Psychiatric disorders in facial plastic surgery

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KEYWORDS

• Cosmetic surgery • Psychology • Borderline personality • Body dysmorphic syndrome

KEY POINTS

- Body dysmorphic disorder (BDD) and borderline personality disorder (BPD) are common in esthetic practices and may occur in up to 15% of patients.
- Although full-blown BDD and BPD may occur in a minority of esthetic patients, many more manifest traits that resemble these conditions.
- The likelihood of a satisfied surgical patient is exceedingly low in true BDD and BPD and surgery may worsen their premorbid condition.
- Avoiding surgery by adequate screening for BDD and BPD is hence essential.
- The standard of care for both conditions is a combination of cognitive behavioral therapy and selective serotonin reuptake inhibitor pharmacotherapy.

INTRODUCTION

Cosmetic facial surgery can provide satisfying results, and significantly improve self-confidence and self-esteem of patients, and most patients show little or no sign of psychological abnormality.[1–4] Yet facial surgery also potentially attracts individuals that can be difficult, if not impossible, to please. These cases have been subject of intense scrutiny for several decades.[5,6] Many of us have wondered over that singular case with a perfect postoperative result, yet who utterly failed to perceive this, and was moreover fully unresponsive to verbal intervention. What makes many patients happy with their surgical results, even if it is not spot-on at times, whereas others can engage in negative and even destructive behavior over a similar result? Understanding prevalent yet complex psychiatric disorders and their potential impact on patient behavior is quintessential in cosmetic facial surgery. In this review we discuss the global psychiatric context with a focus on two of the most prevalent and consequential conditions in the field: borderline personality disorder (BPD) and body dysmorphic disorder (BDD).[7]

SETTING THE STAGE: JUST UNHAPPY OR MENTAL DISORDER?

Every surgeon, and especially those that practice in hypercosmetic practices, will have to deal with patients that are not at the peak of happiness postsurgically. This is likely a source for stress, and may cause “blaming the patient” as a subliminal and unintended strategy.[7] Hence, one risk is that we unjustly label our dissatisfied patients as being psychological disturbed.

In rhinoplasty, the *a priori* likelihood of patients being unhappy is higher than in other cosmetic procedure.[8] The nature of the procedure makes that even small imperfections can have a meaningful esthetic impact. Also, to perform rhinoplasty to

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comply with a high level of perfection is particularly difficult and requires experience and full dedication. Hence, the dissatisfied rhinoplasty patient needs not be "mad." Rather the hypercosmetic patient, the patient who is generally pretty and desires perfecting of her looks, places surgeons for the colossal challenge of improving on an already beautiful face.[1,8] Social media and the rage of selfies has complicated this problem even more, and may have created a level of expectation that one simply cannot realistically deliver on at a reliable rate.[9] Indeed early studies revealed that technical-surgical failure to achieve perfection was the most common cause of patient dissatisfaction, rather than any kind of disorder.[10,11] Given the high expectations of our times, it is unlikely that the extremely high satisfaction rates reported in the 1960s can be replicated in our modern times.[12] Hence one early question we should ask ourselves is if we achieved a realistically satisfactory result.

Another issue that may play a role is the potentially type-changing nature of cosmetic surgery.[5] Indeed, rhinoplasty in particular can change the Gestalt of patients. An extreme type-changing procedure may require adaptation time, even if the esthetic result is otherwise flawless. Shridharani and coworkers[13] have referred to this as a "loss of identity syndrome." Ethnic issues may play a compounding role here, because some ethnicities perceive specific facial features as intrinsic.[14] Hence a second question we should ask ourselves is if we type-changed an unhappy patient too much, or perhaps too little.

