A Cognitive Behavioral Intervention to reduce fear of hypoglycemia in Adults with T1DM

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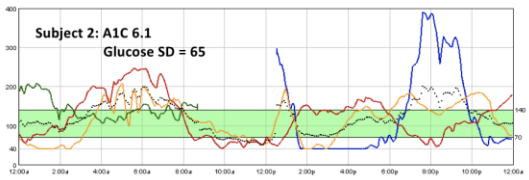
Introduction

- All persons with T1DM are at risk for hypoglycemia (BG < 70 mg/dL)
- Hypoglycemia a major barrier to achieving glycemic targets, in part due to fear of hypoglycemia (FOH)
- FOH can impair diabetes self-management and result in greater glycemic variability



Purpose

Evaluate a cognitive behavioral therapy (CBT) Intervention in young adults with T1DM on the outcomes: FOH, glycemic control and glycemic variability

Methods

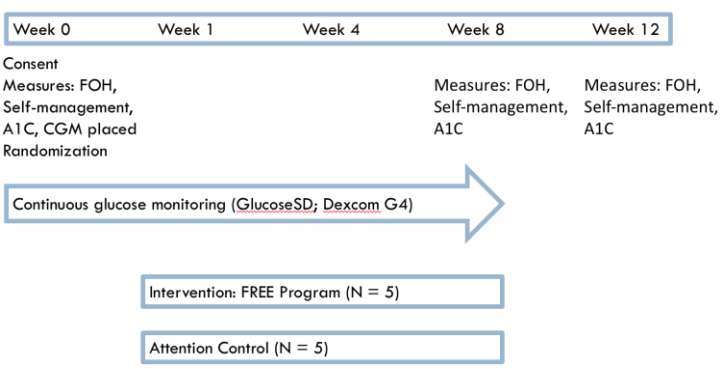
Recruitment:

- Men and women, 18-30 years with T1DM
- Use insulin pump therapy
- Experience FOH (screening instrument)
- Excluded if pregnant, receiving therapy for anxiety or depression

RCT Design:

- 8-week individual CBT program with real-time continuous glucose monitoring
- Compared to 8-week attention control group using continuous glucose monitoring only

Study Protocol



Results

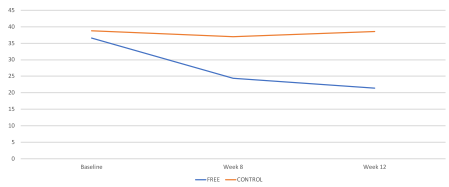
Sample Characteristics

- 21-30 years
- Non-Hispanic, White, 60% female
- Diabetes duration 14.7 ± 5.4 years
- HbA1c 7.6 ± 1.3%

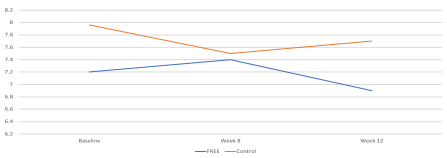
Study Outcomes

- FREE participants experienced a 42% reduction in FOH; attention control group experienced no change (estimated effect size 0.668)
- HbA1c results decreased in both groups (-4% FREE; -2.5% Control)
- No change in glycemic variability

Changes in Fear of Hypoglycemia as a Function of Time and Treatment



Changes in HbA1c as a Function of Time and Treatment



Conclusions

- A CBT program tailored to young T1DM adults is feasible and acceptable to the target audience
- Individualized format that focused on person-specific fears may have contributed to the reduction in FOH

Acknowledgements

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