

Response of HbA1c and weight against time in the Association of British Clinical Diabetologists (ABCD) nationwide exenatide and liraglutide audits

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Introduction

ABCD conducted two nationwide audits of GLP-1 agonist treatment: exenatide (completed) and liraglutide (ongoing). HbA1c and weight effects with time were examined for both agents.

Methods

126 and 65 centres across UK submitted anonymised data on 6717 and 3010 patients started on exenatide and liraglutide, respectively. On-treatment HbA1c and weight results up to 24 months were examined. HbA1c and weight changes of patients with complete data at baseline, 3 and 6 months (Model 1), and baseline, 3, 6 and 12 months (Model 2), were compared using a General Linear Model.

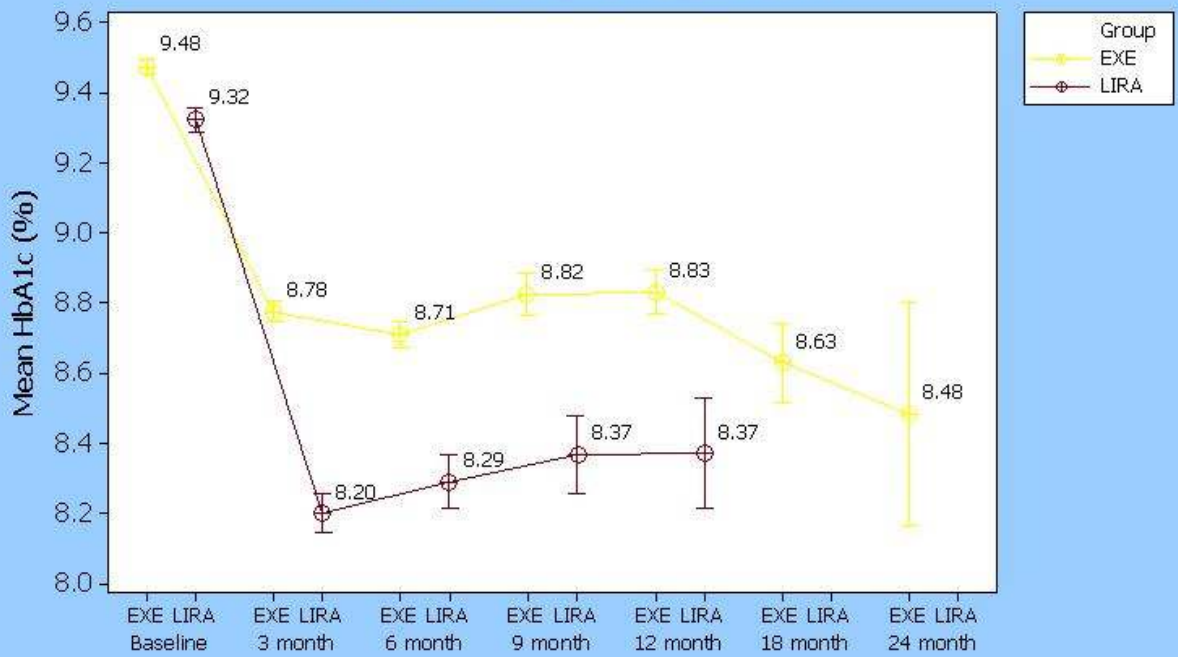
Results

Combined baseline characteristics were 54.5% male, Caucasian 91.1%, mean(SD) age 55.0(10.8) years, HbA1c 9.41(1.71)%, weight 112.8(23.3) kg, BMI 39.4(7.7) kg/m² and median(interquartile range) diabetes duration 9(5-13) years. Model 1 had (exenatide/liraglutide) 1606/215 patients with HbA1c data and 1483/254 patients with weight data. Model 2 (Figures 3 and 4) had 584/31 and 481/30 patients with HbA1c and weight data. In Model 1, exenatide patients achieved significant initial HbA1c change from baseline to 3 months, mean (SE) -0.70(0.04)% (p<0.001) but not subsequently from 3 to 6 months -0.08(0.04)% (p=0.108). Similarly, liraglutide patients achieved corresponding changes of -0.87(0.09)% (p<0.001) and +0.04(0.09)% (p=0.911). In contrast, weight continued to reduce; -4.8(0.1) kg (baseline to 3 months) and -2.2(0.1) kg (3 months to 6 months) for exenatide, and -2.6(0.3) kg and -1.0(0.3) kg for liraglutide (p<0.001 all intervals). Model 2 showed continued weight reduction until 12 months in both audits although this was not statistically significant for liraglutide. This may have been due to a small sample size. HbA1c and weight findings were similar after excluding patients who also started insulin.

Conclusions

In patients continuing exenatide and liraglutide in the audits, HbA1c reduction occurred primarily in the first 3 months after treatment but weight reduction was progressive towards 12 months.

Bars are One Standard Error from the Mean



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