MedicalXpress

Diabetes drug appears to work for weight management, reversing prediabetes

June 23 2014

Nondiabetic obese and overweight people lose more weight, are more likely to reverse prediabetes and are slower to develop type 2 diabetes when they take the diabetes drug liraglutide in addition to dieting and exercising, a new study finds. The results of the multicenter study were presented Saturday at the joint meeting of the International Society of Endocrinology and the Endocrine Society: ICE/ENDO 2014 in Chicago.

Study subjects who received a 3-milligram (3-mg) dose of liraglutide lost an average of 8 percent of their body weight (18.7 pounds), compared with just 2.6 percent (6.2 pounds) for subjects receiving a placebo, or "dummy" drug, the investigators reported.

"An 8 percent weight loss is as good as with any weight loss drug on the market," said F. Xavier Pi-Sunyer, MD, MPH, the study's principal investigator and an endocrinologist at St. Luke's-Roosevelt Hospital Center in New York City.

Liraglutide 3 mg is an investigational product and is not approved by the FDA. Liraglutide (1.2 and 1.8 mg) is exclusively marketed globally under the brand name Victoza® for the treatment of adults with type 2 diabetes to improve glycemic control. The drug is not approved for weight management, according to its manufacturer, Denmark-based Novo Nordisk, which sponsored this study, called the SCALE™ (Satiety and Clinical Adiposity-Liraglutide Evidence in Nondiabetic and Diabetic Subjects) Obesity and Prediabetes trial.

The study included 3,731 obese adults and overweight adults who had at least one other risk factor for heart disease, such as prediabetes, high blood pressure or high cholesterol. As part of their weight loss efforts, all subjects exercised and ate 500 fewer calories than usual. In addition, they were randomly assigned, in a 2-to-1 ratio, to a once-daily injection with either 3 mg of liraglutide or placebo for 56 weeks. Neither the subjects nor the investigators knew who received the active drug. Subjects who received liraglutide started at a dose of 0.6 mg, which gradually was increased to 3 mg, to minimize side effects, such as nausea.

The study had two arms. In the first arm, which included 1,446 adults who did not have prediabetes, 959 received liraglutide and 487 got the placebo. For the second arm, among 2,285 individuals with prediabetes, liraglutide went to 1,528 of them and placebo to 757.

Among subjects who had prediabetes at the beginning of the study (arm 2), blood sugar levels reverted to normal in nearly 70 percent of those receiving liraglutide versus 32 percent of people in the placebo group, according to the abstract. Liraglutide also lowered the chance of prediabetes developing in adults who started the study with normal blood sugar levels, with 7 percent becoming prediabetic compared with nearly 20 percent of those receiving placebo.

Study data also showed that type 2 diabetes developed in three times as many people receiving placebo as those who took liraglutide (14 subjects versus four, respectively).

"The delay in progression to type 2 diabetes with liraglutide use is likely due to increased weight loss," Pi-Sunyer said.

The SCALE Obesity and Prediabetes trial is continuing for two more years for the prediabetic subjects in arm 2. Twelve-week results show

that liraglutide treatment continues to sustain the weight loss, Pi-Sunyer reported.

Provided by The Endocrine Society

Citation: Diabetes drug appears to work for weight management, reversing prediabetes (2014, June 23) retrieved 3 May 2024 from https://medicalxpress.com/news/2014-06-diabetes-drug-weight-reversing-prediabetes.html