as well as from the lack of insight (26-28). Primary complaints may be misleading both to mental health providers and dermatologic or cosmetic surgeons (29). They may appear mainly depressed and be incorrectly diagnosed as such by psychiatrists; dermatologists may not recognize the distress associated with an apparent futile preoccupation. However, BDD is a potentially debilitating psychiatric illness which needs to be identified as it may lead to destructive or life-threatening behaviors.

Unlike normal concerns about one's appearance, this condition is associated with significant distress and impairment in social and occupational life. Close attention should be paid to small clues, such as excessive concern over a nonapparent or minor defect, amount of time spent checking or camouflaging area, skin picking, difficulty in school or at work, going from one dermatologist or surgeon to another, and being dissatisfied with previous treatments (14). Self-reporting questionnaires can be a guide. Referral to psychiatrists may not be a welcomed idea by patients, but focusing on the need to address and treat associated behaviors may be better understood. Other major primary psychiatric disorders such as early stages of schizophrenia, personality and eating disorders may include symptoms of BDD and need to be excluded.

## PROGNOSIS

The onset is usually gradual in adolescence and young adulthood (1,25,30). Untreated, it tends to be chronic and is a potentially debilitating psy-

chiatric illness which may lead to social withdrawal and professional failure, as well as depression and suicide in severe cases.

## TREATMENT

BDD is a recognizable and treatable disorder (30). The need for physicians to identify its symptoms and help patients understand the need of psychiatric help cannot be overly emphasized. It is important to avoid the cycle of multiple surgeries requested by some patients to improve their imagined flaw, as the outcome is usually poor and may lead to exacerbation of symptoms, anger and lawsuits. SSRIs and individual and group CBT have been shown to be most effective and should be used as a first line therapy (29-31). Antipsychotics are ineffective when used alone, but may be useful when added in refractory delusional cases. Psychotherapy and other medications do not help. SSRIs such as clomipramine, fluoxetine, fluvoxamine, sertraline and paroxetine have been found to be safe and effective for both delusional and nondelusional cases, and improve functioning and quality of life (32-34). Fluoxetine and clomipramine also have antidepressant activity and may be indicated in patients with associated depression, although higher doses are needed and response is delayed compared to patients with depression alone. BDD is a chronic disorder which should be followed over several years. Treatment should not be discontinued abruptly, as there is a high rate of relapse.

## References

1. Cotterill JA. Dermatological non-disease: a common and potentially fatal disturbance of cutaneous body image. *Br J Dermatol* 1981;104:611-9.
2. Cotterill JA, Cunliffe WJ. Suicide in dermatological patients. *Br J Dermatol* 1997;137:246-50.
3. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4<sup>th</sup> ed. Washington, DC: American Psychiatric Association Press, 1994.
4. Frare F, Perugi G, Ruffolo G, Toni C. Obsessive-compulsive disorder and body dysmorphic disorder: a comparison of clinical features. *Psychiatry* 2004;19:292-8.
5. Bienvenu OJ, Samuels JF, Hoehn-Saric R, Liang KY, Cillen BA, Grados MA *et al.* The relationship of obsessive-compulsive disorders: results from a family study. *Biol Psychiatry* 2000;48:287-93.

