

What is the Use of Pharmacotherapy in Eating Disorders?

While medications are not recommended as the sole treatment for eating disorders (NICE, 2017), they are commonly prescribed as a supplement to other therapeutic interventions (Davis & Attia, 2017).

Pharmacotherapy in Anorexia Nervosa (AN)

Many medications have been considered for the treatment of Anorexia Nervosa, but with mostly disappointing results. Medication is therefore not typically used as a primary treatment; however, many individuals are prescribed medication as part of their treatment plan, especially those who have not responded to psychotherapy or nutritional rehabilitation. It is thought that the lack of response to medications may be due to the compromised physiological and nutritional state of individuals with AN (Davis & Attia, 2017).

Antidepressants, such as selective serotonin re-uptake inhibitors (SSRIs), were initially thought of as a potential therapeutic option for individuals with AN because of the high incidence of other psychiatric disorders, such as depression, anxiety, and obsessive-compulsive disorder. However, these medications have not been shown to help achieve positive changes to weight or any associated psychological symptoms (Davis & Attia, 2017). Studies have found that antidepressants did not help significantly promote weight gain in inpatients (Attia et al, 1998) or prolong weight maintenance among recently weight-restored outpatients with AN (Walsh et al, 2006), nor did it show any improvement in psychopathology.

Antipsychotic medication has been considered for individuals with AN because they often experience intense anxiety and hold rigid thoughts and beliefs (Davis & Attia, 2017). Two small placebo-controlled trials, using the antipsychotic medication Olanzapine, reported modest improvements in rate of weight gain and end of treatment BMI (Attia et al, 2019), as well as decreased obsessiveness, in those taking Olanzapine (Bissada et al, 2008; Attia et al, 2011).

Other antipsychotic medications (e.g., risperidone, quetiapine) have not been associated with significant benefit in AN (Hagman et al, 2011; Powers et al, 2012).

Olanzapine is therefore the only medication with some consistent evidence supporting a weight gain benefit in AN. Because the weight gain shown in studies is modest, it is recommended as a possible adjunct to psychological treatment and nutrition rehabilitation rather than as a stand-alone treatment. It is also important to exercise caution in prescribing antipsychotics until it is clear that the symptoms experienced are not secondary to starvation (Hay et al, 2014).

In the acute stages of AN, comorbid conditions such as anxiety, depression or obsessive-compulsive features may resolve with weight gain alone without the need for consideration of medication.

Pharmacotherapy in Bulimia Nervosa (BN)

The use of medication in the treatment of Bulimia Nervosa has been well-researched and studies have consistently shown clinically significant results with the use of antidepressant medications such as selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs) (Davis & Attia, 2017).

Fluoxetine is the most commonly prescribed medication for the treatment of BN. The largest study was a randomized controlled trial (RCT) comparing the use of fluoxetine 60mg/day, 20mg/day, and placebo. They found that 60mg/day reduced binge eating episodes by 67%, compared to 45% with 20mg/day and 33% with a placebo. They also showed a 56% reduction in vomiting episodes per week with 60mg/day, compared to a 29% reduction with 20mg/day group, and 5% reduction with a placebo (Levine, 1992). Depression, carbohydrate craving, and pathologic eating attitudes and behaviours also improved significantly. It was also found that Fluoxetine was effective in reducing binge-purge episodes, even in the absence of comorbid depression, and that the clinical dose needed for reducing binge-purge episodes was higher than that prescribed for depression.

Although high dose fluoxetine has the strongest evidence base for Bulimia Nervosa; other SSRIs are also effective in both Bulimia Nervosa and Binge Eating Disorder (Hay et al, 2014).

It is recommended that the GP or psychiatrist consider medication as an adjunctive treatment, since an additive benefit has been shown for combined psychological and pharmacological therapy (Hay et al, 2014).

Cognitive Pharmacotherapy in Binge Eating Disorder (BED)

Similar to their effects in BN, antidepressants have generally been shown to reduce binge-eating in BED (Davis & Attia, 2017). High dose SSRIs are also effective in BED. It is recommended to consider medication as an adjunctive treatment, since an additive benefit has been shown for combined psychological and pharmacological therapy (Hay et al, 2014).

A randomised controlled trial compared the use of Lisdexamfetamine (LDX) at the dose of 70mg/day, 50mg/day, and 30mg/day, as well as a placebo. Treatment with 70mg/day and 50mg/day resulted in significant reductions in binge-eating frequency, as well as 50% achieving 4-week binge-eating cessation with 70mg/day, 42% with 50mg/day, and 21% with a placebo (McElroy et al, 2015). The Australia Department of Health authorised the use of LDX for the treatment of moderate to severe BED in adults when nonpharmacological treatment is unsuccessful or unavailable. They recommend that treatment should be commenced and managed by a psychiatrist, and that it is part of a total treatment program for BED that also includes nutritional, psychological, and medical treatment, and rehabilitation. For BED, the initial treatment period is 12 weeks, after which patients should then be observed to assess whether further treatment with LDX is required (Department of Health, 2018).

Cognitive Summary of Medications Used in Eating Disorders

Medication	Anorexia Nervosa (AN)	Bulimia Nervosa (BN)	Binge Eating Disorder (BED)	Monitoring (in addition to that outlined in drug monographs, e.g., MIMS)
<p>SSRIs</p> <p><i>Fluoxetine</i> <i>Sertraline</i> <i>Citalopram</i></p>	<p>No evidence that the SSRIs treat core symptoms or prevent relapse.</p> <p>This may be due to compromised physiological and nutritional state of individuals with AN.</p> <p>May be used with co-occurring diagnosis that requires this medication.</p>	<p>SSRIs are helpful to reduce binge eating and purging episodes. Most of the evidence is for the use of Fluoxetine at high doses.</p> <p>SSRIs may have additional benefit in patients with co-occurring depressive, anxious and obsessive-compulsive symptoms.</p>	<p>SSRIs are helpful to reduce binge eating episodes.</p> <p>SSRIs may have additional benefit in patients with co-occurring depressive, anxious and obsessive-compulsive symptoms.</p>	<p>Common side-effects include headaches and nausea though these generally resolve over several days to weeks.</p> <p>May increase anxiety particularly if dose is started too high.</p> <p>In individuals with suicidal thoughts this may increase the frequency of such thoughts.</p> <p>In 1-2% of cases it may cause hypomania. This risk can be minimised by starting at a low dose and increasing dose judiciously.</p>
<p>Antipsychotics</p> <p><i>Olanzapine</i> <i>Quetiapine</i> <i>Aripiprazole</i> <i>Risperidone</i></p>	<p>Olanzapine may reduce anxiety and ruminations about weight and shape, compulsive hyperactivity, delusional cognitions, and mood lability.</p> <p>No other antipsychotics have been shown to have benefit.</p>	<p>Not recommended unless a co-occurring diagnosis requires this medication.</p>	<p>Not recommended unless a co-occurring diagnosis requires this medication.</p>	<p>QTc monitoring with baseline and regular ECGs is required because of its potential effect on cardiac function, especially in those with pre-existing cardiac issues. Consult or refer to cardiologist if patient has compromised cardiac function.</p>
<p>Central Nervous System Stimulant</p> <p><i>Lisdexamfetmine</i></p>	<p>Not recommended unless a co-occurring diagnosis requires this medication.</p>	<p>Not recommended unless a co-occurring diagnosis requires this medication.</p>	<p>Approved for use to reduce binge eating episodes.</p>	<p>Can cause loss of appetite, which may affect nutritional intake.</p>

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