Yet in understanding pathology as underlying dissatisfaction, the focus ought not so much be on dissatisfaction itself but rather on behavior, which is a critical distinction. After all, even if surgical results are suboptimal not all patients respond negatively. Although only few are truly happy, and many may experience different levels of distress, most are at least collected in their response. It is the immature response to an optimal or suboptimal surgical response that separates patients with a potential troublesome personality structure from those that are just unhappy. It is a key to identifying genuine personality disorders.

PERSONALITY DISORDERS

Rather than viewing personality disorders as a unique and distinct category, they should be perceived on a gliding scale of human personality traits that are common yet variable in intensity. Hence all people have specific personality traits that may more or less identify who they are, but they typically do not interfere with normal functioning. Yet when these traits scale-up they may well start inhibiting us from leading a full and satisfying life. It is under such circumstances that we consider personality "disorders" rather than just "traits." Personality disorders are, hence, like a blowup version of normalcy.

Personality disorders are common, affecting about 10% of the population. They usually have an onset in adolescence or early adulthood and are divided in three clusters. Cluster A disorders include paranoid personality disorder, and are unlikely to present themselves with an esthetic need. Cluster B personality disorders include BPD and narcissistic personality disorder, and are likely fairly common in those seeking cosmetic surgery. Cluster C includes avoidant personality, obsessive-compulsive personality, and depended personality. BDD, however, is categorized under the obsessive compulsive disorder (OCD) and related disorders and not under Cluster C personality disorder. Yet it is highly relevant for cosmetic medicine and is also discussed here.

BORDERLINE PERSONALITY DISORDER

The pathogenesis of BPD is multifold and has a strong genetic foundation. In terms of psychodynamic cause, several pathways have been highlighted, among which is childhood trauma.[15] The onset of BPD is typically in adolescence and progresses with age. The prevalence in the general population is around 2%, with females being more frequently affected.[4] In a cosmetic environment the rate of occurrence has been found to be much higher, some reporting almost 1 in 10.[16] Morioka and Ohkubo[4] suggest that BPD patients consult for cosmetic surgery through two general pathways. The first is the route of self-injury. The second is the route of insatiable requests for cosmetic procedures, based on their chronic unstable identity and a desire to maintain the relationship with their surgeon. Hence many so-called "polysurgery addicts" are believed to suffer from BPD.[4]

People with BPD suffer from fear of abandonment or separation insecurity, unstable emotions, anxiousness, depressiveness, unstable and conflicted close relationships, unstable identities, and unstable self-direction.[17,18] In addition they tend to be impulsive and engage in risk-taking behavior, in self-destructive or self-harm behavior, and can sometimes manifest paranoid thoughts. People who suffer from BPD are prone to external splitting, which means that those around them are categorized along a strict line of good versus bad. Those that abandon them or threaten to, may instantly flip from being a hero to a villain. Similarly,

internal splitting also occurs. It is suggested that when BPD patients go through a phase of perceiving themselves as "bad," impulsive self-harm may occur. Self-inflicted cuts or burns to the arms or legs are common: some authors report comorbid BPD in more than 50% of self-mutilants.[19] Multiple tattoos or piercings can also be an expression of self-injury. Ultimately, suicide-attempts are more prevalent among people with BPD, completed suicide being reported in up to 10%.[4,20]

BPD commonly coexists with other mental conditions. It can, for example, manifest itself in similar terms as classic mood disorders, such as depression and bipolar disorder, and may cluster around several supplementary personality disorders, such as avoidant and dependent personality disorder.[4] Especially bipolar disease can coexist, because BPD patients are equally inclined toward impulsivity and consequent emotional instability. There also seems to be a significant overlap with eating disorders, with 10% to 15% of BDD patients having comorbid BPD.[21] Morioka and Ohkubo[4] suggest that surgeons should look for the warning signs shown in **Box 1**.

