Review Article

Psychiatric disorders in aesthetic medicine: the importance of recognizing signs and symptoms

Transtornos psiquiátricos na medicina estética: a importância do reconhecimento de sinais e sintomas

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■ **ABSTRACT**

Psychiatric disorders are widely reported in patients seeking aesthetic treatments. Although they are not necessarily a contraindication for procedures, the recognition of these symptoms by the professional tends to strengthen the professional-patient relationship, thus leading to a better prognosis. This reduces the chances of dissatisfaction, complications, and aggravation of psychiatric symptoms, in addition to avoiding legal complications. In this article, the most common psychiatric disorders arising in cosmetic and aesthetic treatment are presented and discussed, as well as guidelines for recognizing the symptoms and managing these patients.

Keywords: Aesthetics; Plastic surgery; Psychiatry; Mental health; Body dysmorphic disorders.

■ **RESUMO**

Transtornos psiquiátricos são amplamente evidenciados em pacientes que buscam tratamentos estéticos. Apesar de não configurarem necessariamente uma contraindicação para a realização de procedimentos, o reconhecimento desses sintomas pelo profissional tende a contribuir para o fortalecimento da relação profissional-paciente e para um melhor prognóstico, reduzindo as chances de insatisfação, complicações e agravos nos sintomas psiquiátricos, além de evitar complicações legais. No presente artigo, os transtornos psiquiátricos mais comuns no domínio cosmético e estético foram apresentados e discutidos, assim como as orientações para o reconhecimento de sintomas e de manuseio destes pacientes por profissionais de saúde.

Descritores: Estética; Cirurgia plástica; Psiquiatria; Saúde mental; Transtornos dismórficos corporais.

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INTRODUCTION

According to the International Society for Aesthetic Plastic Surgery[1], in 2013 Brazil was the country in which the most plastic surgeries were carried out, and was second only to the United States in the number of non-surgical cosmetic procedures. Various demographic, social, and psychological factors have been proposed as predictors of desire for aesthetic procedures; however, these factors might vary according to the procedure, culture, and religion of a society[2]. Studies have found that the main reason for patients to request aesthetic procedures is a hope of becoming more satisfied with their appearance and improving their psychosocial functioning[3].

Technological developments in the aesthetic field have provided the possibility of carrying out an even wider range of procedures. Modern aesthetic procedures, both surgical and minimally invasive, allow the treatment of various body dysmorphic and aesthetic dysfunctions, such as acne, stretch marks, cellulitis, localized fat, and scars, among others[4].

Moreover, aesthetic medicine also interacts with post-surgical rehabilitation, which is often essential for the recovery of individuals in postoperative stages. Therefore, the development of aesthetic medicine provides not only reconstruction of the body image but also rehabilitation and promotion of physical, mental, and social health.

In the context of mental health, it is known that the aesthetic dysfunctions are associated with several psychiatric disorders, such as depression, anxiety, and post-traumatic stress disorders, by damaging self-esteem and quality of life[5]. It seems clear that a successful aesthetic procedure could lead to fundamental emotional improvements, such as self-image enhancement and higher self-esteem, consequently affecting the quality of life and mental health[3].

Thus, several studies have demonstrated improvement in the psychosocial functioning of subjects who underwent aesthetic treatments[4,6]. On the other hand, patient failure or dissatisfaction after an aesthetic procedure could lead to a worsening of symptoms, especially when the patient already has a history or current diagnosis of certain psychiatric disorders[7].

Studies show that about 50% of individuals seeking aesthetic treatments fulfill the diagnostic criteria for psychiatric disorders, mainly associated with body image disorders[8]. A study carried out in 2011 found that 21-59% of the patients who underwent aesthetic surgeries presented higher scores regarding physical dissatisfaction and symptoms of psychiatric disorders than members of the general population[9].

