

Body dysmorphic disorder: A complex and polymorphic affection

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Background: Body dysmorphic disorder (BDD) is defined as a syndrome characterized by an excessive preoccupation because of a presumed or minimal physical flaw in appearance that polarizes the energies of the subject. So far, its specular aspect, represented by the presence of an evident physical defect that is not recognized or is even denied and neglected, has been disregarded. The aim of our study was to examine the individual and relational meaning of BDD and to evaluate the efficacy of cognitive-behavioral and medical-aesthetical treatments.

Methods and results: We describe two subjects with BDD, diagnosed by clinical interviews and test. Both patients were compliant to cognitive-behavioral approach. One out of two subjects underwent aesthetical treatments.

Conclusions: Cognitive-behavioral therapy stimulates self-consciousness, rebuilds the body image, promotes health care, and improves relational capacity. Moreover, it ensures the success of any medical and/or surgical procedures by preventing unrealistic expectations. Lastly, it contributes to the definition of worldwide shared behavioral models.

Keywords: diagnostic criteria, body image, cognition, aesthetical treatments

Introduction

A popular Neapolitan expression, “any cockroach is beautiful to its mother” underlines the relevance of the subjective emotional component in the process of acquisition and elaboration of sensorial stimuli. Indeed, the perception may be even distorted, if what is ugly or repugnant, is shown as beautiful and pleasant, or vice versa. Such misrepresentations occur in body dysmorphic disorder (BDD).

BDD or dysmorphophobia derives from the ancient Greek and means “ugliness”, particularly of the face. It was firstly described by Morselli in 1886 as a “subjective sensation of deformity or physical defect that causes the patient’s belief of being noted by the others, although the physical aspect appears normal”.¹ Later, Janet² and Kraepelin³ underlined the egodystonic feature and considered it an obsessive neurosis. Jaspers observed that the clinical manifestations of the patient tend to worsen, from a minimal uneasiness to a persistent preoccupation, with obsessive and, sometimes, deranging aspects.⁴⁻⁸ Zaidens revealed the schizoaffective nature of the disorder.⁵ In 1994, the American Psychiatric Association distinguished nonpsychotic and psychotic variants of BDD.⁹ According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) text revision,¹⁰ BDD is classified among the somatoform disorders and it is defined as a syndrome characterized by:

- A distressing preoccupation for a presumed or minimal physical flaw in appearance (A), to which the subject attributes an excessive importance;

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- The derived distress causes a significant clinical disease, with negative consequences on many aspects of the daily life (B);
- The exclusion of other primary psychiatric conditions (C).

This definition appears incomplete. So far the most common psychopathological reaction has been disregarded: the specular aspect of the disorder, ie, the presence of an evident physical defect that is not recognized or even denied and neglected.

Aims and methods

The aim of our study was to examine either the positive or the negative psychopathological aspects of BDD, to analyze its relation with affection and insight, and to highlight the importance of the cognitive behavioral approach for self consciousness, body image, and relational capacity.

We describe two patients affected with BDD. One came to our observation for aesthetical medical and/or surgical treatments and gave written informed consent to the study. The other case was recruited among the general population and anonymity was maintained. The diagnosis was based on clinical interviews and test administration.

The Body Dysmorphic Disorder Examination (BDDE)¹¹ comprises an interview and a self-administered questionnaire for evaluating the severity of the dysmorphophobia and monitoring the response to treatments. The Body Dysmorphic Disorder – Yale Brown Scale (BDD–YBS) underscores the compulsive-obsessive aspects.¹² We used the Rochard Test (RT) and the Structured Clinical Interviews (SCID) to better define the psychopathological picture.

The first step of cognitive-behavioral therapy consisted in stimulating self awareness and active participation in the therapeutical process through lifestyle modifications. This was attained by analyzing previous and actual experiences with the help of photos, expressed wishes, and observed choices and behaviors in order to identify the real hindrances to coping with and solving the problem. An accurate case history and visit were performed. The pros and cons of any medical and/or surgical request were carefully examined. The costs and benefits of treatments were discussed.

The software application, PhotoShop (version 9; Adobe, San Jose, CA), is a useful tool for aesthetical purposes. Pictures of the face and the body were taken through a digital camera and saved on a computer. Some were modified according to the requests of the subjects, other were

left unmodified. The different mental representations were examined in order to favor the reconstruction of the body image.

