Review Article

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Patient Selection in Plastic Surgery: Recognizing Body Dysmorphic Disorder

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Abstract

Plastic surgery is a branch of medicine that provides significant improvements to the people with positive changes. But first of all, this branch has a characteristic which requires analysing patients' psychological situation very carefully. Plastic surgeons are often confronted by patients with mental disorders seeking aesthetic surgery. It is imperative for surgeons to recognize possible underlying psychiatric illnesses. Common psychiatric conditions seen in cosmetic surgery patients include body dysmorphic disorder (BDD), narcissistic personality disorder and histrionic personality disorders. BDD is of particular importance to plastic surgeons. Because outrageous dissatisfaction with one's appearance may conceal psychopathologic traits that are not always easily recognizable, and which, if neglected, may result in serious iatrogenic and medicolegal consequences, we hope that this paper will help plastic surgeons in ultimately preventing patient and surgeon dissatisfaction within the population of patients with psychiatric disorders, and should recognize the diagnostic features of body dysmorphic disorder and screen psychologically unstable patients who may never be satisfied with surgery.

Key words: *Psychiatry, cosmetic surgery, plastic surgery, aesthetic surgery, body dysmorphic disorder*

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Introduction

Reasons for aesthetic plastic surgery operation, to which people run, are mostly of a psychological origin. The secret to a successful outcome is the patient selection. The success of the surgery is the patient's response to change, not the beauty of the end result of the surgery. Patients with serious psychological disease or with unrealistic expectations from surgery are not satisfied with the results obtained from the surgery. Therefore, preoperative consideration of psychiatric illness is a critical part of appropriate assessment and treatment of the plastic surgery patient. Studies have shown that primary care physicians fail to diagnose as many as 50 to 70% of patients with common psychiatric illnesses [1]. A basic understanding of common psychiatric disorders is an important asset to an aesthetic surgery practice. Identification of psychiatric disorders preoperatively can prevent potential postoperative complications and reduce distress for both the patient and the

surgeon.

Among patients seeking a consultation for a cosmetic procedure, up to 47.7 percent meet criteria for a mental disorder [2]. Common psychiatric conditions seen in cosmetic surgery patients include body dysmorphic disorder (5% to 15%), narcissistic personality disorder (25%) and histrionic personality disorders (9.7%) [3]. BDD is of particular relevance to plastic surgeons [4]. This diagnosis underscores the hazardous psychological conditions motivating patients to obtain plastic surgery and the potential implications following surgical intervention. Besides, there is some evidence to suggest that these individuals may threaten or take legal action against the surgeon or become violent with the surgeon and his or her staff [4,5]. In addition, studies have suggested that cosmetic surgery patients without body dysmorphic disorder experience significant improvements in their body image postoperatively [6-9].

Body Dysmorphic Disorder

Body dysmorphic disorder is characterized by a preoccupation with a minimal or nonexistent appearance defect and causes significant distress and interferes with the social life of the patient [10-13]. Also named dysmorphophobia, the disorder usually begins in early adolescence and it is associated with poor insight, low self-esteem and functional impairment [14]. In DSM-IV-TR, it is classified as a somatoform disorder and ICD-10 classifies the disorder as a part of hypochondriasis [15]. Carrying similarities to obsessive-compulsive disorder, these patients are usually obsessive, meticulous, constantly viewing their own bodies, insecure, pessimistic and suffer various mental conflicts. DSM-IV diagnostic criteria include "preoccupation with an imagined defect in appearance. If a slight physical anomaly is present, the person's concern is markedly excessive", "the preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning", and "the preoccupation is not better accounted for by another mental disorder (e.g., dissatisfaction with body shape and size in Anorexia Nervosa)".

Despite their normal appearance, these people perceive themselves as ugly and 50-88% of patients with body dysmorphic disorder refer to the plastic surgeon for surgical operation [16-18]. Cosmetic surgical procedures are frequently the self-prescribed treatments of choice for individuals with BDD. Although these patients request multiple aesthetic procedures, they typically report heightened dissatisfaction with the result of surgery [4,10,19-22]. This ratio was 83% [23] in a study and 76% [24] in another. Besides, a minor problem such as wound healing, scar, numbness, or persistent bruising can trigger profound dissatisfaction or the BDD attack [25]. They believe that the imagined disorder is real [26], and they have repetitive compulsive behaviors like often looking in the mirror and frequently cleaning [27]. These irresistible compulsive behaviors also include camouflaging disliked body parts (e.g., with sunglasses, make-up, wigs), comparing oneself with other people, tanning, excessive shopping and excessive exercise. Furthermore, some patients may have thoughts of suicide or may attempt suicide [13,17,28,29]. Depression, obsessive-compulsive disorder, social anxiety, personality disorders and substance use disorders are common comorbid conditions, with lifetime prevalence rates of 80, 30, 38, 53 and 36%, respectively [23,25,27,30].

