

Editorial

Binge eating disorder: an emerging entity that responds to pharmacotherapy

Binge eating refers to overeating episodes characterized by the consumption of a large amount of food in a discrete period of time followed by a sense of lack of control over eating. Stunkard first described this clinical phenomenon in 1959 in obese individuals.¹ More recently, the DSM-IV included the episode of binge eating as a defining component of bulimia nervosa (BN) and of the new proposed diagnostic category of binge eating disorder (BED). BED is an example of an eating disorder not otherwise specified and its provisional diagnostic criteria were included in the Appendix B of the DSM-IV. In short, the diagnosis of BED describes people who engage in recurrent, uncontrollable and distressing binge eating without any compensatory behaviors as those seen in BN. Although BED is not limited to obese individuals, it is a common diagnosis in this group, especially in those seeking weight loss treatment. While the estimated prevalence of BED in the general population ranges from 1.5 to 5%, in obese clinical samples it varies from 7.5% to 30%. Moreover, BED patients usually exhibit higher-than-expected rates of eating-related (body image distress) and general psychopathology (depression, anxiety and impulsivity).

Of note, since it was included in DSM-IV, the validity of BED diagnosis has been the subject of an intense debate among clinicians and researchers. The discrete boundaries between BED and BN non-purging type and the high recovery rates observed in community samples are some of the arguments against the validity of BED as an independent diagnosis. On the other hand, BED's distinctive association with core eating-related psychopathology, the co-occurrence of physical and psychiatric conditions and impaired psychosocial functioning reinforced the idea of BED as a distinctive eating disorder of clinical severity. Devlin et al.² have addressed the current status of BED's nosology reviewing exhaustively the evidence supporting and disconfirming four models to conceptualize this condition. In the first model, BED is considered as a distinct subtype of an eating disorder; in the second one, BED is defined as a variant of BN; in the third one, it is viewed as a behavioral subtype of obesity, and in the last model, BED occurs as an associated feature that appears when two primary disorders co-exist (obesity and depression or obesity and impulsivity). At the end of their discussion, the authors conclude that according to the current evidence none of these models should be entirely discarded.

It is also important to recognize that, to date, most contemporary psychiatric disorders have not been described as valid disease categories *per se*. However, it does not mean that they are not valuable constructs with high clinical utility. Kendell³ proposed that 'a diagnostic rubric possesses utility if it provides nontrivial information about prognosis and treatment outcomes'. In line with this assumption, BED may be considered as a valuable diagnostic concept. The acceptance of BED as a valid diagnostic category still

awaits further studies to address its construct validity. Even though, binge eating without any compensatory behavior is a usual and troubling phenomenon for those who experience it. These individuals are frequently seen in clinical settings and specific treatments are needed to target this condition.

Medications may be part of a multi-modal treatment of BED, that also includes psychological and nutritional interventions. The pharmacotherapy of BED is an area that has shown promising development in the last few years. Several randomized placebo-controlled trials with different agents have been recently published.⁴ Pharmacological studies conducted in BED have shown an increasing and progressive refinement. This methodological improvement may be observed in several aspects of the study design such as the inclusion of subjects with BED diagnosed according to the DSM-IV or DSM-IV-TR criteria, the introduction of more equivalent primary outcome measures (reports of weekly binge eating frequency), the use of standardized instruments to evaluate eating-related and general psychopathology, and the assessment of anthropometric parameters.

Overall, three classes of drugs have been studied in placebo-controlled trials in patients with BED.⁵ Antidepressants, particularly selective serotonin re-uptake inhibitors (SSRI), remain the best studied class of agents in this condition. SSRIs (fluoxetine, fluvoxamine, sertraline and citalopram) have been described to significantly reduce binge eating behavior and weight. More recently, the anti-obesity agent sibutramine⁴ and the neurotherapeutic agent topiramate have also been shown effective in BED.

Despite these refinements, some topics should be considered when analysing BED pharmacological trials. One important finding, specially observed in the early trials, was the strong response to placebo in this group of patients. This high response, however, is not an exclusive phenomenon of BED. It is characteristic of most other psychiatric conditions. For example, Versiani⁶ also observed a variable and pronounced placebo effect when reviewing pharmacological trials in social phobia. In addition, BED may have a variable course (with relapses and remissions) which may contribute to this high placebo response. Another important limitation of BED drug trials is that they are all short-termed, lasting from six up to fourteen weeks. Thus, it is uncertain if their therapeutic effects may be generalized for longer treatment periods.

Summing up, the pharmacotherapy of binge eating is still at an earlier stage of development. However, there is some evidence suggesting that binge eating, a frequently-observed clinical phenomenon, may respond to different pharmacological approaches. Further studies are needed to answer several questions such as the optimal medication, most appropriate regimen of dose and duration of treatment, as well as effects of combined treatments (medication and psychotherapy, medication and nutritional counseling, etc).

References

1. Stunkard AJ. Eating patterns and obesity. *Psychiatr Q.* 1959;33:284-95.
2. Devlin MJ, Goldfein JA, Dobrow I. What is this thing called BED? Current status of binge eating disorder nosology. *Int J Eat Disord.* 2003;34[suppl.]:S2-S18.
3. Kendell R, Jablensky A. Distinguishing between the validity and utility of

psychiatric diagnoses. *Am J Psychiatry* 2003;160:4-12.

4. Appolinario JC, Bacaltchuck J, Sichieri R, Claudino AM, Godoy-Mattos, Morgan C, Zanella MT, Coutinho W. A randomized, double-blind placebo controlled study of sibutramine in the treatment of binge-eating disorder. *Arch Gen Psychiatry.* 2003;60:1109-16.

5. Appolinario JC, Mc Elroy SL. Pharmacological approaches for the treatment of binge-eating disorder. *Curr Drug Targets* 2004;5(3):301-7.

6. Versiani M. A review of 19 double-blind placebo-controlled studies in social anxiety disorder (social phobia). *World J Biol Psychiatry* 2000;1(1):27-33.

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