Body Dysmorphic Disorder: Diagnosis, Clinical Aspects and Treatment Strategies

Abstract

Aim: With the increased demand to undertake dental aesthetic and reconstructive procedures, it is imperative for all dental clinicians to have an understanding of body dysmorphic disorder (BDD). Patient’s preoccupations with perceived defect in appearance or excessive concern about minimal flaws are among diagnostic criteria of BDD. Such patients are difficult to please and often undergo cosmetic procedures such as orthodontic treatment. Methodology: Literature search in PubMed/MEDLINE was conducted from 1891 to 2015. A manual search of relevant articles and review was done and relevant data was collected and analysed. Results: One of the most common areas of preoccupation is the dento-facial region, with up to 20% of patients diagnosed with BDD expressing specific concern regarding their dental appearance. Conclusion: BDD patients often request multiple aesthetic procedures, but remain unsatisfied with their treatment results.

Keywords: Aesthetics, body dysmorphic disorder, orthodontist

Introduction

Facial appearance is vital for human recognition and communication. Today people are majorly concerned about their looks as everyone wants to look aesthetically pleasing. With growing awareness and opportunities, more and more number of people are seeking orthodontic treatment to improve aesthetics. Thus, for patients seeking orthodontic treatment body image plays an important role. Body dysmorphic disorder (BDD) is currently understood as an obsessive-compulsive related disorder rather than a somatoform disorder and that it encompasses pathological fear of ugliness regarding certain aspects of appearance that are considered “not right” or even “hideous” although no defect is observed by others or are thought to be slight. It is also important to ascertain that, in the presence of observable defects on appearance, body dysmorphic disorder should not be diagnosed.

The psychological assessment of patients requesting orthodontic treatment is a vital and integral part of the overall assessment procedure. It allows identification of potential problems at an early stage before irreversible decisions have been made.[1] We as orthodontists are well aware of patients who undergo orthodontic treatment for small, nonexistent deformities and are unsatisfied with complete treatment and request to undergo further treatment. For some patients worries about appearance become extreme and upsetting, interfering with their lives. Both the cases may suggest diagnosis of BDD.

Methodology

Literature search in PubMed/MEDLINE was conducted from 1891 to 2015. A manual search of relevant articles and review was done and relevant data was collected and analysed.

Terminology

BDD (also called dysmorphophobia, body dysmorphia or dysmorphic syndrome)[2,3] is a psychological disorder in which the affected person is excessively concerned about and preoccupied by a perceived defect in his or her physical features (body image). It was first described in 1886 and documented by Morselli[4] as dysmorphophobia. He reported that patients experienced sudden fears of deformity and painful desperation (Phillips, 2001). Over the years, BDD has attracted the attention of some of the most prominent figures in psychology. In 1909, Emil Kraepelin described it as a mental malfunction leading to beauty based hypochondriasis. Similarly, Sigmund Freud also encountered the disorder while treating...
a patient in the late 1930’s.\textsuperscript{[5]} Despite its historical relevance, BDD was eventually recognized as a disorder in 1987 by the American Psychiatric Association\textsuperscript{[9]} in the Diagnostic and Statistical Manual of Mental Disorders IV (DSM IV) and International Classification of Diseases-10\textsuperscript{[7]} redefining dysmorphobia into delusional and nondelusional variant. The delusional variant is classified as psychotic disorder with the exceptions of delusions exclusively appearance-related and no other psychotic symptoms. Nondelusional variant is classified as BDD. Also, a new criterion to report the prevalence rates of BDD based on a DSM-5 diagnosis has been defined. According to DSM-5, BDD is now classified under obsessive-compulsive and related disorders requiring the presence of repetitive behaviors or mental acts in response to appearance concerns which was previously classified under somatoform disorders as per DSM IV\textsuperscript{[8]}.

