

Evaluation of the Efficacy of Weight Lowering Drugs: Saxenda Liraglutide versus Orlistat

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Abstract

Aim: To evaluate the effectiveness of two of the FDA approved medications in reducing weight used for obese patients in the Perfect weight clinic (PWC) of Al Dhafra Family Medicine Center (DFMC) and simultaneously assess the safety and cost of the medications used.

Methods: We did a single center based cohort, observational 16-week monitoring study of weight management in patients on Injectable Saxenda® Liraglutide and for 3 months or more in patients on Open-label Oral Orlistat in the PWC of DFMC. Participants with the Body Mass Index (BMI) of 27 kg/m² or greater in the presence of at least one weight-related comorbid were studied with regards to the effectiveness of the weight reducing drugs. Weight change were monitored after each visit to the clinic for patients on Liraglutide, and retrospective data was extracted from Health Information System (HIS) for weight monitoring in patients prescribed Orlistat. Comparison of means of continuous variables was done using paired sample t-test and two sample t-test.

Results: One Hundred Seventy patients from only Emarati (local population) were included in both groups. 94 from the group of Saxenda® Liraglutide (mean age 34.8 ±10.27 years) were monitored and data from 76 patients from the group of Orlistat (mean age 46.91±10.78 years) was reviewed. The mean weight loss (WL) in patients on Saxenda® Liraglutide (7.14±2.38 kg) was significantly higher than patients on Orlistat (1.89±4.47) kg). There was an exposure–weight loss response in only 14 patients (15%) on Saxenda® Liraglutide who continued with the 16-week regimen (Mean WL – 7 kg) reaching the target of > 4% WL from baseline. Substantial exposure-weight loss was not seen in those 11 patients (14.47%) on Orlistat who maintained the three times a day regimen for 3-7 months' thereby not attaining the target WL of 5% from baseline. Results revealed that 26.6% of Saxenda® Liraglutide and 36.6% of Orlistat were appropriately utilized cost wise. The safety profile showed that only 3 patients (3.2%) discontinued the treatment due to the known GI side effects of Saxenda® Liraglutide.

Conclusions: This analysis supports the use of liraglutide 3.0mg for weight management in patients who comply with the medication along with the diet, exercise and behavioural changes as no concomitant deterioration in safety/tolerability besides previously known gastrointestinal side effects were noted. There was not much remarkable weight loss with Orlistat and rather poor compliance with both medications.

Keyword: Liraglutide, Orlistat, weight loss