Beauty and the beast: Body Dysmorphic Disorder and aesthetic dentistry

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Introduction

More and more people are asking for aesthetic dental treatment and expressing ever higher standards of excellence in the appearance of their teeth throughout their lifetime. Clinicians have more treatment options available to meet these demands but are rightly concerned about treating the patient who appears to be overly preoccupied and distressed by minor (or non-existent) defects; such patients may be suffering from a psychological disorder called Body Dysmorphic Disorder (previously termed Dysmorphophobia). Here we will outline the features of Body Dysmorphic Disorder (BDD), and describe techniques for assessment and management.

Body Dysmorphic Disorder: An overview

The diagnostic criteria for BDD are outlined in the Diagnostic and Statistical Manual of Diseases, version 4.0.[1] The criteria are:

- Preoccupation with an imagined defect in appearance. If a slight physical anomaly is present, the person's concern is markedly excessive in relation to the nature of the defect.
- The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The preoccupation is not better accounted for by another mental disorder (e.g. Anorexia nervosa).

The primary symptom of BDD is preoccupation with perceived defects. Concerns may be specific to particular body parts or a more pervasive vague concern about something 'not being right'. The feature is felt to be unbearingly ugly, leading to high levels of shame and distress[2] and low levels of self-esteem.[3] Individuals with BDD are convinced of the severity of the defect, no matter how minor it may seem to others.[4] Aspects of appearance that are most commonly the focus of this preoccupation are the skin (e.g. blemishes and moles), hair and nose, thus the face is frequently involved. However, the focus often shifts between body parts over the course of the disorder. Individuals with BDD have thoughts and concerns about the body part (e.g. everyone is staring at it; this body part is 'disgusting') which are experienced as uncontrollable and intrusive. These thoughts are likely to be worse in social situations.

The usual age of onset of symptoms is late adolescence (the average age reported in a large sample of patients was 16.4 years), however people with BDD can go undiagnosed for many years and the typical age of presentation of psychiatric services is in the early 30s.[5] The disorder is equally common amongst men and women.[6] The course of the illness is continuous, that is it is unusual for symptoms to show periods of remission. Complete remission is rare and its occurrence is related to the duration and severity of symptoms, such that people who have relatively mild BDD which is not long established are most likely to remit.[7] Comorbidity is frequent in individuals with BDD: the condition is commonly associated with the presence of other psychiatric disorders such as depression, anxiety, social phobia and obsessive compulsive disorder. For example, approximately 38% of people with BDD have previously experienced a social phobia. Alcohol dependence is also common, as individuals may attempt to manage their distress by using alcohol. Of great importance for clinicians who may treat individuals with BDD, suicidal ideation (considering suicide or making plans to commit suicide) is common, being reported in 78% of cases, and 17-33% of cases have attempted suicide.[8] This is a critically important point in the assessment of individuals with BDD.

The individual with BDD may engage in a variety of compulsive behaviours in relation to their body part9. These behaviours are termed 'compulsive' because they occur at very high rates and are repetitive. Examples include; checking the body part in the mirror; comparing the self to others; 'Skin picking' (seeking to remove the blemish by plucking it or scratching it); applying make up; and camouflaging the body part with clothes. These rituals, while reducing anxiety in the short term, are counter-productive in terms of reducing anxiety in the longer term, as they tend to lead to increased focusing of the perceived problem and anxiety rather than reassurance. The rituals may occupy a number of hours each day leading to impairment in ability to function in work or relationships. For instance, 27% of people with BDD report having been housebound at

some point in the disorder.[9] This should be differentiated from a diagnosis of agoraphobia, individuals with BDD are housebound as a secondary consequence of their anxiety from their perception that people will stare at them, judge them and so forth.