According to Ritvo et al.[7], although such disorders are common, the aesthetic treatment of this population can be very challenging, especially because, in many cases, the patients are obsessed with body image and not satisfied with the results of the procedures. Therefore, familiarization with and recognition of the signs and symptoms of psychiatric disorders can be very important for professionals in the aesthetic field, to avoid having patients undergo unsatisfactory procedures, and (in the context of the growing importance of medical-legal disputes) to avoid lawsuits. Taking these aspects into account, the present article aims to describe the most common psychiatric disorders in the aesthetic domain, and to guide professionals in the recognition of the signs and symptoms of psychiatric disorders and the management of patients with these disorders.

OBSESSIVE-COMPULSIVE DISORDERS (OCD)

Body Dysmorphic Disorder

Body dysmorphic disorder (BDD) is a psychiatric disorder included within the category of obsessive-compulsive disorders, characterized by the individual's exaggerated concern with appearance. In this sense, BBD is mainly characterized by excessive preoccupation with one or more defects or failures in physical appearance that are not observable by third parties, or only slightly visible. This distortion in perception generates intrusive thoughts and repetitive behavior, difficult to control, that can last 3 to 8 hours a day, causing intense distress and damaging multiple aspects of life.

However, it is important that a professional knows how to differentiate BDD from anorexia and bulimia. While in those disorders the concern is with the size or shape of the body , BDD refers to one or more specific body parts, such as the nose, mouth, chin, breasts, head, hair, legs, or hips[10].

Studies have found that the prevalence of BDD in the general population ranges from 1-3%[11]. On the other hand, despite the low prevalence in the general population, the prevalence of BDD in subjects seeking dermatological treatment or plastic surgery can vary from 5 to 15%[12], reaching more than 50% in some populations[13]. Owing to this high prevalence, BDD is the most extensively studied psychiatric disorder in the literature on aesthetic procedures.

Evidence suggests that patients with higher levels of BDD symptoms are less satisfied with the results of aesthetic surgeries, and present higher levels of psychological symptoms and lower levels of self-esteem than patients with less expressive BDD[9].

Similarly, other studies have shown that the more extensive the symptoms of the disorder, the greater the dissatisfaction of the patient after a procedure[14].

Thus, some studies have concluded that carrying out aesthetic procedures in this population, besides not generally improving BDD symptoms[15,16], might actually result in exacerbation of the symptoms[17], or in the appearance of other exaggerated body concerns[18]. In addition, studies have reported that rhinoplasty is the most prevalent aesthetic procedure among patients with BDD, mainly owing to the central position of the nose in the face[19,20].

EATING DISORDERS

Anorexia Nervosa and Bulimia nervosa

Anorexia nervosa is a serious and complex eating disorder, in which people seek excessive weight loss, leading to extreme thinness. This disorder mainly affects women, resulting in body weight significantly lower than the healthy minimum. Three fundamental characteristics are evidenced in this disorder: persistent restriction in caloric intake, intense fear of gaining weight, and disturbance in self-perception of body weight or shape[10].

Anorexia nervosa can be sub-classified into two different forms: a binge eating/purging type of anorexia, or a restrictive type of anorexia. The first is characterized by recurrent episodes of binge eating followed by purging behaviors (auto-induced vomiting, use of laxatives, etc.); the second by weight loss due to dietary restriction, with no alternation of binge eating and purgative behaviors[10].

Bulimia nervosa is also considered an eating disorder, characterized by recurrent episodes of uncontrolled binge eating, in which excessive food intake occurs in a short period of time (usually less than 2 hours, with episodes at least once a week) and by a lack of self-control over food consumption. These episodes are accompanied by recurrent inappropriate compensatory behaviors (purging) that aim to prevent weight gain. It is important to point out that the binging and purging usually occur discretely[10].

Although both anorexia and bulimia are related to the fear of gaining weight, the symptoms are different. In anorexia nervosa, the weight loss is severe, and usually leaves the person malnourished; in contrast, bulimics generally maintain a normal body weight. Nevertheless, it is estimated that in 10% to 15% of cases, bulimia can evolve into anorexia nervosa; it is also possible for these two syndromes to appear in alternation[10].