Clinical cases and treatments

Case 1 (H), a 44-year-old teacher of philosophy, had suffered from depression since adolescence when his nose became hooked. He also had severe acne, which was worsened by self-injuring lesions. He was extremely slim and did not take care of his appearance. He smoked and ate irregularly. Another relevant manifestation of his depression was his complete lack of positive reaction to pleasant events. A depressive trait was present in the mother. The father, from whom H inherited the nose, was apparently euthymic, although he was not satisfied about his job and his relationship with his wife. H's narcissism and introversion alternated between rare adventures with friends. He became engaged to a nice and bright girlfriend to whom he showed an excessive attachment that was partially reciprocated. She was able to close her eyes to his physical defects. However she tried, she could never understand his depression. The negative feelings that he communicated was responsible for her decision to end the relationship. He suffered from this negative experience, although, as far as we know, he tended to reiterate it unconsciously. While he was compliant to the interviews, he appeared insecure and vulnerable. His lifestyle is substantially unchanged and a latent dissociation pervades his mind and actions.

Case 2 (G), a 45-year-old physician, consulted an aesthetic surgeon for an inferior blepharoplasty. He had already undergone two aesthetical operations; a rhinoplasty and superior blepharoplasty. He spent his time at the gym and intensively trained to model and sculpt his body. During his case history, he revealed that his mother also underwent several aesthetical treatments, which included a facelift. She was chronically depressed and presented an obsessive-compulsive trait with marked hypochondriac aspects that caused frequent admissions to nursing homes for diagnostic and therapeutic care. G also suffered from severe depressive episodes. When he was young, he felt himself so ugly that when he saw a girl at distance, he avoided being seen by crossing to the other sidewalk. Moreover, when he was a child his mother often reminded him that he was ugly, but he would not have regretted this because he looked the same as she did. He presented as a handsome man with signs of aging. According to the psychologist that evaluated his request, the aesthetical intervention would not have solved his personality disturbances and conflicts, but it might have

a positive effect on his negative body image. He has been under fluoxetine treatment, at the dose of 20 mg/daily with benefits and no side effects for eighteen months. The inferior blepharoplasty was performed. At the six-month follow-up, the BDD-YBS decreased from 32 to 17. No relevant differences were recorded at RT and SCID.

Discussion

Our study focuses on the strict relationship between the dysfunctional perception of the body image and the development of BDD. Excessive preoccupation with or negligence of a flaw in appearance can lead to the development of clinical manifestations with individual and relational, or brief, and long-term consequences.

While the “sensation” is generated by the direct and elementary stimulation of the peripheral sensorial receptors, the “perception” is the result of the elaboration and integration of general and specific sensorial data in parietal and sensory specific areas. According to the “multisensory interplay model”, sensory events in one modality may modulate the processing of those related to another modality and involve other cerebral regions, such as temporal superior sulcus, frontal areas, superior colliculus.¹³ Such personal experience confers originality to thoughts and actions.

The “body image” is the mental representation that each subject has concerning his or her own body.¹⁴ It is formed by the “body scheme” and the “ideal body”. The body scheme derives from the subjective apperception, the association, and the integration of the sensations. The ideal body is constituted by the expectations about the body, its shape, dimension and pleasantness and it is the expression of cognitive associative, comparative, and discriminative processes from which behavioral models derive. Then, the body image is continuously remodeled by perceptive, emotional, and cognitive-behavioral processes. It comprises a “real body”, a “perceived body”, an “ideal body”, and a “socially accepted body”. When these components are conflicting, self-disesteem, frustration, disaffection, and delusions develop. Indeed, in BDD, the perceived body may not correspond either to the real, the ideal, and the socially accepted bodies. The subject looks at the body as if in a carnival mirror. The capacity to distinguish reality from fiction is lost and the deformed image generates a negative feeling that invades the psyche independently of the severity of the flaw in appearance. Therefore, BDD may be considered a “delusional distortion of the body image” that involves the individual and the relational sphere. The opposite manifestation of the disorder, the behavior of avoiding the distress by unrecognition, denial, or negli-

gence of an evident defect, represents a defense mechanism. However, this attitude may be apparent and even associated and worsened by self-directed injurious behaviors such as eating disorders and addictive behaviors. Either the “need of perfection” or “negligence” concerns one’s own body or other bodies, which are under severe examination by BDD-affected subjects who compare, judge, and condemn mercilessly.

The ideal beauty is not an absolute concept. It is peculiar to each culture and is determined by genetic and environmental factors and influenced by sociocultural stimuli. Indeed, the western ideal of beauty has changed. Mass media has replaced the image of the Rubenesque woman with slender women such as models. On the contrary, in Arabian cultures, prosperity in the appearance of having eaten well is a symbol of fertility and well being. These discrepancies and the abnormal reactive behaviors generate or further contribute to the dysfunctional perception of the body image with relational consequences.