Individuals with BDD often believe cosmetic treatment is the only way to deal with the defect and in turn seek help from clinicians such as maxillofacial surgeons, dermatologists and plastic surgeons. A number of surveys of individuals with BDD have indicated that 71-76% had sought cosmetic treatment, and approximately 65% of all cases had received cosmetic treatment . The treatments most commonly undergone were rhinoplasty, liposuction, breast augmentation, though minimally invasive procedures were also common (collagen injections, tooth whitening). Refusal to treat is less common than might be expected, only 35% of treatments requested by people with BDD were refused.[10]

Research on BDD and dental treatment is relatively sparse - various published case reports document patients with BDD attending for treatment in general dentistry[11,12] and maxillofacial surgery.[13,14] Hepburn and Cunningham[15] conducted a survey of 40 patients attending for adult orthodontic treatment and found an estimated prevalence of 7.5% for BDD, suggesting that individuals with BDD are likely to seek orthodontic treatment. This is supported by a recent investigation of patients presenting to two maxillofacial surgery outpatient clinics, where 10% of patients were found to demonstrate symptoms of BDD.[16] De Jongh *et al.*[17] surveyed a community sample about their intentions to receive cosmetic dental treatment and found that those who reported being preoccupied with a defect of appearance were nine times more likely to consider tooth whitening and six times more likely to consider orthodontic treatment, compared to those without such a preoccupation. It follows that clinicians working in the field of aesthetic dentistry are likely to be visited by patients with BDD, and as such need to be aware of this condition and how to assess and manage patients suspected of having BDD.

Assessment of patients who are suspected of having Body Dysmorphic Disorder

Cunningham and Feinman[18] outline the importance of systematic and detailed assessment of individuals who are suspected to have BDD attending for dental treatment. The first consideration is to establish a 'safe' environment for the patient to talk with the dentist, and sufficient rapport to ensure open communication, there are a number of areas which the discussion should cover *(Box 1 - overleaf)*. Central to this is an assessment of whether the patient's response is proportionate. Is it reasonable to hold such strong beliefs about the defect, be it imagined or real? Are the consequences of having such a defect proportional to the reported interference of the defect? For example being unable to maintain employment because of crooked teeth is unlikely to be a realistic consequence.

If the clinician has strong suspicions of a diagnosis of BDD, or where there is clear suicidal ideation, the patient should be referred for formal assessment by psychological or psychiatric services. Any referral letter should contain reference to the information gained from the interview in *Box 1* and *2 (overleaf)*.

Management strategies for people with Body Dysmorphic Disorder

Provision of the requested cosmetic treatment

Once a formal diagnosis of BDD has been made, it is not advisable to commence with cosmetic treatment. Provision of the requested cosmetic treatment appears to be of little benefit to the patient and there is some possible harm. Crerand *et al.*[10] found that 91% of procedures administered to people with BDD resulted in no change in BDD symptoms, further there is strong suggestion that people with BDD express high levels of dissatisfaction with treatment.[18] This often leads to further treatment (usually with different clinicians) or the shifting of the preoccupation to another part of the body.[2]

Additionally, there are numerous possible adverse effects for the treating clinician if they provide

cosmetic treatments for people with BDD. As patients tend to be dissatisfied with the results of cosmetic treatment, there is the possibility that the patient may sue the clinician for their perceived poor outcome (29% of members of the American Society for Aesthetic Plastic Surgery have been sued at some point in their medical career though it is not possible to determine how many of these cases involved a person with BDD.[21]

Thus, given the potential risks to both the patient and the professional, it is recommended that patients diagnosed with BDD should not undergo the cosmetic treatment requested. Instead, in a sensitive yet straightforward manner, clinicians should discuss with the patient that the cosmetic treatment is not in the patient's best interest[4] and recommend referral to psychological or psychiatric services for pharmacological or psychological treatment.

Pharmacological and psychological therapy

A recent Cochrane review[23] suggested that both pharmacotherapy and psychotherapy may be effective in the treatment of BDD.

Psychological management of BDD, specifically Cognitive Behavioural Therapy (CBT) is recommended as the first line of management by the National Institute for Health and Clinical Excellence (NICE, http://www.nice.org.uk/Guidance/CG31). CBT is based on the premise that the emotions such as anxiety and distress are affected by thoughts (or 'cognitions') and beliefs, and by

Box 1: Areas to cover in an interview with a patient who is suspected to have BDD[19]