Prevalence

Despite the common belief that BDD is a strictly western phenomenon with females, the disorder is equally distributed across gender and culture.\textsuperscript{[9]} It is difficult to diagnose and is usually under diagnosed. One of the main difficulties in determining the exact prevalence of BDD in adolescents in both community and clinical settings is the elevated rate of comorbidity.\textsuperscript{[10]} It occurs in both the sexes although reports of sex bias are variable. Phillips\textsuperscript{[11]} and Biby\textsuperscript{[12]} quote a ratio of 1.3:1 female to male but in a recent study is said to be 1:1. Majority of the BDD patients are unmarried and unemployed which may reflect the damage done to their personalities.\textsuperscript{[13]}

The prevalence of BDD has been estimated to be 1%–2% in the general population of United States. However, BDD is more frequent among patients seeking cosmetic treatments and has been reported to be diagnosed in 6%–15% of dermatologic and cosmetic surgery patients\textsuperscript{[14]} and in 7.5% of an orthodontic patient sample of 40 patients in London.\textsuperscript{[15]} Recently, in an Iranian study,\textsuperscript{[16]} a total of 270 orthodontic patients were evaluated for the diagnosis of BDD. Fifteen patients (5.5%) were screened positive for BDD. Prevalence of BDD in dermatological and plastic surgery patients have been reported to be 8%–15%\textsuperscript{[17,18]} and 3%–53%\textsuperscript{[19,20]} respectively.

Onset

The onset of BDD typically begins in early adolescence, although it has been shown to develop in mid late childhood.\textsuperscript{[10]} BDD is often present with depressive disorders, social phobias and obsessive compulsive disorders.\textsuperscript{[21,22]}

Diagnostic criteria

Leone \textit{et al.}\textsuperscript{[23]} reported diagnostic criteria as:

1. Preoccupation with an imagined defect in appearance-if a slight physical anomaly is present, the person’s concern is markedly excessive
2. The preoccupation causes clinically significant distress or impairment in social, occupational or other important areas of functioning; and
3. The preoccupation is not better accounted for by another mental disorder (e.g., dissatisfaction with body shape and size in anorexia nervosa).

BDD is underdiagnosed, though it has been described for more than 100 years and relatively common disorder that is associated with high rates of occupational and social impairment, hospitalization, and suicide attempts.\textsuperscript{[24]} In order to correctly diagnose BDD a series of questions are asked to the patient to determine if they are consumed with distress about a seemingly small or unnoticeable flaw.

A questionnaire can be made and patient is interviewed regarding concern about his looks, past history, family history and recognized pattern of behaviour as reported by Naini and Gill. A diagnosis can be made according to his/her answers [Table 1].\textsuperscript{[25]}

| Table 1: Areas to cover in an interview with a patient who is suspected to have BDD |
|-----------------------------------------------|
| Patient interview/consultations               |
| Vague presentation                            |
| Excessive concern regarding a minor or imperceptible appearance defect |
| Over specific concerns                        |
| Unrealistic expectations and desires          |
| Dissatisfaction                               |
| Past history                                  |
| Anxiety disorders like social anxiety disorder (social phobia), obsessive compulsive disorder or hypochondriasis |
| Schizophrenia or delusional disorder          |
| Somatoform disorder                           |
| History of substance abuse                    |
| History of eating disorders                   |
| Previous history of psychiatric treatment     |
| Social and family history                     |
| Unemployed/frequent change in jobs            |
| Unmarried/divorced or living alone            |
| Poor family/social support                    |
| Recognized pattern of behaviour               |
| Unusual demanding or suspicious behaviour     |
| Frequent change in complaints or not following instructions |
| Frequent cancellations and rebooking of appointments |
| Camouflaging behavior such as covering of mouth with a hand or scarf |
are mentally disturbed, they magnify their tiny flaws and believe that they are too ugly.

The common location of the defect in the facial region are:
- Hair
- Nose
- Skin
- Eyes
- Teeth
- Lips.

