Recurrent Pancreatitis from Chronic GLP-1 Use

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Introduction

Pancreatitis can range from mild discomfort to severe, life-threatening illness. It is commonly caused by cholelithiasis, chronic alcohol consumption, or certain medications. In recent years, there has been growing interest in the relationship between glucagon-like peptide-1 (GLP-1) receptor agonists—widely used for managing type 2 diabetes and obesity—and the risk of acute pancreatitis. While GLP-1 receptor agonists such as liraglutide and semaglutide have shown significant metabolic benefits, concerns have emerged regarding their potential to increase the incidence of pancreatitis. This has prompted ongoing research and debate within the medical community to better understand the safety profile of GLP-1–based therapies.

Case

64-year-old male with past medical history of hypertension, hyperlipidemia, coronary artery disease, left below-knee amputation, type 2 diabetes, and obesity presented for worsening abdominal pain and constipation. He stated that he started using Ozempic about 5 months ago due to diabetes and obesity. He stated that he always experienced some abdominal pain for a few days after using Ozempic, but it would resolve on its own. This time the patient's abdominal pain began shortly after he used his Ozempic but he also started to experience constipation. His abdominal pain kept getting worse and he had bouts of dry heaving and could not tolerate oral intake prompting him to come to the emergency department. He also endorsed subjective fever and chills since taking his Ozempic. Patient denied alcohol use.

Clinical Course

Upon arrival to the emergency department, the patient was found to be hemodynamically and vitally stable. Physical exam revealed epigastric tenderness. His labs were significant for glucose 257, creatinine 1.36, calcium 10.9, lipase 585, and WBC 14.49. CT abdomen pelvis with contrast was done which showed mild fatty infiltration and atrophy of the pancreas seen in figure 1 and 2 below. Patient admitted for treatment of acute pancreatitis.

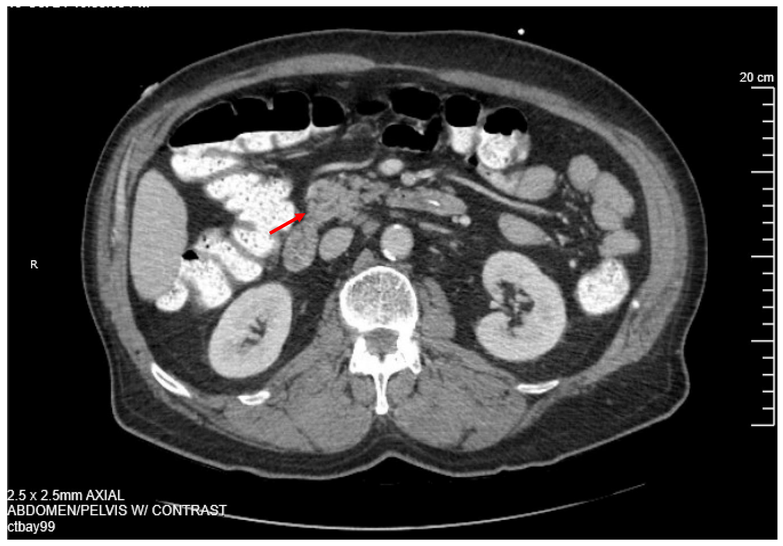

Figure 1: Axial view of CT abdomen/pelvis w/ contrast.

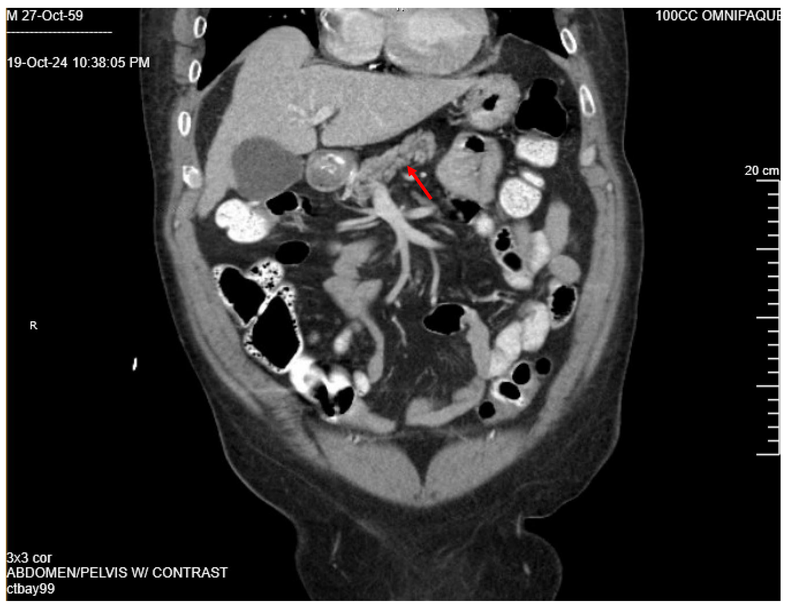

Figure 2: Coronal view of CT abdomen/pelvis w/ contrast.

Discussion

This case highlights a potential association between GLP-1 receptor agonist use and the onset of acute pancreatitis. The patient, a 64-year-old with type 2 diabetes and obesity, presented with worsening abdominal pain, constipation, and systemic symptoms following the use of Ozempic. His clinical picture, along with elevated serum lipase level and imaging findings of pancreatic atrophy and fatty infiltration, support a diagnosis of pancreatitis. GLP-1 receptor agonists have gained popularity due to their efficacy in improving glycemic control and promoting weight loss. However, post-marketing surveillance and case reports have raised concerns about a possible link to acute pancreatitis. While causality remains difficult to establish definitively, this case adds to the growing body of anecdotal evidence suggesting that GLP-1 therapy may precipitate or exacerbate pancreatic inflammation in certain individuals.

Conclusion

The patient's recurrent abdominal pain following Ozempic administration, and eventual progression to more severe symptoms, underscores the importance of monitoring for gastrointestinal side effects in patients on these medications. Clinicians should maintain a high index of suspicion when evaluating patients on GLP-1 receptor agonists who present with abdominal symptoms and consider pancreatitis in their differential diagnosis. Further research is needed to better define the risk profile and to identify patient-specific factors that may predispose individuals to this complication. Until then, careful patient selection and monitoring remain key when prescribing GLP-1–based therapies.

References

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