

Low dose semaglutide use for weight loss in an Emirati population living with obesity: a retrospective study

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Introduction

Semaglutide subcutaneous injection has been widely used since it was first made available in the United Arab Emirates (UAE) in 2020, when it was licensed for the treatment of type 2 diabetes (T2D) in a dose of up to 1mg weekly. Semaglutide has since been licensed in the USA for the treatment of obesity at higher doses, up to a maximum of 2.4mg weekly. Patients living with obesity and without T2D have been prescribed this medication off-label for weight loss on a self-funding basis, often preferring to stay on lower doses because of the lower cost. Our aim was to assess outcomes of semaglutide use in our weight management clinic at Imperial College London Diabetes Centre (ICLDC) in Abu Dhabi.

Method

A search was performed of the ICLDC database from 1st October 2020 to 30th September 2022. Weight and demographic data were recorded for all patients without a diagnosis of T2D who received subcutaneous semaglutide for a minimum of 3 continuous months at an average dose ≥ 0.5 mg weekly and who attended for regular follow-up.

Results

We identified 87 patients with weight measurements both at initiation and on completion of three months' treatment and 27 patients with weight data for six months. For the three month group mean age at the start of treatment was 39.7 years, median BMI was 34.0 kg/m² and of those 80 were Emirati, six were other Arab ethnicity and one was non-Arab. 66 patients (76%) were female and 22 patients (25%) had history of bariatric surgery (15 had sleeve gastrectomy, six had gastric bypass and one gastric band). Median total body weight loss at three months was 6.6% (IQR 3.4-9.1) ($p=0.02$) using a mean weekly dose for the period of 0.64mg semaglutide (SD 0.17). For those completing six months treatment median total weight loss was 11.5% (IQR 7.7-15.5) ($p=0.03$) with a mean weekly dose of 0.68mg (SD 0.18). Weight loss was not associated with age, gender, BMI and history of bariatric surgery.

Conclusion

In this predominantly Emirati population, patients who attended regular follow-up achieved significant weight loss with semaglutide therapy, which was greater at six months than at three months. Many patients were excluded from the study due to insufficient data as they received medication refills remotely, a common practice since the covid19 pandemic. Others were excluded due to treatment gaps either because of irregular attendance or financial constraints. It is notable that these outcomes were achieved with relatively low doses of semaglutide, on average less than one third of the maximum dose licensed for the treatment of obesity.

1. Conflict of Interest:

None Disclosed

2. Funding:

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