

Title: Semaglutide Vs Liraglutide for treatment of type 2 diabetes mellitus in adults: a systematic review

Abstract:

Background

Semaglutide and Liraglutide are two newly introduced medications and are both GLP-1 agonists. However, only Semaglutide is FDA approved for the treatment of type 2 diabetes, while Liraglutide is FDA approved for the purpose of chronic weight management. This raises the query regarding the variability between these two medications in the context of treating type 2 diabetes mellitus in adults.

Methods

Four electronic platforms (PubMed, Embase, the NIH clinical trials database, the Canadian journal of Diabetes) were searched with no restriction. Abstracts and full texts of relevant articles were reviewed independently by two researchers against the set eligibility criteria, and assessed using the JBI critical appraisal checklist for randomized controlled trials. Data was independently extracted by 2 researchers.

Results

A total of 88 articles were identified following thorough research. After excluding duplicates and evaluating the relevant papers, 5 articles were included in this review. Two variables were recorded with relevance to the management of type 2 diabetes: change in HbA1c levels and change in body weight.

Conclusion

Both Semaglutide and liraglutide were successful in decreasing HbA1c and body weight in type II diabetes patients. Semaglutide was more effective in achieving higher HbA1c and body weight changes than liraglutide.