The prevalence of BDD is estimated between 1 and 3% of the general population [5,10,16,31-33]. However, it is experienced by up to 20% of patients requesting cosmetic surgery [10,16,25,34-37]. The incidence appears to be about equal for both sexes [4,10,25,38,39]. It is a progressive disease and it becomes evident in 70% of cases during the late teenage years. The course of the disorder is considered to be chronic if left untreated [23,28]. The perceived physical anomaly may involve the shape and size of the whole body or may be centered on single units [5,17]. The body areas mostly concerned in this disorder are the skin, hair and nose. People with BDD tend to be preoccupied with approximately 5 to 7 different body parts during their lifetime period [23,40].

Patients with body dysmorphic disorder become worse as a result of repeated cosmetic surgeries and they will have an unnatural appearance. This also leads to seeking surgery that causes a vicious circle. Because they have large distortion in their body images, it is not possible to treat this disorder with cosmetic surgery. Indeed, even if a satisfactory result is achieved, the body

dysmorphic disorder patient may blame or sue the surgeon, and they can have injurious behavior toward the surgeon [41-43]. Sarwer conducted a survey and found out that 12% of the plastic surgeons reported that they had been threatened by a dissatisfied BDD patient and 40% of the respondent surgeons were threatened physically or legally [44].

Discussion

Many of these patients seek cosmetic surgery and go to the plastic surgeons or dermatologists rather than psychiatrists. Therefore, most cases of body dysmorphic disorder will be diagnosed by plastic surgeons, not by psychiatrists. For this reason, the plastic surgeon should be aware of BDD, know how to identify the possibility of its presence, and refer the patient to a mental health care professional rather than unwittingly operate. Diagnosing body dysmorphic disorder is not only very important for the plastic surgeon for medicolegal reasons, but also to initiate appropriate psychiatric treatment for these individuals. If unrecognized, these patients may cause major personal and financial disturbances, even in well-established practices. Only a timely diagnosis will enable both surgeon and staff to adequately address the patient's needs.

When you practice aesthetic surgery, you expose yourself to risks that no other practicing physician assumes. You are not treating sick or injured patients to make them well; you are treating well people by making them temporarily unwell to make them better. This situation becomes even more complex when one realizes that the degree of improvement achieved, and the inevitable effect that the change has on the patient's self-image, may be only in the eye of the beholder. There are no established parameters. You might think the result is great, but will the patient? [45]

Because BDD is a psychiatric disorder, surgery cannot cure the patient. Although no prospective outcome studies with surgical treatment exist, the most agreed recommendation is not to operate on the BDD patients [10,46-48]. A retrospective study has shown that surgery in such patients not only results in dissatisfaction in 70 percent, but also patients may escalate complaints and bear grudges against the surgeon. In over 80 percent of cases, the patient's psychological situation will destabilize or the patient will find new defects [10,49].

Patients with previous surgery, especially those with multiple surgeries who are still dissatisfied, could likely be experiencing BDD [25]. To the surgeon, a minimum defect, a variation in size or shape, or a minimal scar catastrophized into dislike or disgust is an alert or red flag suggesting BDD [25].

Higher rates of BDD were observed in some groups, like rhinoplasty patients. Javanbakht et al., in a case-control study, assessed the frequency of mental health problems among patients who wanted to undergo rhinoplasty compared to a control group [50]. There were 44 women and 5 men in the study group, and 46 women and 4 men in the control group. They found that body dysmorphic disorder and mental problems were more prevalent in candidates for rhinoplastic surgery than the control group. Furthermore, in another study involving 226 patients, Picavet et al. reported that the prevalence of body dysmorphic disorder symptoms in a cosmetic rhinoplasty population is high and that the severity of symptoms has a clearly negative effect on daily functioning [51]. Patients undergoing revision rhinoplasty and patients with a psychiatric history are particularly at risk for body dysmorphic disorder symptoms. Aesthetic goals ($p < 0.001$), revision rhinoplasty ($p = 0.003$), and psychiatric history ($p = 0.031$) were associated with more severe symptoms. There was no correlation between the objective and subjective scoring of the nasal shape. Likewise, Alavi et al., in a cross-sectional study, recruited 306 patients referred to cosmetic surgery clinics. Analysis on disease-related variables showed that 126 (41%) patients had an associated psychiatric disorder. Moreover, 75 patients (24.5%) fulfilled the DSM IV criteria for BDD. Findings from this study support earlier studies which found that BDD is a relatively common disorder among individuals seeking aesthetic surgery, particularly in rhinoplasty patients [17].