Despite the importance of eating disorders, few studies have examined the psychological ramifications of performing aesthetic procedures in people with eating disorders. In this sense, it is important to note that eating disorders might be of particular concern for patients interested in body contouring procedures. A study carried out by Jávo et al.[21] showed that women with eating problems are more interested in aesthetic procedures than female controls. In addition, the authors found that interest in liposuction was twice as high in this population as in women without eating disorders, and was reported by 52% of participants with eating problems[21].

Some studies have reported cases of women with anorexia and bulimia who had previously undergone facial or body procedures, suggesting that these procedures might lead to exacerbation of eating symptoms[22]. However, the data are contradictory, since other studies reported that procedures such as breast implants, liposuction, and abdominoplasty reduce the risk of developing an eating disorder, as well as improving body image and self-esteem[23-25]. According to Veer et al.[26], it is possible that, even though most patients with eating disorders are satisfied with the initial results of an aesthetic procedure, it usually leads to few changes to the body image and to the subsequent quality of life.

PERSONALITY DISORDERS

It is important to note that, regardless of the area of specialization, personality-related factors can interfere with any doctor-patient relationship[27]. This is because personality affects essential behaviors, such as seeking help, treatment adherence, coping styles, decision making, lifestyle, and social support choices, among other elements that can undermine the prognosis and treatment of physical and mental diseases.

In addition, evidence suggests that the probability of being a "patient with a problematic medical relationship" is high in individuals with personality disorders[28]. In a literature review on psychosocial outcomes for patients seeking aesthetic surgery, Honigman et al.[29] found that having a personality disorder is one of the main risk factors associated with a poor prognosis.

Narcissistic Personality Disorder

Narcissistic personality disorder is characterized by a pervasive pattern of grandiosity, need for admiration, and lack of empathy, beginning in adulthood and present across a range of contexts. Narcissistic individuals are characterized by unrealistic fantasies

of success, a sense of uniqueness, hypersensitivity to evaluation by others, feelings of authority, and expectations of special treatment[10].

A recent study evaluated personality-associated characteristics in individuals seeking rhinoplasty in Iran, and found that approximately 26.7% of the individuals had narcissistic personality traits[30]. According to Veer et al.[26], perfectionist and narcissistic patients often point out almost imperceptible imperfections in their appearance, and might have an increased chance of being disappointed with any level of asymmetry, or appearance of surgical scars or stains, following a procedure.

Histrionic Personality Disorder

This disorder is characterized by a pattern of excessive emotionality and a need to call attention to oneself, including approval-seeking and inappropriately seductive behavior, usually dating from the beginning of adulthood. These individuals are vivid, dramatic, animated, and flirtatious, and alternate their states between enthusiasm and pessimism[10].

Patients with histrionic personality disorder are usually emotional, and tend to focus on personal appearance rather than on procedures. It is common for these patients to seek aesthetic treatment after a disappointment, such as the end of a relationship or loss of a job. Patients with this type of psychiatric disorder must be monitored closely after a procedure, since they tend to focus on the smallest details. The success of a cosmetic procedure consistently leads to stabilization of the psychiatric symptoms. However, there is a high probability that the patient will become depressed if he or she does not like the results[31].

Borderline Personality Disorder

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Borderline Personality Disorder (BPD) is characterized by an inflexible pattern of emotional instability and by affective dysregulation, producing an emotional polarization that interferes with interpersonal relationships, self-image, and affects, consequently leading to impulsive or startling behaviors[10].

The intensity of the emotional variability evidenced in this disorder, in particular the prevalence of love-hate relationships, generates anguish, feelings of abandonment, and perception of invasion of the ego, which often generates impulsive behavior, chronic feelings of emptiness, and dysfunctional reactions to stress, sometimes leading in turn to threats of (or attempts at) suicide, or self-mutilation. The onset of the disorder can occur in adolescence or adulthood, and the use of medical and mental health resources by these patients is significant.

A retrospective study carried out by Groenman and Sauër[32] found that the most insatiable plastic surgery patients-those who were considered addicted to plastic surgeries-showed diagnostic criteria for BPD. Some articles have reported that individuals with BPD usually have a low degree of satisfaction with the results of surgeries and aesthetic procedures[33,34]. Moreover, in a systematic review of psychiatric disorders in patients undergoing aesthetic surgeries, BPD was described as a risk factor for the worsening of psychosocial prognoses[29].