6. Phillips KA, Diaz S. Gender differences in body dysmorphic disorder. *J Nerv Ment Dis* 1997;185:570-7.
7. Castle DJ, Harrison T. The treatment of imagined ugliness. *Adv Psychiatr Treat* 1999;5:171-9.
8. Bohne A, Keuthen NJ, Wilhelm S, Deckersbach T, Jenike MA. Prevalence of symptoms of body dysmorphic disorder and its correlates: a cross-cultural comparison. *Psychosomatics* 2002;43:486-90.
9. Bohne A, Wilhelm S, Keuthen NJ, Florin I, Baer L, Jenike MA. Prevalence of body dysmorphic disorder in a German college student sample. *Psychiatry Res* 2002;109:101-4.
10. Hollander E, Aronowitz B. Comorbid social anxiety and body dysmorphic disorder: managing the complicated patient. *J Clin Psychiatry* 1999;60:27-31.
11. Phillips KA, Dufresne RG, Wilkel CS, Vittorio CC. Rate of body dysmorphic disorder in dermatology patients. *J Am Acad Dermatol* 2000;42:436-41.
12. Cotterill JA. Body dysmorphic disorder. *Dermatol Clin* 1996;14:457-63.
13. Albertini RS, Phillips KA. Thirty-three cases of body dysmorphic disorder in children and adolescents. *J Am Acad Child Adolesc Psychiatry* 1999;38:453-9.
14. Phillips KA, Dufresne RG. Body dysmorphic disorder. A guide for dermatologists and cosmetic surgeons. *Am J Clin Dermatol* 2000;1:235-43.
15. Mayville SB, Williamson DA, White MA, Netemeyer RG, Drab DL. Development of the muscle appearance satisfaction scale: a self-report measure for the assessment of muscle dysmorphia symptoms. *Assessment* 2002;9:351-60.
16. Patterson WM, Bienvenu OJ, Chodynicki MP, Janziger CK, Schwartz RA. Body dysmorphic disorder. *Int J Dermatol* 2001;40:388-90.
17. Phillips KA, Taub SL. Skin picking as a symptom of body dysmorphic disorder. *Psychopharmacol Bull* 1995;31:279-88.
18. Schneier FR, Blanco C, Antia SX, Liebowitz MR. The social anxiety spectrum. *Psychiatr Clin North Am* 2002;25:757-74.
19. Buhlman U, McNally RJ, Wilhelm S, Florin I. Selective processing of emotional information in body dysmorphic disorder. *J Anxiety Disorder* 2002;16:289-98.
20. Phillips KA, McElroy SL, Keck PE Jr, Pope HG Jr, Hudson JL. Body dysmorphic disorder: thirty cases of imagined ugliness. *Am J Psychiatry* 1993;150:302-8.
21. Castle DJ, Morkell D. Imagined ugliness: a symptom which can become a disorder. *Med J Aust* 2000;173:205-7.
22. Rabe-Jablonska JJ, Sobow TM. The links between body dysmorphic disorder and eating disorders. *Eur Psychiatry* 2000;15:302-5.
23. Stein DJ. Obsessive-compulsive disorder. *Lancet* 2002;360:397-405.
24. Biby EL. The relationship between body dysmorphic disorder and depression, self-esteem, somatization, and obsessive-compulsive disorder. *J Clin Psychol* 1998;54:489-99.
25. Pacan P, Szepletowski J. Dysmorfobia-zaburzenie psychiczne, z ktorym pacjenci zwracaja sie do dermatologa. *Przegl Dermatol* 1999;86:171-5.
26. Szepletowski J, Pacan P. Dysmorphophobia – a case report. *Dermatol Estetyczna* 2003;5:42-4.
27. Hadley SJ, Greenberg J, Hollander E. Diagnosis and treatment of body dysmorphic disorder in adolescents. *Curr Psychiatry Rep* 2002;4:108-13.
28. Phillips KA. Body dysmorphic disorder: diagnostic controversies and treatment challenges. *Bull Menninger Clin* 2000;64:18-35.
29. Grant JE, Kim SW, Crow SJ. Prevalence and clinical features of body dysmorphic disorder in adolescent and adult psychiatric inpatients. *J Clin Psychiatry* 2001;62:517-22.
30. Neziroglu FA, Hsia S, Yaryrya-Tobias J. Behavioral, cognitive and family therapy in the treatment for obsessive compulsive and related disorders. *Psychiatr Clin North Am* 2000;23:657-70.
31. Phillips KA, Albertini M, Siniscalchi MS, Khan A, Robinson M. Effectiveness of pharmacotherapy for body dysmorphic disorder: a chart-review study. *J Clin Psychiatry* 2001;62:721-7.
32. Hollander F, Allen A, Kwon J, Aronowitz B, Schmeidler J, Wong C, *et al*. Clomipramine vs desipramine crossover trial in body dysmorphic disorder. *Arch Gen Psychiatry* 1999;56:1033-9.
33. Phillips KA, Rasmussen SA. Change in psychosocial functioning and quality of life of patients with body dysmorphic disorder treated with fluoxetine: a placebo-controlled study. *Psychosomatics* 2004;45:438-44.
34. Cartwright C, Hollander E. SSRIs in the treatment of obsessive-compulsive disorder. *Depress Anxiety* 1998;8 (Suppl 1):105-13.