Added weight loss effects with Dapagliflozin and GLP-1 agonists

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Study Question and Design

Are the weight loss actions of dapagliflozin and GLP-1 agonist additive?

Retrospective systematic case-note audit of patients started on dapagliflozin in the Beta Cell Diabetes Centre at Chelsea and Westminster Hospital.

Data Collection

- A real world observational study
 - All patient started on dapagliflozin identified (n=122)
 - Data collected from electronic and paper records: weight, HbA1c, BP, concurrent medications, ect.
- Study population
 - Those with weight follow up data included for analysis (n=88)
 - 48 people on dapagliflozin without a GLP-1 agonist
 - 40 people on dapagliflozin and a GLP-1 agonist

Study population

	No GLP-1 agonist	GLP-1 agonist	p value
Mean age (years)	61	59	0.34
Mean BMI (kg/m²)	33	34	0.37
Mean duration of diabetes (years)	15	16	0.43
Female (%)	49	39	0.40
Systolic BP (mmHg)	135	135	0.96
HbA1c (%)	9.5	9.2	0.40

Study population

GLP-1 agonists (n=40):

- Exenatide n=5
- Liraglutide n=34
- Lixisenatide n=1

Follow up

- Total number of follow up visits: 140
 - Mean of 1.6 per person
- Mean duration of follow up 154 days
 - Range 11 to 404 days

Results

The mean weight change:

- -1.4kg (dapagliflozin)
- -2.8kg (dapagliflozin and a GLP-1 agonist)

(p=0.05)

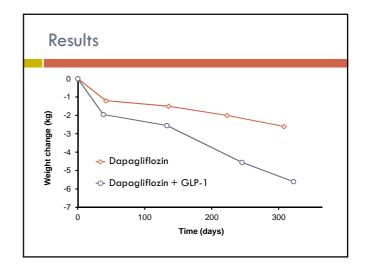
No weight loss in:

- 12 people (25%) (dapagliflozin)
- 9 people (23%) (dapagliflozin and a GLP-1 agonist)

In weight loss responders:

- -3.0kg (dapagliflozin)
- -7.2kg (dapagliflozin and a GLP-1 agonist)

(p=0.02)



Strengths and limitations

Limitations

- Small sample size
- Short duration of follow-up
- Heteroskedacity in weight loss outcome

Strengths

- Frequent follow up measurements
- Real world data on a real world population

Conclusion

This early data suggests that there are additive weight loss effects of dapagliflozin and GLP-1 agonists

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