

Hypertriglyceridemia – A Neglected Cause for Acute Pancreatitis

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Introduction

Hypertriglyceridemia (HTG) is the third most common cause of acute pancreatitis (AP) after alcohol and gall stones [1]. It is reported to cause 1-4 % of all cases of AP and 56% of pancreatitis during pregnancy [2]. A Triglyceride (TG) level of more than 1,000 mg/dL is needed to cause an episode of pancreatitis. Here we present 4 patients diagnosed with hypertriglyceridemic pancreatitis.

Cases

Case 1

33-year-old Filipino male with history of diabetes and obesity, was admitted for AP. APACHE-II score did not improve despite adequate IV fluids. TG levels were found to be at 2556 mg/dL 48 hours after admission. He was started on regular insulin drip and gemfibrozil. He gradually improved and was discharged with TG level at 617 mg/dL.

Case 2

49-year-old Caucasian male with a history of neuroendocrine tumor was admitted for AP. Patient was undergoing chemotherapy with Everolimus. His TG levels were at 9550 mg/dL on admission. He was started on regular insulin drip, Everolimus was discontinued and gemfibrozil was started. Patient improved and was discharged after 9 days with TG level at 421 mg/dL.

Case 3

41-year-old Sri Lankan male with HTG who was non-compliant to gemfibrozil, was admitted for AP. TG level on admission was 2219 mg/dL. Gemfibrozil was resumed but patient was not started on Insulin drip. Patient had gradual improvement of pain and discharged on a subcutaneous insulin regimen.

Case 4

31 year old Indian male with history of heavy alcohol use, was initially admitted for alcohol-induced pancreatitis. Patient did not improve in the next 48 hours after admission. TG levels were then found to be at 1870 mg/dL. Patient was then started on Insulin drip and fenofibrate. TG level on discharge was 401 mg/dL.

Discussion

The typical clinical profile of hyperlipidemic pancreatitis is a patient with a preexisting lipid abnormality along with the presence of a secondary factor (e.g., poorly controlled diabetes, excessive alcohol use, or a medication) that can induce HTG. The authors believe that a lipid profile should be part of standard work up when admitting patients with AP so that patients with HTG can be identified early and be started on the appropriate therapy. Regular insulin infusions are already appropriate in decreasing triglyceride levels as demonstrated in all 4 cases. Plasmapheresis is not necessary for all patients with HTG pancreatitis and should be reserved for patients who do not have clinical improvement with insulin drip or who already have severe presentation upon admission [3]. Maintenance treatment to prevent recurrent HLP include high-dose fibrates or a combination of fibrate plus niacin [4]. The mainstay of treatment still includes dietary restriction of fat in addition to managing the secondary or precipitating causes.

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