People with BPD are poor candidates for cosmetic procedures, because their outcome is usually disappointing and troublesome.[4,22] Moreover external splitting can eventually turn their disappointment toward the treatment team. Lawsuits and even violence have been reported.[16] Standard of care consists of psychotherapy, and may include pharmacotherapy.[23] In terms of how to handle patients with BPD, Morioka and Ohkubo[4] suggest "a flexible and individualized approach and confident attitude." Given their sensitivity for impending abandonment, maintaining a positive relationship is key. At the same time, drawing clear boundaries is also of importance. Hence one ought to be analytical and detailed about the expected benefits and confident in the treatment plan, because patients themselves are lacking in this respect. Smaller procedures are a way to divert attention away, toward a less risky treatment plan.

Protecting the team's resilience if trouble does occur is imperative. Experiencing a BPD patient in a downward spiral can deeply erode the morale of the treating team. Those that provide care for BPD patients are at high risk for burnout.[24] Discussing the case regularly in team meetings, and agreeing on a single person to communicate with the patient on a day-to-day basis are general pearls that are of help.

Box 1
Warning signs of BPD

- Female gender
- Early 20s to 30s
- History of psychiatric disorders
- History of adverse events in childhood
- History of multiple cosmetic procedures
- Dissatisfaction or anger toward previous surgeon
- Self-harm behavior, multiple tattoos and/or piercings
- Splitting behavior
- Psychosocial impairment
- Concern with one or more body parts

BODY DYSMORPHIC DISORDER

BDD is likely the most prevalent of mental disorders in terms of its relevance to cosmetic surgery. It was first described in the late 1960s, even though related concepts emerged in medical literature more than a century ago as "dysmorphophobia."[25–27] The formal diagnosis was established in Diagnostic and Statistical Manual of Mental Disorders (DSM)-3, separating delusional and nondelusional variants as separate entities.

BDD is defined as a disproportional obsession with a minimal or imagined defect of the body, where the disproportionality relates to its obsessive undertone and dysfunctional embedding. In the historic diagnosis of dysmorphophobia, this has been described as an obsessive thought of being ugly, later described as imagined ugliness.[25,28] The likelihood of being satisfied with cosmetic surgery is exceedingly low, leading to insatiable sequential request for sequential procedures.[26] In DSM-5 BDD is categorized under OCD and related disorders, as a specific variant of OCD. Delusional and nondelusional variants are nowadays viewed as expressions of the same disease.

The population incidence of BDD has been found to be around 1.5 to 2.5 in 100, and it affects both genders about equally. Yet in those that seek cosmetic procedures, the incidence has been found to be significantly higher.[13,29–32] Sarwer reports a prevalence of 7% in women seeking cosmetic surgery, whereas Veale reports almost double that number.[33–36] Self-referrals may be for cosmetic surgery, injectables, but also for dermatology and dentistry. Obsessive attention to body muscle mass (muscle dysmorphia) may also be a variant of BDD.[37] The condition is typically chronic and rarely leads to remission.

More than 80% of cosmetic surgeons are said to have operated on patients who, in hindsight, probably had BDD.[38] These cases were mostly unknown to psychological services.[9] Cosmetic rhinoplasty is the single procedure that BDD cases are most likely to request, and the onset of BDD and the desire for rhinoplasty tend to overlap in late adolescence.[39] Although these patients may behave maturely at their consultation, things can drastically and rapidly change postsurgically.[15]

Hence, what characterizes BDD is the severe discordance between the emotional attribution to a specific facial shape, versus what others perceive. Indeed Edgerton and coworkers[40] included the degree to which the surgeon can empathize with the patient's desire as a key indicator. Hence, there is a severe and intrusive preoccupation with a physical shape that is imagined or hardly perceivable, and this concern is causing significant distress and, critically, impairs normal functioning. For up to 40% this belief is actively delusional, implying that correction is impossible, and there is a lack of disease insight.[41] Most, however, suffer from what is referred to as "overvalued ideas" rather than true delusion.[42] Although a small minority of cases may meet the full criteria, more than 40% of cosmetic rhinoplasty cases may have some symptoms of BDD.[26,43]

