

Body Dysmorphic Disorder (BDD) — Signs and Treatment

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Body dysmorphic disorder is a common psychiatric condition that is characterized by preoccupation with false ideas about one's own physical appearance. This preoccupation leads to repetitive compulsive behavior that aims to fix the perceived physical defects. Patients with body dysmorphic disorder might have good insight, poor insight or completely absent insight. When patients have poor insight or completely absent insight into their condition, cognitive-behavioral therapy might fail. Patients with good insight who know that their beliefs about their body appearance are probably wrong usually respond well to intensive cognitive-behavioral therapy. Serotonin-reuptake inhibitors, serotonin-norepinephrine reuptake inhibitors, and some antiepileptic medications have been used for the pharmacotherapy management of body dysmorphic disorder.



Overview

Body dysmorphic disorder is a psychiatric condition that is characterized by the **preoccupation with one or more physical defects in one's body which are not observed by others**. In some cases, the problem is defined as the exaggeration of a real sight and trivial physical defect. For example, one may think that his/her nose is

too big.

Body dysmorphic disorder is a condition that is believed to be **related to obsessive-compulsive behavior**; therefore, patients with body dysmorphic disorder show repetitive behaviors such as excessive grooming, recurrent visits to health care providers, and performing multiple cosmetic procedures.

Epidemiology of Body Dysmorphic Disorder

Body dysmorphic disorder is a **common condition in the United States** with an estimated prevalence of 2.4 %. The disease has no sexual predilection.

Body dysmorphic disorder is higher among dermatological and post-operative patients with **15 % of dermatology patients showing evidence of body dysmorphic disorder** and 7 to 8 % of surgical patients are later diagnosed with body dysmorphic disorder. The highest prevalence of body dysmorphic disorder is reported in cosmetic surgery patients, especially those who seek interventions outside the United States.

Body dysmorphic disorder **usually has an onset at the age of 15 years**. At first, the symptoms are usually benign and subclinical. The main risk factors for body dysmorphic disorder are childhood abuse and neglect. In fact, many forms of childhood abuse, such as sexual, physical, emotional or psychological abuse, have been linked with body dysmorphic disorder.

Genetic predisposition has been suggested in obsessive-compulsive disorders including body dysmorphic disorder. Recent studies have shown that the prevalence of body dysmorphic disorder in first-degree relatives of patients with obsessive-compulsive disorder is higher compared to the general population.

Clinical Presentation of Body Dysmorphic Disorder

Patients with body dysmorphic disorder usually **present to the clinic with specific symptoms that are related to body perception**. They are preoccupied with certain ideas and truly believe that they have a physical defect that needs to be fixed medically or surgically.

A specific form of body dysmorphic disorder, known as muscle dysmorphia, should be excluded in the presenting patient. Muscle dysmorphia is a condition that is characterized by the **preoccupied idea that one's body build and muscle content is too little or small**.

Patients with body dysmorphic disorder might have good insight, poor insight or absent insight into their condition. When the patient acknowledges that he or she understands the symptoms are not true or probably not true, then the patient has good insight. In most cases, however, **patients think that their beliefs are either probably true or definitely true**. In that case, the specifier's poor insight or absent insight are used respectively.

Diagnostic Criteria for Body Dysmorphic Disorder

The [DSM-5](#) has put strict criteria for the adequate diagnosis of body dysmorphic disorder.

The first criterion is that the **patient should be preoccupied with one or more perceived beliefs in their physical appearance** which are not observable to others.

Repetitive behavior to fix or confirm these defects is the second criterion.

For the diagnosis of body dysmorphic disorder to be made, the **preoccupying ideas should cause significant distress in one's social, occupational or academic life.**

The final criterion indicates that the **symptoms should not be related to a preoccupation with concerns with body fat.** Patients who believe they are overweight and show an obsession with weight loss despite being underweight should be evaluated for an [eating disorder](#) rather than body dysmorphic disorder.

Brain Imaging in Body Dysmorphic Disorder

Brain imaging studies which are research-oriented in psychiatric disease aim to elucidate new insights into the pathogenesis of certain disorders and find new therapeutic targets. In body dysmorphic disorder, researchers were mainly interested in **studying brain connectivity and how certain brain regions are communicating with each other.**

A recent study has shown that patients with body dysmorphic disorder have **increased connectivity between the temporal lobe and the occipital cortex, the parietal lobe, and these two regions and the bilateral occipital cortices.**

These findings are important as they can explain the symptoms of the disease and can also explain why the disease is more common in first-degree relatives, i.e. true structural brain abnormalities are evident. The previously described regions are known to be related to visual perception, higher visual function, emotion, and sensory perception. These are the functions believed to be impaired in patients with body dysmorphic disorder.

Single-photon emission computed tomography (SPECT) studies show whether regional perfusion patterns are changed. SPECT studies showed that patients with body dysmorphic disorder most commonly have abnormal involvement of the parietal regions which have been also shown to be involved in obsessive-compulsive disorder.

Based on these studies, **pharmacotherapy with serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors** has been used in small studies to test their efficacy in the condition. These neurotransmitter modulators are believed to alter brain connectivity, and/or the metabolic brain profile, which explains in part how they might work.

Treatment of Body Dysmorphic Disorder

Unfortunately, most patients with body dysmorphic disorder **eventually undergo some sort of cosmetic surgery or treatment.** When this happens, the patient is usually unsatisfied with the results and repetitive surgeries become more likely. Unsatisfied patients might even threaten the treating doctor physically or take some legal action against the treating surgeon. Because of this, it is better to reassure the patient that his or her condition is a psychiatric condition which is better managed by a psychiatrist rather than a surgeon.

The definitive treatment of body dysmorphic disorder includes [cognitive behavioral therapy \(CBT\)](#). Cognitive-behavioral therapy is the mainstay of treatment for body dysmorphic disorder.

The aim of cognitive-behavioral therapy is to **persuade the patient to change his or her appearance-related assumptions and beliefs.** One important goal of cognitive-

behavioral therapy in body dysmorphic disorder is to help the patient to perceive their body holistically, rather than focusing on minor physical defects.

Patients with good insight who receive **20 daily sessions of cognitive-behavioral therapy that are 90 minutes long** usually do very well and their symptoms improve dramatically. On the other hand, patients with poor or absent insight into their condition usually do not respond well to cognitive-behavioral therapy.

Pharmacological therapy

Patients who do not respond to cognitive-behavioral therapy, or those who have severe symptoms, might need pharmacotherapy. Unfortunately, most medications used in body dysmorphic disorder are **based on small case reports and case series** without any controlled randomized clinical trials.

The serotonin reuptake inhibitor clomipramine has been found to be effective in the symptomatic treatment of body dysmorphic disorder. **Non-serotonin reuptake inhibitor antidepressants should be avoided** in patients with body dysmorphic disorder as they were found to be ineffective.

More recently, the **serotonin-norepinephrine reuptake inhibitor venlafaxine** has been used in an open-label study for the treatment of body dysmorphic disorder. The results were promising. Levetiracetam, an antiepileptic medication, has also shown some efficacy in managing the symptoms of body dysmorphic disorder.

Complications

Untreated disease leads to the development of delusions and depression among the affected. The disease increases morbidity of comorbid conditions such as obsessive-compulsive disorder (OCD).

References

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