

Study suggests glucagon-like peptide-1 receptor agonists related to adolescent weight loss

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Preliminary evidence from a clinical trial suggests that treatment with glucagon-like peptide-1 (GLP-1) receptor agonists was associated with reduced body mass index and body weight in adolescents with severe obesity, according to a report published Online First by *JAMA Pediatrics*.

GLP-1 receptor agonist therapy, approved for adults with [type 2 diabetes mellitus](#), reduces body weight by enhancing satiety and suppressing appetite, even in patients without diabetes, according to the study background.

Aaron S. Kelly, Ph.D., of the University of Minnesota Medical School, Minneapolis, and colleagues conducted a three-month, placebo-controlled trial followed by a three-month open-label extension during which medication was offered to all patients. A total of 22 patients (12 to 19 years of age) completed the trial, in which the medication exenatide was administered subcutaneously (injected).

"The results of this clinical trial extend the findings of our previous pilot and feasibility study and offer additional evidence, within the context of a randomized, placebo-[controlled trial](#), that treatment with a GLP-1 receptor agonist significantly reduces BMI and body weight in adolescents with severe obesity," the authors note.

Exenatide caused a greater reduction in BMI compared with placebo (-2.7 percent). Researchers also observed a further reduction in BMI during the open-label phase for those patients initially randomized to exenatide (cumulative BMI reduction of 4 percent). The medication also resulted in a reduction, on average, in systolic blood pressure of -6mm HG, although researchers note it did not reach the level of statistical significance.

"In conclusion, data from the current study provide evidence that GLP-1 receptor agonist treatment reduces BMI and elicits a potentially meaningful reduction in SBP in adolescents with severe obesity," the authors conclude.

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