One of the problems with BDD is the lack of an unambiguous diagnostic tool, and the sensitivity to social and cultural vignettes. Researchers may hold preconceptual views of cosmetic surgery as cultural victimization, which may bias their definitions.[36,37,44,45] What exactly comprises a preoccupation with a perceived defect is ultimately not a matter of science. For example, all surgeons that work in a cosmetic practice know that many, if not most, of our clients are skewed toward being preoccupied with their appearance, and are detailed in their judgment. Some have argued that to avoid such bias, the nature or assumed severity of the facial trait should not even matter, but rather the emotional attribution to that trait. Hence, in this respect BDD is more one end of a spectrum rather than a unique entity. Although popular media and some sciences may implore on BDD as a construct, blaming unrealistic cultural standards and social media, true BDD does occur. The defining trait that sets BDD apart from subclinical obsession with one's appearance is dysfunction.

Hence, what sets people with true BDD apart is dysfunction. They pervasively think about their face for hours at a time, averaging 3 to 8 hours per day.[41] They are overwhelmed with distressing thoughts about their appearance; have low self-esteem as a consequence; engage in compulsive rituals, such as mirror-gazing; and are inhibited to function normally.[26] They may avoid people or skip school or work, out of shame, and hence disfunction psychosocially. BDD patients believe they are worthless and the constant subject of mockery.

In a clinical setting BDD patients are extremely detailed about their esthetic concerns, sometimes leading to drawings and self-morphed pictures, and even proto-professionalizing behavior where they suggest which surgical technique to undertake. However, they also tend to be secretive about their concerns because they fear social reprimanding. In a clinical setting they may also fear not being operated on if disclosing their condition (**Box 2**).

Full-blown cases of BDD are unlikely to be encountered in cosmetic practices, because these individuals are unlikely to be functional enough to make their way to the office. So, this correction needs to be taken into consideration when interpreting the DSM definition of BDD, which may be skewed toward overt dysfunctional psychiatry. The patients that cosmetic surgeons see are not the housebound, delusional individuals described in the mental health literature. Instead, surgeons meet apparently functional, often highly performing people seeking surgery, or more surgery. Thus, a way of understanding and recognizing these patients, a method of defining surgical BDD, would be useful in patient selection and safety.

Even for dedicated researchers, the cause BDD has been elusive. Neurobiologic processing issues may coexplain why BDD patients attribute such disproportional values to a specific facial shape. It has indeed been suggested through functional MRI studies that BDD patients process visual memory differently, lacking in global memory and focusing on detailed visual cues instead.[46] Structural differences at serotonin and dopamine levels have also been implicated.[47–49] A genetic trend

Box 2
BDD criteria (DSM-5)

- Preoccupation with one or more perceived defect or flaws in physical appearance that are not observable or seem slight to others
- Repetitive behavior (eg, mirror checking) or mental acts (eg, rumination) in response to these concerns
- Preoccupation causing clinically significant distress or impairment in functioning
- Preoccupation not explained by eating disorder, and not about bodyfat

has been reported, because 5% to 20% of BDD subject have a first-degree family member also suffering from the condition.[39,50] A genetic relation with OCD has also been reported.[48,50]

Yet environmental or sociodynamic explanations also apply.[26] Social environment can, it is assumed, modify or reaffirm the negative emotional attribution to a specific facial shape. The family is an important modifier in this context, explaining why part of the BDD literature focusses on family environment. A negative family environment, where the child is rejected, based on appearance in particular, is believed to play a causative role, particularly during adolescence.[51] Constantian[15] and others have related BDD to childhood trauma and regressed states. The sense of being defective is being localized in childhood, through a series of distinct pathways, eventually leading to body shame, which connects low self-esteem to body shape and can lead people to inappropriately seek out plastic surgery. The common denominator is that a child is given the feeling of not being good enough or fit for his or her parents.

