

Watch Out For Semaglutide: Potential Cause Of Pancreatitis?

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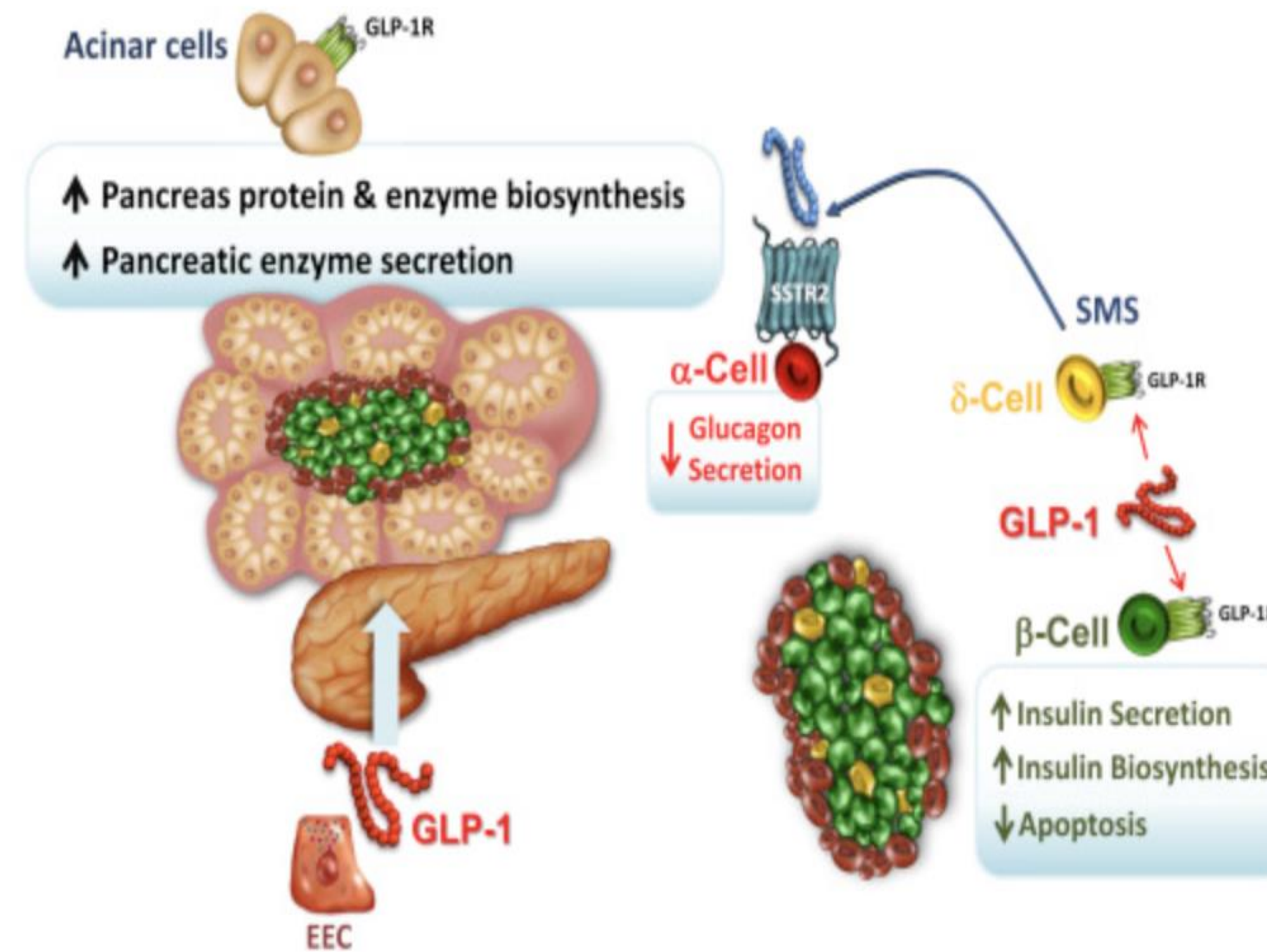
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Introduction

- Recent clinical trials (STEP program) have shown Semaglutide to be the cornerstone in type 2 diabetes and weight management. Here, we present a case of acute pancreatitis (AP) in a patient who was recently started on Semaglutide for diabetes mellitus.

Case

- 61-year-old female with a medical history of diabetes Mellitus type 2, hypertension, depression, and obesity (BMI 48.87) presented with one day of 10/10 upper quadrant abdominal pain radiating to her back associated with nausea.
- She was recently started on Semaglutide 2 months ago.
- Denied alcohol and recreational drug use. She had a cholecystectomy five years ago.
- On arrival, blood pressure was 178/80. The chemistry and lipid panel was unremarkable except for the liver's function, elevated: AST 324, ALT 140. Lipase level 4986.
- Diagnosed with AP based on 2 out of 3 diagnostic criteria: abdominal pain, amylase and/or lipase ≥ 3 ULN, and/or characteristic findings on pancreas imaging.



They directly stimulate GLP-1 receptors in pancreatic islet beta cells and exocrine duct cells which may cause an overgrowth of the cells that cover the smaller ducts, thereby resulting in hyperplasia, increased pancreatic weight, duct occlusion, back pressure, and subsequent acute or chronic pancreatic inflammation.

- MRCP did not show any abnormalities or stones.
- She was continued on IVF and had a resolution of all symptoms the following day.
- She was advised to discontinue Semaglutide on discharge and discuss with PCP regarding other diabetes medications options.

Discussion

- GLP 1 agonists are becoming more favored among diabetes mellitus type 2 patients due to weight loss, less risk of hypoglycemia, and better compliance.
- Pancreatitis associated with GLP 1 agonists might present with atypical presentation; therefore, the prevalence might be underreported, and other database studies have also shown conflicting results.
- Acute pancreatitis was observed with Semaglutide at rates similar to placebo during the SUSTAIN-6 trial.
- Data could have been confounded, since patients with diabetes who have an indication for GLP-1RA therapy often have concomitant risk factors for pancreatitis (*obesity, longer diabetes duration, and co-medication*).

Reference

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