The etiopathogenesis of BDD is still unknown. Anatomic malformations and/or neurophysiological dysfunctions of the parietal-temporal-occipital regions, particularly the right parietal area, are hypothesized and supported by single positron emission computed tomography.¹⁵ Some BDD subjects present anosodiaphoria, prosopagnosia, and become unable to recognize themselves in front of a mirror as patients affected with cognitive deterioration, independently on the presence of parietal-temporal-occipital lesions.¹⁶ Whether these manifestations are expression of an intraemispheric disconnection is under evaluation. A dysfunction of the multisensory system and of the mirror neuron system may be supposed and will be assessed. Moreover, the correlation between BDD and obsessive-compulsive disorder suggests an impairment of the cortical-striatal-thalamic-pallidal-pontine circuitry.¹⁷ These areas, together with the limbic and hypothalamic regions, belong to the appetitive and hedonic circuitries, and are also involved in eating disorders.^{18,19} Lastly, alterations of the levels of neurotransmitters including serotonin has to be considered, as has already been described in patients suffering from obsessive-compulsive disorder, depression, and depersonalization.^{17,20}

The psychopathological process in BDD may depend on the mode of attachment. An “insecure” attachment is characterized by the incapacity to establish pleasant relationships and to be considered as an object of love.^{21–23} This is responsible for the development of a negative body image from which BDD may be generated and structured. The mental representation of the body image occurs early during psycho-emotional and cognitive development, being

already in fieri by 6–7 years of age. Children may worry about their body appearance. Commonly, BDD appears during adolescence; some traits may be present already during infancy and puberty. This is not surprising because deep transformations of the body associated to consolidation of the personal identity occur. Usually, BDD decreases by aging and disappears around the age of 18–20 years.

The overall prevalence of BDD is around 0.1%–2.2%^{6,24,25} and is underestimated. The data reported in the literature are dissimilar because of the low number of recruited samples, diversity of methods and instruments, frequent misdiagnosis, and scarce compliance. Prevalence is higher in females than in males.²⁶ Females more than males are at risk of developing a negative distorted body image because they are more susceptible to judgments about their body, although this trend is decreasing.²⁷ Dysfunctional eating behaviors are often observed. Indeed, as described by Bruch in *Pathology of Eating Behavior*, dysfunctional perceptions of the body image are present in eating disorders.²⁸ Moreover, comorbidity studies showed a linkage with personality^{29,30} and substance abuse disorders.³¹

BDD is present in 6%–16% of subjects requiring an aesthetical medical and/or surgical treatment.³² A dysfunctional organization of the personality is described, together with the suggestion of performing an accurate psychiatric evaluation before any intervention.^{32,33}

The request for intervention may represent an attempt to repair an early wound that left an indelible sign on the psyche and, sometimes, the body. Since the subject is unconscious or partially conscious of the deep meaning of the distress associated with the flaw in appearance, the subject tends to consider it merely as a technical medical or surgical problem. However, personality as well as relationships are structured around this defect. This explains the frequent behavior of avoiding the distress by unrecognition, denial, or negligence, which represent negative signs of the same disorder. On one hand, the defect represents the existential trouble to which the subject attributes all his/her defeats, independently of severity. On the other hand, the defect may function as the expression of regressive aspects. If personality disturbances coexist, the correction of the defect may even induce a maladaptive response. Lastly, the subject may be dissatisfied with treatment. Several factors are associated with poor outcomes of cosmetic surgery: masculine gender, young age, minimal deformity, excessive expectations, relational problems, psychological/psychiatric disorders, and previous surgical procedures.³⁴ The direct and indirect costs of misdiagnosis of both positive and negative BDD

manifestations are unpredictable, while the earlier the cognitive-behavioral approach is, the longer-lasting the benefits are. Cognitive behavioral therapy is effective in preventing not only individual but also relational consequences of BDD. It educates the subject on risk factors and prevention of diseases. Moreover, it contributes to the definition of worldwide shared behavioral models. In resistant and relapsing cases, pharmacological therapy is prescribed. Serotonin reuptake inhibitors are efficacious.³⁵ Studies on the effect of neuroleptic and antiepileptic drugs are ongoing.

Conclusions

BDD is a complex and polymorphic affection of the body image, whose manifestations varies between two extremes: the persistent preoccupation for a presumed or minimal flaw in appearance and the systematic unrecognition, denial, or even negligence of an evident physical defect. A borderline personality and a schizoaffective background may constitute the peculiar trait of these subjects. These features have to be considered before performing aesthetical treatments. The cognitive-behavioral approach stimulates self consciousness, reconstruction of body image, promotion of health care, and improvement in relational capacity. Moreover, it enhances compliance and creates a therapeutical alliance between the subject and the medical process. Lastly, it contributes a worldwide shared behavioral strategy for the disorder.

Disclosures

The authors report no conflicts of interest in this work.

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