

Regimen promotes orlistat efficacy in teens

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Orlistat may be an effective weight loss medication that can enhance self-esteem in motivated, overweight teens

Orlistat is an FDA-approved anorexic agent for adults and adolescents that interferes with gastrointestinal lipase and prevents the absorption of 30% of dietary fat. Some clinical trials have failed to show significant weight reduction with orlistat,^{1,2} but in our adolescent residential psychiatric treatment center:

- 15 patients (13 girls and 2 boys) lost an average 17.9 lbs over 4 months
- one patient lost 100 lbs over 8 months.

In a naturalistic observation, we offered orlistat plus dietary counseling to all teenage patients with a body mass index (BMI) >25 kg/m². Gastrointestinal (GI) side effects, such as odoriferous loose stools and fat-stained and occasionally soiled underwear, are common.

Factors contributing to weight loss

Motivation. Most of our patients gained weight while being treated with psychiatric medications, particularly mood stabilizers and atypical antipsychotics. These were continued during orlistat use.

Larger waist sizes and exaggerated facial and body features diminished our overweight patients' self-respect and made them targets of bullying and rejection. Weight loss helped reverse these negative factors. Peers often supported these changes by including the teens in their circle of friends. Self-esteem, maturity, and motivation for personal growth were reflected in the teens' social and psychotherapeutic encounters.

Overweight. Weight loss was statistically significant in teens with BMI >25 kg/m². Average pre-orlistat weight was 193 lbs and BMI 33 kg/m². Average BMI loss was

4.3 kg/m² (median loss 3.7 kg/m², standard deviation ±4.08). Although we did not treat patients with initial BMI <25, patients who chose to remain on orlistat after reaching that level continued to lose weight.

Diet, dosing, and activity. Our patients began a low-fat, 1,800-calorie diet in 3 meals and 2 snacks per day. They also received a daily supplement with vitamins A, D, E, and K to prevent deficiencies from the loss of fat-soluble vitamins.

Orlistat, 120 mg tid, was dispensed before meals, which enhanced awareness of healthy food choices because high-fat foods caused GI side effects.

As patients lost weight, they became more interested in exercise, and tolerance for physical activity improved.

Monitoring and support. Nursing staff weighed the teenagers weekly. Patients also had twice-monthly psychiatric assessments of orlistat's impact on their medical, psychiatric, and psychopharmacologic status. The teens' primary concerns included the amount of weight loss and GI side effects.

Summary. Under these conditions, orlistat may be an effective weight loss medication that can enhance self-esteem in motivated, overweight teenagers with psychiatric comorbidities.

References

1. Chanoine JP, Hampl S, Jensen C, et al. Effect of orlistat on weight and body composition in obese adolescents: a randomized controlled trial. *JAMA*. 2005;293:2873-2883.
2. Maahs D, Gonzalez de Serna D, Kolotkin RL, et al. Randomized, double-blind, placebo-controlled trial of orlistat for weight loss in adolescents. *Endocr Pract*. 2006;12:18-28.

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