

Antiobesity drug therapy

To the Editor: The article by Mauer et al¹ in the August issue is an excellent and comprehensive review of antiobesity pharmacologic therapy. The authors twice mention the positive impact of antiobesity medications in reducing blood pressure. I wish to highlight that the pre-semaglutide trials of antiobesity medications have generally shown an underwhelming blood pressure effect given the amount of weight loss. It is important for physicians to consider these data when counseling patients about the magnitude of expected benefits in initiation of antiobesity therapies. For example, in the CONQUER² trial of phentermine-topiramate) and the SCALE³ trial of liraglutide, placebo-adjusted reductions of systolic blood pressure were approximately 3 mm Hg, and of diastolic blood pressure approximately 1 mm Hg. In CONQUER, the effect was minimally better when examining only the subgroup of patients with preceding hypertension, ie, approximately 4 mm Hg for systolic and 2 mm Hg for diastolic. The clinical relevance of these mild improvements may be less certain.

Of note, recent trials demonstrating more robust weight loss, such as those of semaglutide⁴ and tirzepatide,⁵ demonstrate more significant blood pressure reduction. It remains to be seen whether the improved effectiveness is simply due to increased weight loss, or whether other factors in the complicated pathophysiology of hypertension are being impacted.

Taher Modarressi, MD
Diabetes & Endocrine Associates of Hunterdon
Hunterdon Medical Center
Flemington, NJ 08822

■ REFERENCES

1. Mauer Y, Parker M, Kashyap SR. Antiobesity drug therapy: an individualized and comprehensive approach. *Clev Clin J Med* 2021; 88(8):440–448. doi:10.3949/ccjm.88a.20080
2. Gadde KM, Allison DB, Ryan DH, et al. Effects of low-dose, controlled-release, phentermine plus topiramate combination on weight and associated comorbidities in overweight and obese adults (CONQUER): a randomised, placebo-controlled, phase 3 trial. *Lancet* 2011; 377(9774):1341–1352. doi:10.1016/S0140-6736(11)60205-5
3. Pi-Sunyer X, Astrup A, Fujioka K, et al. A randomized, controlled trial of 3.0 mg of liraglutide in weight management. *N Engl J Med* 2015; 373(1):11–22. doi:10.1056/NEJMoa1411892
4. Wilding JPH, Batterham RL, Calanna S, et al. Once-weekly semaglutide in adults with overweight or obesity. *N Engl J Med* 2021; 384(11):989–1002. doi:10.1056/NEJMoa2032183
5. Frias JP, Davies MJ, Rosenstock J. Tirzepatide versus semaglutide once weekly in patients with type 2 diabetes. *N Engl J Med* 2021;385(6):503–515. doi:10.1056/NEJMoa2107519

doi:10.3949/ccjm.88c.12001