In more than 90% BDD coincides with other and multiple psychiatric conditions, such as depression, anxiety, social phobia, OCD, and eating disorders.[52] Some studies found that more than 50% of BDD patients have a lifetime history of anxiety.[39] Personality disorders are common, mostly Cluster C. This implies that a history of psychiatric comorbidity may be viewed to strengthen the clinical case for BDD. A repeat history of cosmetic procedures, revision cases that started their primary rhinoplasty with a near-normal nose, and cases that present themselves as depressed and highly demanding are perhaps at higher risk of BDD.[14] Personality disorders overlap in terms of definition, and commonly coexist with each other or other psychological problems, such as depression or anxiety, making diagnosing and managing these cases a complex task. BDD patients, for example, commonly manifest the same splitting behavior as is common in BPD. The two commonly coexist and may overlap.

The typical presentation of the BDD patient preoperatively has been laid out. Yet if one operates on these cases, knowingly or unknowingly, the course is typically one of intense and unmitigated dissatisfaction with the results, in spite of possible initial satisfaction at cast removal. Surgery is hence not an adequate nor suitable solution for these people's grievances, because only in a minority it leads to remission. In some cases it may even worsen the condition.[37,53] Constantian and Lin[54] report only 3% of BDD cases being happy with their result after a single rhinoplasty procedure, typically leading to an insatiable need for sequential procedures. Patients are typically inaccessible for argument, angry, and can spin into fierce aggression and sometimes social isolation. Aggression can express itself physically, but also legally or, nowadays, though social media. Several cases of aggression toward surgeons have been reported. Hence, their unhappiness deeply intertwines with negative affect toward the operating surgeon. Feeling betrayed, which may reveal coinciding of BPD, is a key emotion that is described repeatedly.[14] Aggression can also turn on oneself, because the annual rate of completed suicide is more than 40 times that of normal population.[41]

Given the potential impact on the postoperative course, timely diagnosing BDD at the intake procedure is appropriate. However, the diagnosis is commonly missed.[37,41] Phillips and Hollander[41] recommend screening for BDD in cosmetic surgery. Several tools stand at our disposition for this purpose. Some are based on experience, and specific red flags can be probed for during the consultation intake. Additionally, a specific number of questionnaires has been developed, specifically the Body Dysmorphic Disorder Examination Self-Report[55] and the Yale-Brown Obsessive Compulsive Scale for Body Dysmorphic Disorder.[56] Yet psychological questionnaires, be it disease specific or generic, alone cannot solve the dilemma of screening for psychologically complicated patients.[14] Although BPD and BDD patients are likely to fall through the cracks, many more may suffer from a range of emotional distress unrelated to their surgical desire. For others, emotional distress may be an adequate response. Many patients resist the diagnosis, if only because it precludes surgery. Hence some commonsensical perspective remains useful. Some practical signs that notify of impending problems are shown in **Box 3**.[9,41]

The gold standard of management of BDD is treatment with a selective serotonin reuptake inhibitor–type antidepressant in a high dose, reducing distress in up to almost three-quarters of cases. Referral for cognitive behavioral therapy and, if trauma related, EMDR therapy, is a good adjunct therapy.[37,39,57–60] Pharmacotherapy is especially essential for more severe cases of BDD, and undertreatment is common.[41]

FAMILY HISTORY AND CHILDHOOD TRAUMA AS A COMMON PATHWAY

About 20 years ago physicians at Kaiser Permanente in San Diego, California devised a weight loss program that seemed to have infinite promise.

