Acute necrotizing pancreatitis secondary to Hypertriglyceridemia with Splenic Vein thrombosis

M H M Memon, A Z Qazi, R R Memon, S N Siddiqui, R Jayashekar

Background

*Pancreatitis is defined as an inflammation of the pancreas. It can be acute or chronic. The pancreas has both exocrine and endocrine functions thereby producing hormones and enzymes along with other substances that change the stomach contents from acidic to alkaline. The pancreatic enzymes remain inactive until they reach the small intestine via the ampulla of vater at the duodenum. However premature activation of enzymes causes autodigestion inside the pancreas thereby triggering acute inflammation of the pancreas

*We report a case of Acute Pancreatitis with Splenic Vein Thrombosis [SVT] triggered by Hypertriglyceridemia [HTG]. This necessitated immediate treatment, ITU admission and a teamwork of various disciplines to effectively

Case Report

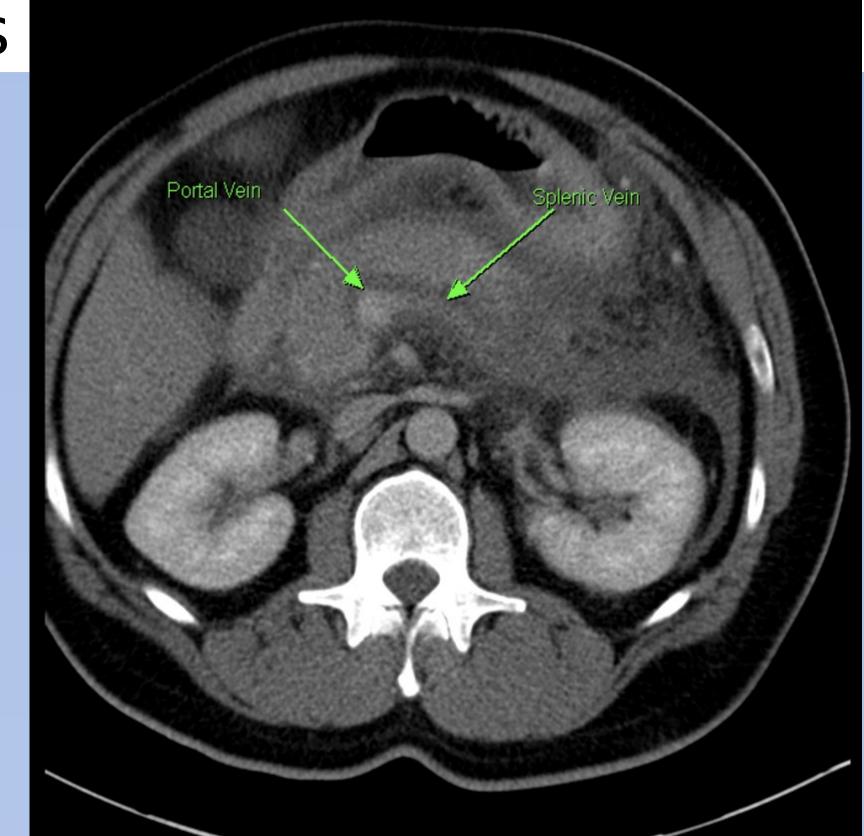
- A 34 year old gentleman presented to the emergency unit with a day's history of back pain with radiation towards the front of the chest associated with abdominal discomfort and one episode of vomiting.
- He has a background of type 2 diabetes mellitus, hypertension, and has had an episode of pancreatitis last year which was managed conservatively. His current cut down intake is around 3-4 units a day.
- Initial physical examination during admission showed a soft abdomen but tenderness was elicited at the epigastric region along with surrounding right and left hypochondrium. There was no rebound tenderness or mass felt at that time
- *Blood tests during admission revealed a hemoglobin of 233g/L, and raised white cell count. Triglycerides were 122.8 mmol/L. His venous blood gas demonstrated metabolic acidosis with high lactate (2.2) and high blood sugar (26.2m.mol/l). His ketones were negative...
- Contrast enhanced CT Abdomen and Pelvis revealed appearances consistent with necrotising pancreatitis with presence of widespread inflammatory changes The splenic vein is likely thrombosed secondary to the inflammation

control the serum glucose and a treatment dose of low molecular weight heparin and intravenous antibiotics were started

Discussion:

- Most common etiology of AP include alcohol consumption and biliary pathologies
- Hypertriglyceridemia is considered as the third most common cause of AP
- The diagnosis of AP can be made if two of the three conditions are met: (a) elevated serum lipase or amylase, (b) marked inflammation in ultrasound or computed tomography [CT] scan, (c) clinical symptoms

Patient with HTG can be managed with plasmapheresis



References:

- 1.Lindberg DA. Acute Pancreatitis and Hypertriglyceridemia. *Gastroenterol Nurs* 2009;**32**:75.
- 2 Moossa AR, Gadd MA. Isolated splenic vein thrombosis. *World J Surg* 1985;**9**:384–90.
- 3 Heider TR, Azeem S, Galanko JA, et al. The natural history of pancreatitis-induced splenic vein thrombosis. *Ann Surg* 2004;**239**:876–80; discussion 880–2.
- 4 Henzen C, Röck M, Schnieper C, et al. [Heparin and insulin in the treatment of acute hypertriglyceridemia-induced pancreatitis]. Schweiz Med Wochenschr 1999; 129:1242-8.
- 5 Jabbar MA, Zuhri-Yafi MI, Larrea J. Insulin therapy for a non-diabetic patient with severe hypertriglyceridemia. *J Am Coll Nutr*