A CASE OF ACUTE PANCREATITIS INDUCED BY HYPERTRIGLYCERIDEMIA

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Introduction

Acute pancreatitis is most commonly due to alcohol intake and gallstones, accounting for 2/3rd of cases. Hypertriglyceridemia above 500mg/dL may precipitate acute pancreatitis. Recurrent pancreatitis can increase risk of chronic pancreatitis, complications, and organ failure.

Case Summary

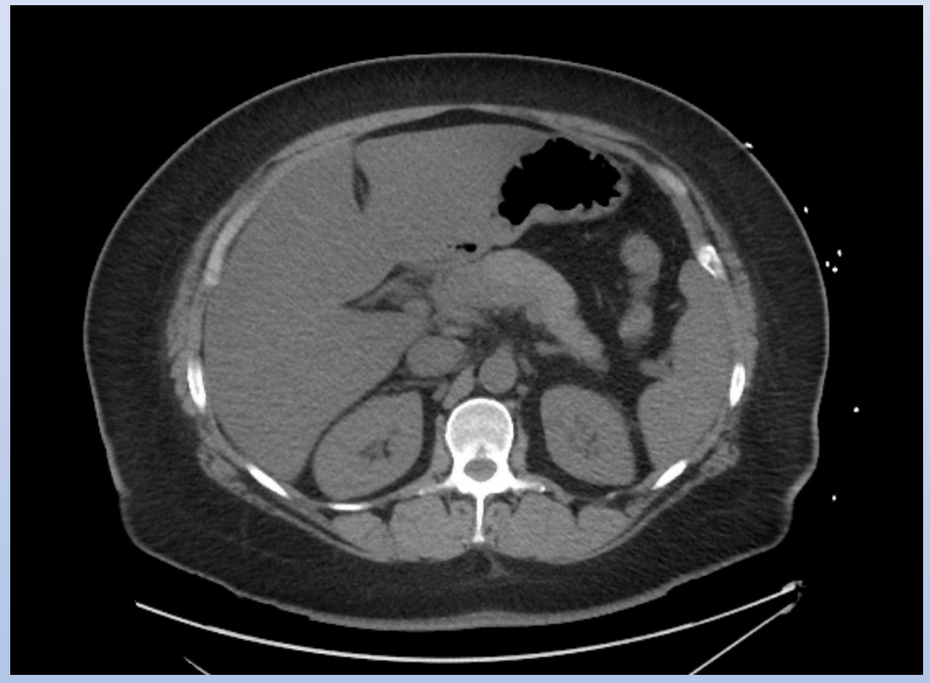
Patient is a 44-year-old female presenting with epigastric pain, radiating to the back, associated with nausea and vomiting.

In the ED, lipase levels were found to be 162. TG levels >10,000. CT abdomen/pelvis showed moderate to severe inflammation of pancreatic head with peripancreatic fat stranding.

Further questioning revealed extensive history of similar attacks. She was seen couple months ago, found to have normal CT abdomen results, given fluids, and discharged from the ED after improvement in symptoms at the time. Patient's first episode of similar abdominal pain was in 2017. Her triglycerides were >4000 at the time and she was given plasmapheresis. She also has a personal medical history of NSTEMI, on DAPT and statin, as well as extensive family history of cardiac issues, GI issues, and hyperlipidemia.

GI was consulted, recommending another plasmapheresis for the patient. Patient was started on IV NS and insulin gtt with D5 in the time being.

Patient was transferred to a hospital with plasmapheresis, continued on insulin gtt. Her triglyceride levels improved as well as her pancreatitis with plasmapheresis and insulin therapy. Of note, her most recent A1c was 12.4. At time of discharge, she was prescribed fenofibrate 200mg, omega 3 acid ethyl ester, and evaluation with a lipid specialist.



CT abdomen/pelvis showing inflammation of the pancreatic head with peripancreatic fat stranding, pancreatic head edema with small amount of peripancreatic edema.

Discussion

This case demonstrates the need for early recognition of hypertriglyceridemia as a cause of acute pancreatitis. It also raises the question about the need for further evaluation for primary and secondary causes of hypertriglyceridemia in patients with recurrent pancreatitis. In the setting of no alcohol intake or gallstone, this patient had multiple episodes of pancreatitis most likely due to hypertriglyceridemia. With her elevated A1c of 12.4, it is likely that her uncontrolled diabetes may be the cause of her elevated triglycerides. However, we cannot rule out genetic causes of her elevated triglycerides, especially with her family history of hyperlipidemia and cardiac issues.

Conclusion

High suspicion for triglyceridemia as cause of acute pancreatitis should be kept in mind in patients with recurrent pancreatitis, especially without history of alcohol use.

The patient's recurrent acute pancreatitis was most likely due to her high triglyceride level in setting of her uncontrolled diabetes. However, primary and other secondary causes of triglyceridemia should be thoroughly explored to prevent further recurrence and possible complications of pancreatitis.

References

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