A recent review study showed that individuals with BPD tend to request corrections of various parts of the body for two main reasons: 1) to avoid abandonment by the surgeon, and 2) impulsiveness. In such cases the concern with appearance is superficial, and can change focus from one part of the body to another over time[35].

It is important for us to know that individuals with BPD often express anger, or difficulty controlling anger, which are usually directed at family or friends, but can be directed to the professional or team members in cases where they are disappointed with the behavior of the professional or with the result of the procedure, and could result in acts of violence[33,36,37].

Consequently, these individuals may not return for follow-up consultation, and will often change professionals. It is also possible that more impulsive individuals present behaviors of self-mutilation, as reported in a case study of a patient with BPD who self-mutilated as a response to the refusal of his surgeon to perform a new aesthetic surgery[35].

INVESTIGATION OF SIGNS AND SYMPTOMS BY HEALTHCARE PROFESSIONALS

To avoid possible complications that may result from performing aesthetic procedures in patients with psychiatric disorders, it is important that healthcare professionals recognize the signs and symptoms of each disorder. Therefore, it is extremely important that the medical history be taken in detail, addressing questions about the history of previous procedures, history of psychiatric disorders, and other factors that we will cover below.

Responding to the high prevalence of BDD among aesthetic patients, the National Institute for Health and Care Excellence (NICE) proposed five questions that may aid in the diagnosis of BDD, presented in annex 1. The NICE guidelines clearly state that all patients with suspected or confirmed BDD diagnosis should be referred to a psychiatrist before any procedure or surgery is performed. However, it is important to

note that, even after having received the opinion of a psychiatric specialist, the decision to perform the procedure should be taken by the professional.

Regarding eating disorders, anorexia nervosa has three essential characteristics: persistent restriction of caloric intake; intense fear of gaining weight or getting fat or persistent behavior that interferes with weight gain; and disturbance in the perception of their own weight or shape. The individual maintains a physical weight below what is minimally normal for age, gender, development, and physical health.

Bulimia nervosa is also characterized by three central features: recurrent episodes of binge eating [1] (Criterion A); recurrent inappropriate compensatory behaviors to prevent weight gain (Criterion B); and self-assessment unduly influenced by shape and body weight (Criterion D). To qualify for the diagnosis, binge eating and inappropriate compensatory behaviors should occur on average at least once a week for three months (Criterion C)[10].

Annex 2 presents the diagnostic criteria established by the DSM-5 for each of the personality disorders previously discussed. Professionals should be alert for these signs and symptoms, to identify patients with a possible diagnosis of personality disorder.

DISCUSSION

Recently, a study evaluated the association between mental health problems and the postoperative results of cosmetic surgeries, within 30 days after the procedure. The authors observed that patients with psychiatric disorders more frequently required hospital care within this time period than those without mental health diagnoses (11.1% *vs*. 3.6%; adjusted *odds ratio* [AOR]: 1.78 [95% confidence interval, 1.59- 1.99])[38].

Moreover, they found that the cost of post-surgery care for patients who needed care within 30 days after the initial procedure was, on average, 35,637 dollars[38]. Thus, in addition to the problems arising from dissatisfaction with the treatment, the higher prevalence of post-surgical complications associated with patients with psychiatric disorders can lead to high costs for both the professional and the client.

It is highly recommended that healthcare professionals refer patients who present signs and symptoms of psychiatric disorders to a specialist (psychiatrist, psychologist), who is requested to decide whether to authorize them to perform the procedure. Even with the authorization of a psychiatrist, it is up to the professional responsible for performing the aesthetic procedure to decide on its realization individually for each patient.

If the professional decides to conduct the procedure, among the main precautions raised in the literature is the use of an Informed Consent Form, containing before-and-after documentation through photographs and images, rigorous post-procedure treatment advice, and, more important than any of these, a detailed explanation of the specific risks and complications associated with aesthetic procedures, allowing the patient to thoroughly understand these issues. In addition, the patient must be aware of the actual results that can be expected, to avoid frustration after a procedure is performed[26].