- **What is the main complaint?**
  Is the patient's perception of the blemish proportionate?
- **When did the patient first become aware of the problem?**
- **Why has the patient sought help now?**
- **What does the patient expect/hope for from treatment?**
- **How much does the problem interfere with daily life?**
  - Is the patient's assessment of the degree of interference proportionate?
- **Is there anybody else exerting pressure for the patient to have treatment?**
- **Is there support from family/friends for the patient?**
- **Has the patient seen anyone else about this problem?**
  - Other dental / medical teams (is the patient 'doctor shopping' that is going from health care professional to health care professional until they get the treatment they desire)
- **Is there any psychiatric / psychological involvement**
- **Are there any signs of depression**
  - Sleep disturbance - Lethargy - Inability to enjoy life - Hopelessness / Helplessness
- **Are there any signs of anxiety**
  - Restlessness - Agitation
  - Somatic symptoms: Dizziness, shortness of breath, stomach pains
- **Has the person ever been diagnosed as having an eating disorder?**
- **Has the person ever been diagnosed with an obsessive compulsive disorder?**
- **Is there evidence of substance misuse?**
  Note units of alcohol per week, also use of legal and illegal drugs.
- **Is there any suicidal ideation?** The three questions given in *Box 2* have been validated for use as a screening tool for people who are at risk of attempting suicide. If the patient scores within the range identified as at risk, an immediate referral should be made to their general medical practitioner stating your concerns.

Box 2: Assessing suicide risk[20]

- **1. Have you been feeling life isn't worth living?**
  - 0 = Not at all - 1 = Some of the time - 2 = Most of the time - 3 = All of the time
- **2. Have you been feeling like wanting to kill yourself?**
  - 0 = Not at all - 1 = Some of the time - 2 = Most of the time - 3 = All of the time
- **3. Have you been thinking about how to kill yourself?**
  - 0 = Not at all - 1 = Some of the time - 2 = Most of the time - 3 = All of the time

A score of 2 or 3 on any item should trigger an alert requiring a letter to the patient's general medical practitioner. A score of 2 or 3 on item 3 should trigger immediate emergency psychiatric referral.

behaviour. CBT works by encouraging the reassessment of thoughts and actions. CBT often includes exposure to the feared stimulus (e.g. social setting) and response prevention whereby the patient is encouraged to face their anxiety without engaging in their repetitive ritual. This process is repeated until the patient no longer feels anxious. CBT can also involve changing beliefs connected to patients' dissatisfaction with their body, teaching stress management techniques and provision of information about the condition23. Randomised Controlled Trials have indicated that, for example, reports that 55% of patients in a CBT group improve, in comparison none of the no treatment control group improved and 14% were symptomatically worse.[24]

There is good evidence for the effectiveness of anti-depressive drugs in people with BDD. Randomised controlled trials of Selective Serotonin Reuptake Inhibitors (e.g. fluoxetine. clomipramine) indicate that on average 53% of individuals with BDD improved compared to18% in the placebo control group.[25] Given the prevalence of delusions amongst people with BDD, it has been suggested that anti-psychotic agents might be prescribed. However there is no evidence for the effectiveness of anti-psychotic agents in patients with BDD even when delusions are present.

Conclusions

Patients with BDD are likely to present for aesthetic or cosmetic dental treatment. This is potentially problematic since aesthetic dental treatment has little benefit for people with BDD and has potentially negative consequences for the patient and the treating clinician. Clinicians should be aware of this possibility and be familiar with specific strategies to recognise and assess people with suspected BDD and appropriately manage them by referral to specialist services.

Resources for clinicians

- For guidance on assessment of people with BDD, see: Cunningham SJ and Feinman C. Psychological assessment of patients requesting orthognathic treatment and the relevance of body dysmorphic disorder. *Br J Orthodont* 1998 **25**: 293-298.
- For information leaflets suitable for patients, and for information for clinicians working with individuals with Body Dysmorphic Disorder, see: the National Institute for Health and Clinical Excellence (NICE) http://www.nice.org.uk/Guidance/CG31