According to the Pavan et al.'s literature review, findings show that BDD has a high rate of comorbidity with depressive disorders (estimated to be 80% of cases) [5]. Various reports in the literature have confirmed that subjects with BDD present with depressive symptoms marked by emotional lability, social withdrawal, loss of pleasure or interests, or comorbidity [50-54]. Therefore, BDD should be considered in patients with

depressive symptoms.

Philips KA et al. examined predictors of BDD remission in a prospective study of the course of BDD over 1 year with two hundred subjects [48]. They hypothesized that more severe BDD and current major depression would predict a lower likelihood of remission from BDD, and the presence of a personality disorder would be associated with a more chronic course of BDD. But they found that the following variables did not significantly predict a lower likelihood of remission: gender, race/ethnicity, socio-economic status, being an adult versus an adolescent, age of BDD onset, or delusionality of BDD symptoms. Similarly, the presence of major depression, substance use disorder, social phobia, obsessive-compulsive disorder, or an eating disorder at intake (the most common comorbid disorders) did not significantly predict BDD remission. BDD remission was also not significantly predicted by receiving mental health treatment during the follow-up period, or by receiving non-mental health treatment (e.g., surgery or dermatologic treatment) that was aimed at improving the perceived appearance defects.

When interviewing a patient, several issues should be evaluated. Motivation for surgery, personal expectations, and medical and psychiatric history are important to be considered. Unfortunately, there is no single question that will unmask BDD. The surgeon will come up with the diagnosis by combining the answers of the patient. Although there are several questionnaires such as BDD Questionnaire (BDDQ) [3,25], BDD Examination Self Report (BDDESR) [3, 41], Dysmorphic Concern Questionnaire (DCQ) [27], Body Dysmorphic Disorder Examination (BDDE) [27,55], Body Image Disturbance Questionnaire (BIDQ) [27,56], and Cosmetic Procedure Screening Questionnaire (COPS) [57] for the diagnosis of BDD, patients may not wish to apply these and may give unwanted reactions. All questionnaires require patient motivation before a consultation. BDD patients are often secretive and, therefore, may not be willing to fill out such questionnaires. Questionnaires are useful tools, but are not very practical in a busy practice. Moreover, there is no uniformly accepted questionnaire eliminating the impressionistic process of diagnosing BDD [10,43,58].

The best test to recognize the BDD is a personal interview between surgeon and patient [1]. BDD is considered to be a contraindication for surgery [4,41,59-61]. Once BDD is suspected, the patient should not be operated on and should be referred to a psychiatrist [16,23,36,46,62]. The lack of good screening tools for BDD in patients seeking cosmetic surgery makes it difficult to diagnose the BDD patients [41]. Therefore, improving your communication skills and being alert to potential problem patients is the key to enhanced success [3]. Thomas et al. believe that the best test for identification of psychiatric illness is a personal interview between surgeon and patient [1].

Gorney M. emphasizes in his article that "there are certain groups of patients with easily identifiable characteristics that constitute a red flag: those with great expectations, the demanding patients, the "surgiholic", those facing marital or familial disapproval, those who are pushed into surgery by others, those with whom you are incompatible, and those with body dysmorphic disorder" [45].

Although the diagnosis of BDD must be confirmed by a psychiatrist in accordance with DSM-IV criteria and after a psychiatric interview [5], plastic surgeons must keep in mind the following questions to be able to recognize the BDD patient preoperatively:

- Do they have unreasonable expectations from the procedure?
- Are they spending money that is beyond their means?
- Do the patients experience significant social problems due to this imagined defect? (such as a broken relationship, social isolation)
- Do they have dissatisfaction with previous surgical procedures?
- Do they have excessive concern with a nonexistent deformity?
- What features of themselves are they happy with? Which parts of their body are they happy with?
- Are they camouflaging the imagined defect?
- Do they have impaired functioning and social activities?
- How much time does the patient spend thinking about a defect? Is it more than an hour?
- Is there any behavior that is not within a normal range?

As a conclusion, it is critically important to be wary, to document your recommendations to the patient and always protect yourself with high-quality, dated, preoperative, and sequential postoperative photographs. This precaution may make the difference between winning and losing the case [45].

Conflict of interest statement

The authors have no conflicts of interest to declare.

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