The program was a failure. Instead of thin, happy people, the program generated depression, divorce, anxiety attacks, and suicide attempts. Many patients regained their lost weight. The researchers also uncovered the disturbing fact that behind the medicating effect of overeating were stories of childhood abuse and neglect. They reluctantly concluded that obesity was not a problem for these patients, but rather a solution.[61] Compelled to look further, Drs Vincent Felitti and Robert Anda studied the types of childhood trauma they were seeing, releasing their findings in 17,337 patients. When this middle class (80% White, 10% Black, 10% Asian) general medical population was asked about 10 common types of childhood abuse or neglect (emotional abuse, emotional neglect, physical abuse, physical neglect, sexual abuse, violence against the mother, divorce, alcohol or drug abuse in the family, mental illness in the family, imprisonment, or suicide), 64% had at least one positive answer. Furthermore, the more positive answers patients had, the worse their health: heart disease, pulmonary disease, hypertension, hypercholesterolemia, depression, obesity, and many other common adult illnesses.[62–65]

Constantian's Adverse Childhood Experiences Study (ACE) duplicated the study in a plastic and reconstructive surgery population. Only postoperative patients were tested, putting results in context. Was patient behavior depressed? How much pain medication did they need? Did the patients mention shame? What were their current health problems? Most importantly, were the patients satisfied postoperatively? Patients younger than age 21 were excluded. Participation was explicitly voluntary, but not one patient refused to be included. Two hundred-eighteen patients completed the survey, 76% women and 34% men. Ninety-four percent of the patients were White, 2% Black, 2% Asian, and 2% Latino. Mean age was 54 (range, 22–81). Seventy-nine percent had completed college or graduate school. Seventy-eight percent were employed, 10% unemployed, and 12% retired. Of the entire group, 86% were esthetic surgery patients (80% rhinoplasty and 20% other facial surgery or breast surgery) and 14% were reconstructive patients (skin cancers, reconstructive facial surgery, or hand surgery). Most patients had health insurance or income that covered esthetic surgery. The study population shared similarities to the Kaiser group and was not disadvantaged.

Among the rhinoplasty patients, 33% were primary rhinoplasties and 67% were revision patients. Seventy-five percent of the revision patients originally had normal noses. Typical expressed reasons for having had surgery were: "to be as pretty as my sister," "because I was an ugly baby," "so people would love me" (**Table 1**).

Whereas 64% of the Kaiser patients had at least one positive answer, 79% of this study's patients did (P<.001). Reconstructive patients had almost the same individual positive scores as the Kaiser patients (61% vs 64%, respectively). Not only were overall prevalences higher than the Kaiser group, but 4 of the 10 individual trauma types

Box 3
Practical warning signs

- Disconnect between intensity of preoccupation and severity of problem
- Impairment in normal socioemotional functioning (ie, school, work, and relations)
- Preoccupation (>1 hour per day) with appearance (ie, mirror gazing, camouflaging)
- Referential thinking (that others also perceive the problem as intensely)
- Previous requests for surgery
- Unrealistic expectations
- Demanding or unpleasant behavior toward personnel
- Viewing surgery as the solution to problems in other domains of life

Table 1
Component rates for ACE patients

	Our Patients (%)	Kaiser Value (%)	*P* value
Emotional abuse	41	11	<.0001
Physical abuse	25	28	.824
Sexual abuse	23	21	.184
Emotional neglect	38	15	<.0001
Physical neglect	12	9	.132
Parental separation or divorce	28	23	.082
Mother treated violently	11	13	.742
Household substance abuse	36	27	.002
Household mental illness	29	19	<.0001
Incarcerated household member	6	5	.149

were significantly higher than the Kaiser Permanente group (emotional abuse, emotional neglect, household substance abuse, and household mental illness). Separating the study groups according to their reasons for surgery, revealing differences were found. The mean ACE score for reconstructive patients was 2.0 but for BDD patients it was 4.3 ($P<.029$). Similarly, whereas 12.5% of the Kaiser patients had a total of ACE of four or more, similar to our reconstructive patients (16%), BDD groups had more than double the Kaiser rate at 36%. Like the Kaiser Permanente study, the number of positive ACE answers correlated with patient health. Even in this small population, dose-related correlations existed with depression, hypertension, hyperlipidemia, obesity, headaches, cancer, recreational drug use, irritable bowel, asthma, chronic obstructive pulmonary disease, arthritis, and excessive requests for pain medication.

