

The Association of British Clinical Diabetologists (ABCD) nationwide exenatide and liraglutide audits

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Aims

- To compare use and efficacy of exenatide and liraglutide in two large scale nationwide audits of real clinical practice.

The ABCD nationwide exenatide and liraglutide

	Exenatide Audit	Liraglutide Audit (ongoing)
Dates of data	2007 - 2009	2009 - 2010
Centres	126	64
Contributors	315	210
Patients	6717	3010

- Collected anonymised data of patients treated with exenatide or liraglutide in the UK
 - Patient demographics
 - Diabetes medications
 - HbA1c, Weight
 - Lipids
 - Blood pressure
 - Adverse Events and GLP-1 discontinuation

Methods

- Comparisons of baseline characteristics, diabetes medication use and HbA1c and weight changes using Student's t-test, Mann-Whitney U test and Chi Square test
- Excluded liraglutide patients previously on exenatide
- HbA1c and Weight results taken at 6 months (\pm 6 weeks)
- Blood pressure and lipid changes also analysed

Results

Baseline characteristics

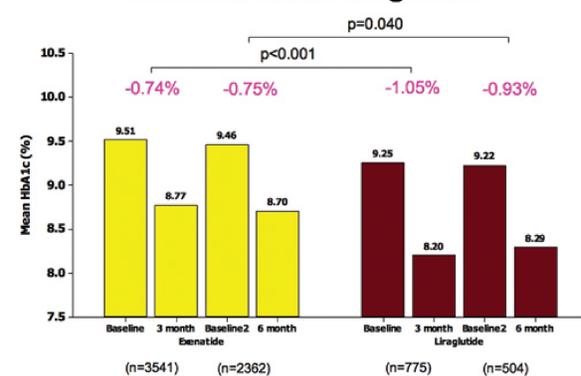
	Exenatide Audit (n=6717)	Liraglutide Audit (n=2303)	p value
Male (%)	54.9	54.1	0.491
Caucasian (%)	84.4	90.4	<0.001
Age (yrs)	54.9 (10.6)	55.4 (11.2)	0.033
Diabetes duration (yrs)	8 (5-13)	9 (5-13)	0.424
HbA1c (%)	9.47 (1.69)	9.32 (1.72)	0.001
Weight (kg)	113.8 (23.4)	111.1 (23.0)	<0.001
BMI (kg/m ²)	39.8 (8.0)	39.1 (7.5)	<0.001
Single oral therapy (%)	12.7	12.0	0.371
Dual oral therapy (%)	28.1	28.1	0.969
\geq 3 oral therapy (%)	15.6%	17.9%	0.012
On insulin (%)	33.9	39.8	<0.001

Results with mean (SD) and median diabetes duration (inter-quartile range)

Baseline diabetes treatment use and discontinuation

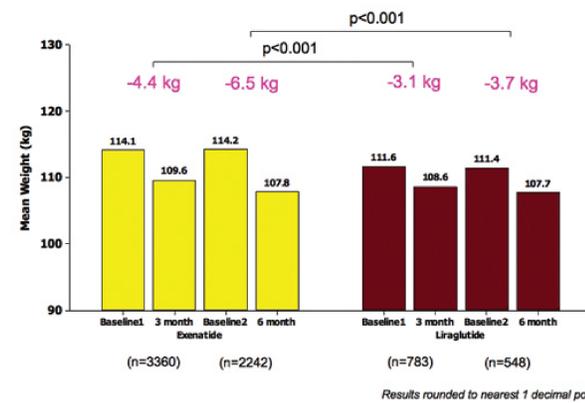
	Exenatide Audit	Liraglutide Audit
Metformin	84.0% (0.9%)	82.7% (0.7%)
Sulphonylurea	49.5% (6.5%)	42.8% (5.3%)
Thiazolidinedione	27.1% (13.4%)	20.5% (7.5%)
Meglitinide	2.0% (0.6%)	1.0% (0.2%)
Acarbose	0.9% (0.3%)	0.7% (0.3%)
DPPIV-Inhibitor	2.2% (1.4%)	10.9% (9.3%)
Exenatide	-	21.9% (21.9%)
Insulin	33.9% (8.1%)	39.6% (2.6%)

HbA1c changes at 3 and 6 months: exenatide and liraglutide



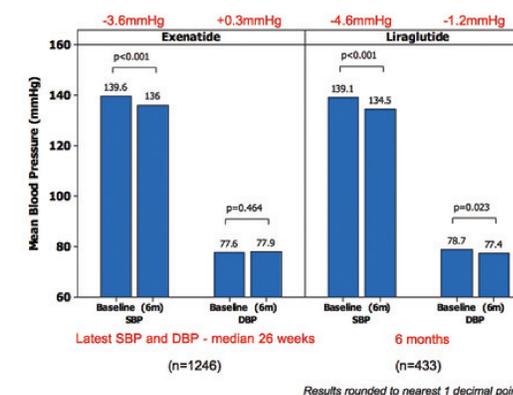
Results rounded to nearest 2 decimal points

Weight changes at 3 and 6 months: exenatide and liraglutide



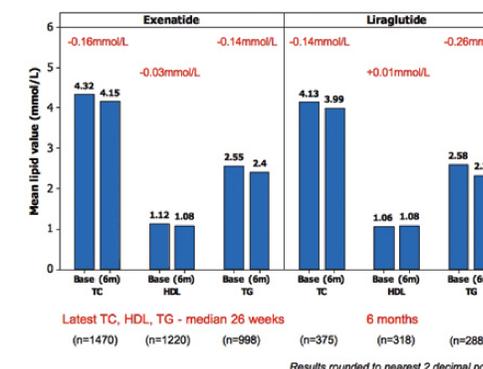
Results rounded to nearest 1 decimal point

Blood pressure: exenatide and liraglutide



Results rounded to nearest 1 decimal point

Lipids: exenatide and liraglutide



Results rounded to nearest 2 decimal points

Conclusions

- These very large audits reveal the effectiveness of these agents in much heavier and more poorly controlled patients than those studied in clinical trials
- Patients achieved greater HbA1c reduction but lesser weight reduction in the liraglutide audit as compared with the exenatide audit
- However, there were lesser insulin and TZD discontinuation but greater DPPIV inhibitor discontinuation in the liraglutide audit. Contributors might have learnt from the previous use of exenatide to avoid over-reduction of diabetes treatment when initiating liraglutide

Acknowledgment

- We thank all the nationwide contributors for submitting data on patients on exenatide and liraglutide
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