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Principal Investigator

Andrea Kelly, MD, MSCE and Michael Rickels, MD, MS

Study Title:

Effects of GLP-1 Agonist Therapy on Insulin Secretion in Adults with Pancreatic Insufficient Cystic Fibrosis and Abnormal Glucose Tolerance: a randomized, open-label, cross-over trial

Purpose:

The research study is being conducted to better understand Cystic-Fibrosis Related Diabetes (CFRD) and to see the effects of an analog of the gut incretin hormone, GLP-1 (dulaglutide), has on individuals with abnormal glucose tolerance. GLP-1 (dulaglutide) helps the pancreas release insulin, which controls blood sugar levels from getting too high and is currently prescribed to people with Type 2 diabetes. We are looking at how GLP-1 (dulaglutide) might help improve blood sugar levels for people with cystic fibrosis and abnormal glucose tolerance.

Brief Description

Diabetes is a major co-morbidity in pancreatic insufficient cystic fibrosis (PI-CF) and associated with worse outcomes. While reduced β -cell mass contributes to the insulin secretory defects that characterizes cystic fibrosis-related diabetes (CFRD), other modifiable determinants appear operative in the emergence and progression of abnormal glucose tolerance towards diabetes. Identifying interventions to preserve β -cell function are crucial for delaying and potentially preventing CFRD development. In this study, we hypothesize that weekly administration of the long-acting glucagon-like peptide-1 (GLP-1) agonist dulaglutide will improve defective early-phase insulin secretion and improve glucose tolerance during a mixed-meal tolerance test.

Eligibility

Eligible to participate in this study if they meet the following criteria:

1. Confirmed diagnosis of Cystic Fibrosis.
2. Male or Female
3. 18 year or older
4. Pancreatic insufficiency
5. Abnormal glucose tolerance

Compensation (if applicable)

\$75.00 for Screening Visit

\$200 or each Mixed Meal Tolerance Test

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