This patient population, with an average age of 56, had health problems that correlated with their childhood trauma and manifested 35 to 50 years later. For many individuals, the effects of childhood do not dissipate: their minds, behaviors, lifestyles, and abilities to care for themselves each suffer. Detailed data are beyond the scope of this article but will be published shortly.[14] However, when segregating the groups according to surgical type (reconstructive, cosmetic nonrhinoplasty, primary rhinoplasty, revision patients who originally had deformities, and revision patients who originally had normal noses), those who originally had normal noses were youngest at their first surgeries, youngest at their first other cosmetic surgeries, most likely to be single (55%), and the most likely to explicitly mention shame to the surgeon (73% compared with 16% of reconstructive patients, 24% of cosmetic nonrhinoplasty patients, 39% of primary patients, and 64% of other revision rhinoplasty patients; $P<.001$).

Childhood abuse and neglect create shame, most commonly body shame.[66] If we begin with self-injurious, obsessive, intemperate, poor adult health, or addictive behaviors including BDD and work backward, each leads to dysfunctional family systems, shame, and childhood neglect or abuse, independent of socioeconomic conditions.[67–69] If we begin with childhood, the effects of developmental trauma can produce body shame-based, self-injurious, obsessive, intemperate, or addictive behaviors; poor adult health; and BDD.[66] Thus the connection between family, childhood, body shame, and body image disorders works in either direction, starting from childhood or starting from its adult sequelae. Adding our observations to the existing literature, it is possible to trace a pathway in which childhood trauma is the seed; shame its core manifestation; and dysregulation, addictions, and disease are its poisonous blooms. Many elective plastic surgery patients have had traumatic childhoods that impact self-worth and that can later manifest as body shame, perfectionism, an obsessive desire for plastic surgery, or postoperative anger, even with good results. The often inexplicable and sometimes irrational behavior that so taxes theses patients' families, friends, and caregivers is not their fault.

Thus, surgical BDD is not determined by what happens after surgery, but what goes before. Not every unhappy patient is body dysmorphic. Postoperative distress is not the key. The key to surgical BDD is what drove the surgery: shame and the desire for self-worth. These patients cited original motives of self-esteem, self-perfection, or shame, not deformity. Any addictive substance, not even repeated plastic surgery, will never be enough to satisfy the patient's goal. That is why the size of the deformity does not justify the patient's level of distress. Why should it? It is not about the deformity.

DISCUSSION

The general population incidence of mental illness is estimated to be around 20%. Among clients that visit for cosmetic surgery, however, the incidence is believed to be significantly higher, some reporting half or even more meeting International Statistical Classification of Diseases and Related Health Problems-10 criteria for mental disorder.[16] In general the estimate of the incidence of psychopathology in patients seeking cosmetic surgery has been highest in earlier reports (1950s and 1960s) and has shown a consistently decreasing trend over time, perhaps suggesting a role of cultural vignettes.[26] Mental disease in itself is not by definition a reason to avoid cosmetic surgery, because many have been shown to be satisfied with the results of surgery.[40] It is those, however, that are unlikely to be happy regardless of the surgical results, and those that are at risk to harm themselves or the treatment team, that need to be identified. BPD and BDD are the two most relevant to cosmetic surgery. Both conditions occur in about 10% to 15% of cosmetic candidates and tend to coexist with other mental disorders. BPD and BDD patients are considered poor candidates for surgery because the likelihood of aggravating their premorbid condition is high and the likelihood for a satisfying outcome low. Adequate screening for these conditions is hence considered critical, even though milder cases may be able to dodge

these instruments. Pragmatic vigilance for mental comorbidity, social dysfunction, and childhood trauma may hence be of use.

DISCLOSURE

None.

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