References

1. American Psychiatric Association. Diagnostic and Statistical Manual of Diseases DSM-IV. 4th Edition. American Psychiatric Press Inc. Washington DC. Pp. 466-469. 1994.
2. Rumsey N. Facial disfigurement and dysmorphology. In *Cambridge Handbook of Psychology, Health and Medicine* (2nd Edition) Ayers S, Baum A, McManus C, Newman S, Wallston K, Weinman J, West R. (Eds), Cambridge UK: Cambridge University Press, 2007; pp. 708-711.
3. Phillips KA, Pinto A, Jain S. Self-esteem in body dysmorphic disorder. *Body Image* 2004 **1**: 385-390.
4. Naini FB, Gill DS. Body dysmorphic disorder: a growing problem? *Prim Dent Care* 2008 **15**: 62-64.
5. Phillips KA, Menard W, Fay C. Gender similarities and differences in 200 individuals with body dysmorphic disorder. *Compr Psychiatry* 2006 **47**: 77-87.
6. Phillips KA, Diaz SF. Gender differences in body dysmorphic disorder. *J Nerv Ment Dis* 1997; **185**: 570-577.
7. Phillips KA, Pagano ME, Menard W, Fay C, Stout RL. Predictors of remission from body dysmorphic disorder: a prospective study. *J Nervous Mental Dis* 2005 **193**: 564-567.
8. Phillips KA, Menard W, Fay C, Weisberg R. Demographic characteristics, phenomenology, comorbidity, and family history in 200 individuals with body dysmorphic disorder. *Psychosomatics* 2005 **46**: 317-325.
9. Phillips KA, Menard W, Fay C & Pagano ME. Psychosocial functioning and quality of life in body dysmorphic disorder. *Comprehensive Psychiatry* 2005 **46**: 254-260.
10. Crerand CE, Phillips KA, Menard W, Fay C. Nonpsychiatric medical treatment of body dysmorphic disorder. *Psychosomatics* 2005 **46**: 549-555.

11. de Jongh A, Adair P. Mental disorders in dental practice: a case report of body dysmorphic disorder. *Special Care in Dent* 2004 **24**: 61-64.
12. Herren C, Armentrout T, Higgins M. Body dysmorphic disorder: diagnosis and treatment. *General Dent* 2003 **51**: 164-166.
13. Cunningham SJ, Bryant CJ, Manisali M, Hunt NP, Feinmann C. Dysmorphophobia: recent developments of interest to the maxillofacial surgeon. *Br J Oral Maxillofac Surg* 1996. **34**: 368-374.
14. Cunningham SJ, Harrison SD, Feinman C, Hopper C. Body dysmorphic disorder involving the facial region: a report of 6 cases. *J Oral Maxillofac Surg* 2000 **58**: 1180-1183.
15. Hepburn S, Cunningham SJ. Body dysmorphic disorder in adult orthodontic patients. *Am J Orthodont Dentofac Orthopedics* 2006 **130**: 569-574.
16. Vulink NCC, Rosenberg A, Plooij JM, Koole R, Berge SJ, Denys D. Body dysmorphic disorder in maxillofacial outpatients presenting for orthognathic surgery. *Int J Oral Maxillofac Surg* 2008 **37**: 385-391.
17. De Jongh A, Oosterink FMD, van Rood YR, Aartman IHA. Preoccupation with one's appearance: a motivating factor for cosmetic treatment? *Br Dent J* 2008 **204**: 691-695.
18. Veale D, Boocock A, Gournay K, Dryden W, Shah F, Willson R, Walburn J. Body dysmorphic disorder. A survey of fifty cases. *Br J Psychiatry* 1996 **169**: 196-201.
19. Cunningham SJ & Feinman C. Psychological assessment of patients requesting orthognathic treatment and the relevance of body dysmorphic disorder. *Br J Orthodont* 1998 **25**: 293-298.
20. Marks IM, Mathews AM. Brief standard self-rating for phobic patients. *Behaviour Res Therapy* 1979 **23**: 563 -569.
21. Sarwer DB. Awareness and identification of body dysmorphic disorder by aesthetic surgeons: Results of a survey of American society for aesthetic plastic surgery members. *Aesthetic Surg J* 2002 **22**: 531-535.
22. Crerand CE, Franklin ME, Sarwer DB. Body dysmorphic disorder and cosmetic surgery. *Plastic Reconstructive Surg* 2006 **118**:167e-180e.
23. Ipser JC, Sander C, Stein DJ. Pharmacotherapy and psychtherapy for body dysmorphic disorder. *Cochrane Database of Systematic Reviews*. 2009. Issue 1. Art. No.: CD005332. DOI: 10.1002/14651858.CD005332.pub2.
24. Veale D, Gournay K, Dryden W, Boocock A, Shah F, Willson R, Walburn J. Body dysmorphic disorder: a cognitive behavioural model and pilot randomised controlled trial. *Behaviour Res Therapy* 1996 **34**: 717-729.
25. Phillips KA. Pharmacologic treatment of body dysmorphic disorder: review of the evidence and a recommended treatment approach. *CNS Spectrums* 2002 **7**: 453-460.

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