The common behaviour of patients is
- Excessive preconceived thoughts lead to personal inadequacy
- Usage of strategies like camouflage by applying makeup and wearing concealing clothes
- Fixation or avoidance of mirrors, for people with BDD, gazing in a mirror, regardless of duration, might act as an immediate trigger for an abnormal mode of processing and associated distress, and that this association has developed from past excessive mirror gazing
- Inability to see one’s photographs or reflection in doors, window glasses etc.
- Patient may avoid social gatherings or go on house arrest. In extreme cases they can even commit suicide.

The patients may show
- Frustration with those who are unable to identify the defect
- Obsession with the perceived effect like touching it or measuring it
- Social boycott – patient start avoiding social gatherings like frequent absents from school
- Excessively gathering of information about the defect
- Feusner et al. reported individuals with BDD have abnormalities in facial identification for faces with emotional expressions.

Causes
The exact cause is unknown. The various theories are:
- Biological - There is hypothesis concerning deficiency of serotonin. Serotonin is one of the brains neurotransmitters involved in mood and pain
- Genetic - About 20% of the BDD patients have a first degree relative-such as parent, child or sibling-who also suffers from this condition
- Personality - Certain personality traits like neuroticism, perfectionism, introversion, sensitivity to rejection, unassertiveness or having schizoid or avoidant personality, make someone more susceptible to develop BDD
- Environmental - Media pressure may contribute to the onset of BDD, e.g., desire to look like glamour models lead to unrealistic expectations. These cases are difficult for orthodontist to treat
- Teasing or criticism could play a contributory role in individuals who are genetically or environmentally predisposed
- Parenting style - Parents who either place excessive emphasis on aesthetic appearance or disregard it may act as a trigger in genetically predisposed
- Other life experiences like sexual trauma, insecurity or rejection may be contributory.

Reasons for patients to seek orthodontic treatment
- Asymmetry of chin
- Unesthetic smile
- Upper midface deficiency
- Asymmetry during smile
- Persistent unexplained dental pain

Treatment
Pharmacological treatment
Use of selective serotonin reuptake inhibitors such as fluoxetine, paroxetine, clomipramine, fluvoxamine etc., are required, in higher doses and usually for a prolonged period.

Cognitive behavioural therapy
Cognitive behaviour body image therapy has been found useful. This form of treatment involves the patient constructing a hierarchy of these symptoms and keeping a body image diary during treatment, which is exposure therapy to overcome self-consciousness and response to decrease checking behaviour.

Surgery
The role of surgery remains controversial. The patient is rarely satisfied with surgery, since the defect is mostly imagined and is emotional, rather physical but recent study reported 32 of the 41 patients who did undergo were highly satisfied with the outcome.

Ethical Issues
The diagnosis of BDD raises ethical issues with regard to consideration for psychiatric referral versus initial and continued cosmetic treatment. According to Nash and Simonsen the emphasis upon aesthetics and cosmetics appears to be moving dental care more toward an economic business model compared to a patient-centered diagnosis, treatment and prevention model.

BDD is an increasingly recognized obsessive-compulsive related disorder with potential legal malpractice leading to a potential hazard of litigations.

Conclusion
BDD is a severe psychological condition that induces debilitating anxiety stemming primarily from body
preoccupations. An orthodontist should evaluate patients psychologically to rule out disorders like BDD by simply putting up questions like are you happy with your appearance? Is there anything you would like to change about it? Have you sought any help before? What do you expect to achieve from the treatment?

Once, full case history is taken and an orthodontist is fully aware of the expectations, which are within the realms of reality then it is considered normal. If there is an uncertainty, patients should be referred to a psychiatrist for analysis. Given the sensitivity of the population primarily affected (adolescents), promoting the awareness in understanding the disorder, specifically school psychologists in educational settings, is integral in approving acceptance and care for adolescents with BDD.

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**Conflicts of interest**

There are no conflicts of interest.

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