Semaglutide and Tirzepetide for Weight Regain and Management following Sleeve Gastrectomy

Jamal M[1], Dsouza C[1], Al-Hashemi M[1], Al-Hassani S[1], Qasem W[2], Almazeedi S[2], Al-Sabah S[2]

[1] College of Medicine, Department of Surgery, Kuwait University
[2] Ministry of Health, Kuwait

INTRODUCTION AND OBJECTIVE

Metabolic and bariatric surgery (MBS) is the most effective treatment for obesity and improvement of obesity associated comorbidities. However, a proportion of these patients may suffer from weight recurrence and recurrence of obesity associated comorbidities. The aim of the study is to determine the real-world effectiveness of semaglutide and tirzepatide as a treatment for weight recurrence after sleeve gastrectomy (SG).

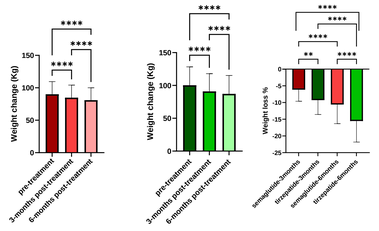
METHODS

A retrospective analysis of medical records on individuals who underwent SG between January 2008 and August 2022, and sought treatment for weight recurrence or management using semaglutide or tirzepetide from January 2022 onwards

RESULTS

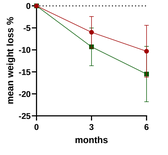
Weight loss outcomes were obtained after 3 and 6-months of semaglutide and tirzepatide treatment Following a semaglutide treatment, the mean post-treatment weight at 3-months and 6-months was 84.9±19.3 kg and 81.0±19.1 kg from 90.1±19.4 kg, corresponding to a clinically significant mean weight loss from baseline to 3-months of -6.0±3.6% ($p<0.0001$) and to 6-months of -10.3±5.9 % ($p<0.0001$). Following a tirzepatide treatment, the mean post-treatment weight at 3-months and 6- months was 91.2±27.3 kg and 87.6±28.3 from 100.2±28.5 kg, corresponding to a clinically significant mean weight loss from baseline to 3-months of -9.3±4.3 % ($p<0.0001$) and to 6-months of -15.5±6.3 % ($p<0.0001$). Weight loss percentage in tirzepatide patients at 3 and 6-months was significantly greater than the semaglutide patients at 3-months ($p=0.007$) and 6-months ($p<0.0001$), likewise statistical difference in weight loss was observed with increase in respective treatment duration ($p<0.0001$).

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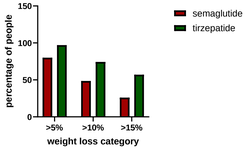
KEY FINDINGS

Key Finding 1: .



Following 6-month of semaglutide and tirzepatide treatmenr, weight loss was 10.3 (5.9%) and 15.5 (6.3%) respectively

Key Finding 2



At 6-months of semaglutide and tirzepatide treatment, 80.0% and 97.1% of patients had ≥5% total body weight loss

KEY HIGHLIGHTS

- Weight recurrence is common after metabolic and bariatric surgery (MBS). However, there are no approved weight management drugs for use in patients with weight recurrence after MBS.
- This study adds to the current body of evidence supporting the clinical effectiveness of semaglutide and tirzepatide for weight reduction in patients with obesity, particularly in those with weight recurrence following sleeve gastrectomy (SG).
- A meaningful weight loss may be achieved with the use of pharmacotherapy in patients with weight recurrence after SG without the need for revisional surgery.
- Pharmacotherapy can be an effective alternative to revisional surgeries with minimum adverse effects.

CONCLUSION

Semaglutide and tirzepatide may be an effective treatment for managing excessive weight regain or insufficient weight loss in patients who had sleeve gastrectomy. Further studies with larger sample sizes and longer follow-up periods are needed to strengthen the evidence on the benefits and safety of the treatment approach.

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