[1] Defined as intake, in a given period (usually less than two hours), of a substantially larger amount of food than most individuals would eat in the same period in similar circumstances.

CONCLUSIONS

Psychiatric disorders are not always considered a contraindication for aesthetic procedures; however, due to the high incidence of subsequent complications and patient dissatisfaction with the results, the professional must be alert to the signs and symptoms of these disorders[39]. It is then up to the medical professional to assume an ethically correct posture, respecting the autonomy of the patient, but also taking into consideration the technical indications, the associated risks and, above all, the benefit that the procedures will bring to the patient.

COLLABORATIONS

JNS	Analysis and/or interpretation of data; final approval of the manuscript; conception and design of the study; writing the manuscript or critical review of its contents.
FO	Analysis and/or interpretation of data; final approval of the manuscript; conception and design of the study; writing the manuscript or critical review of its contents.
JCMN	Final approval of the manuscript; Writing the manuscript or critical review of its contents.
RCN	Final approval of the manuscript; Writing the manuscript or critical review of its contents.

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Annex 1. Screening questions for the diagnosis of body dysmorphic disorder.

Questions
1) Do you care a lot about your appearance and do you want to think/worry less with this?
2) What specific concerns do you have about your appearance?
3) On a typical day, how many hours do you spend thinking about your appearance? (more than one hour is considered an excessive concern).
4) What effect does your appearance have on your life?
5) Do your appearance concerns make difficult to perform everyday tasks, execute the work or socialize with friends or relatives?

Source: created by the authors from information of the National Institute for Health and Care Excellence (NICE).

Annex 2. Diagnostic criteria for personality disorders established by DSM-5.

Narcissistic Personality Disorder
Presents five or more of the following symptoms/behaviors:
• Has a grandiose sense of self-importance (e.g.: exaggerates achievements and talents, expects to be recognized as superior without commensurate achievements;
• Is preoccupied about fantasies of unlimited success, power, brilliance, beauty, or ideal love;
• Believes that he or she is "special" and unique and can only be understood by, or should associate with, other special or high status people (or institutions).
• Requires excessive admiration;
• Has a sense of entitlement, i.e., unreasonable expectations of especially favorable treatment or automatic compliance with his or her expectations.
• Is interpersonally exploitative, i.e., takes advantage of others to achieve his or her own ends.
• Lacks empathy: he/she is reluctant to recognize or identify himself/herself with the feelings and needs of others;
• Displays arrogant behaviors and attitudes;
• Often envies other people and believes that other people envy him or her.
Histrionic Personality Disorder
• Unhappiness in situations where not the center of attention;
• Sexually inappropriate behavior; provocative; seductive;
• Easily changeable behavior and opinions; superficial expressions of emotion;
• Use of physical appearance to attract attention;
• Excessively impressionistic and a speech style with lack of detail;
• Drama, theatrics, excessive exposure of emotions;
• Suggestibility;
• Reporting more intimacy in relationships than actually exists.
Borderline Personality Disorder
• Desperate efforts to avoid real or imagined abandonment;
• Pattern of unstable and intense interpersonal relationships characterized by alternation between extremes of idealization and devaluation;
• Identity disturbance: marked and persistent instability of self-image or self-perception;
• Impulsivity in at least two potentially self-damaging areas (e.g., spending, sex, substance abuse, binge eating);
• Recurrent suicidal behavior, gestures, or threats, or self-defeating behavior;
• Affective instability due to marked mood reactivity (episodic dysphoria, irritability, or intense anxiety usually lasting a few hours and only rarely more than a few days);
• Chronic feelings of emptiness;
• Intense and inappropriate anger, or difficulty in controlling it (frequent episodes of irritation, constant anger, recurrent physical fights);
• Transient paranoid ideation associated with stress or intense dissociative symptoms.

Source: Created by the authors themselves with information from the DSM-5.