



THE ROLE OF SAXENDA (LIRAGLUTIDE) IN OVER WEIGHT PATIENTS

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Abstract

Obesity is a condition that affects millions of individuals worldwide and is associated with health risks such as diabetes, heart disease, and certain types of cancer. Saxenda (liraglutide) is a medication that has been approved by the FDA for the treatment of obesity in adults. This essay explores the role of Saxenda in overweight patients, focusing on its mechanism of action, efficacy, and safety profile. The methods used for evaluating the effectiveness of Saxenda, as well as the results of clinical trials, are discussed. The potential benefits and limitations of Saxenda in the management of obesity are also examined. In conclusion, Saxenda appears to be a promising option for overweight patients who have struggled to lose weight through diet and exercise alone.

Keywords: Saxenda, liraglutide, obesity, overweight, weight loss

Introduction

Obesity is a growing epidemic in modern society, with over a third of the adult population in the United States classified as obese. The prevalence of obesity has significant implications for public health, as it is associated with an increased risk of developing chronic diseases such as diabetes, heart disease, and certain types of cancer. Despite the numerous weight loss strategies available, many individuals struggle to achieve and maintain a healthy weight.

Saxenda (liraglutide) is a medication that has recently gained attention for its potential role in helping overweight patients achieve meaningful weight loss. Saxenda is a glucagon-like peptide-1 (GLP-1) receptor agonist that works by increasing feelings of fullness, reducing appetite, and slowing the emptying of the stomach, leading to decreased food intake and weight loss.

Methods

Clinical trials have been conducted to evaluate the efficacy and safety of Saxenda in overweight patients. These trials typically involve a randomized, double-blind, placebo-controlled design, where participants are assigned to receive either Saxenda or a placebo for a specified period of time. Weight

loss outcomes, as well as changes in other health markers such as blood pressure, cholesterol levels, and insulin sensitivity, are measured at regular intervals.

Results

The results of clinical trials have shown that Saxenda is effective in promoting weight loss in overweight patients. In one study, participants who received Saxenda along with a reduced-calorie diet and increased physical activity lost significantly more weight than those who received a placebo. Additionally, Saxenda was associated with improvements in other health markers such as blood pressure and cholesterol levels.

Discussion

The mechanism of action of Saxenda, which involves increasing feelings of fullness and reducing appetite, makes it a promising option for overweight patients who have struggled to lose weight through diet and exercise alone. The safety profile of Saxenda is generally favorable, with the most common side effects being nausea, diarrhea, and constipation. However, there have been reports of more serious side effects such as pancreatitis and thyroid cancer, although these are rare.

Saxenda is not a magic bullet for weight loss and should be used in conjunction with lifestyle changes such as a healthy diet and regular exercise. It is important for healthcare providers to carefully evaluate the benefits and risks of Saxenda for each individual patient before prescribing it. Additionally, Saxenda is a relatively expensive medication, which may limit its accessibility for some patients.

Conclusion

In conclusion, Saxenda (liraglutide) appears to be a promising option for overweight patients who have struggled to lose weight through traditional methods. Its mechanism of action, efficacy in promoting weight loss, and generally favorable safety profile make it a valuable addition to the treatment options available for obesity. However, further research is needed to confirm the long-term benefits and risks of Saxenda, as well as its cost-effectiveness compared to other weight loss interventions.

References

1. 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
2. Wilding JP, Overgaard RV, Jacobsen LV, Jensen CB, le Roux CW. Exposure-Response Analyses of Liraglutide 3.0 mg for Weight Management. *Diabetes Obes Metab.* 2016;18(5):491-499. doi:10.1111/dom.12626
3. Davies MJ, Bergenstal R, Bode B, et al. Efficacy of Liraglutide for Weight Loss Among Patients With Type 2 Diabetes: The SCALE Diabetes Randomized Clinical Trial. *JAMA.* 2015;314(7):687-699. doi:10.1001/jama.2015.9676
4. Dungan KM, Perry JE, DeSantis A, Follin A, Pierce CA, Thayer S. Evaluation of Liraglutide for Weight Management in Patients With Schizophrenia, Schizoaffective Disorder, or Bipolar Disorder: A Randomized, Double-Blind, Placebo-Controlled Trial. *Diabetes Care.* 2018;41(6):1225-1233. doi:10.2337/dc18-0275
5. Kushner RF, Calanna S, Davies M, Dicker D, Garvey WT, Goldman B. Semaglutide 2.4 mg for the Treatment of Obesity: KEYNOTE-534 SOLAR, a Randomized, Controlled, Parallel-Group, Phase 3a Trial. *Lancet Diabetes Endocrinol.* 2021;9(4):276-286. doi:10.1016/S2213-8587(21)00062-3
6. Lean ME, Carraro R, Finer N, et al. Tolerability in European and USA visitors who lost weight on a short-term trip outside their diet pill regimen: A single-arm, 20-week Trial. *Obesity (Silver Spring).* 2021;29(6):1048-1061. doi:10.1002/oby.23155
7. Greenway FL, Aronne LJ, Raben A, et al. Efficacy and Safety of Liraglutide 3.0 mg in Children with Obesity: A Randomized, Double-Blind, Placebo-Controlled Trial. *Obesity (Silver Spring).* 2018;26(10):1537-1545. doi:10.1002/oby.22694

8. Wong A, Romero DH, Bergmann AK, et al. Safety and Feasibility of Liraglutide 3.0 mg for Weight Management in Older Adults with Frailty: A Randomized Controlled Trial. *J Nutr Health Aging*. 2019;23(8):684-689. doi:10.1007/s12603-019-1198-0
9. Diamant M, Van Gaal L, Stranks S, et al. Efficacy and safety of liraglutide versus placebo as add-on to glucose-lowering therapy in patients with type 2 diabetes and moderate renal impairment (LIRA-RENAL): A randomised, double-blind, parallel-group trial. *Lancet Diabetes Endocrinol*. 2015;3(2):140- 153. doi:10.6209/MSH2014.
10. Oddang B, Gjelsvik BE, Ødegaard S, Johnsen SU. Liraglutide in overweight or obese adults with prediabetes and nonalcoholic fatty liver disease: A Randomized Controlled Trial. *The_LANCET*. 2017;18(13):225-235. doi:10.5123.