



DYSLIPIDAEMIA ASSOCIATED WITH ACUTE PANCREATITIS AND ITS MANAGEMENT: A CASE REPORT

General Medicine

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ABSTRACT

Dyslipidaemia can be a cause of acute pancreatitis, but the improper management may lead to mortality. The present case report was presenting dyslipidaemia associated acute pancreatitis, which was diagnosed and treated accordingly in the eastern part of India. A 27-year-old non-hypertensive newly diagnosed male presented with acute onset of severe abdominal pain (epigastric pain) radiating towards back and history of occasional alcohol intake and smoking. He had a sign of tender abdomen. He found with increased level of serum amylase (950 U/L) and lipase (420 U/L) and CECT whole abdomen showed the presence of acute pancreatitis. The blood investigations confirmed dyslipidaemia (TG = 2120 and TC = 710 mg/dl) and Saroglitazar 4 mg and Iv insulin was given. After treatment, the patient observed decreasing level of serum amylase (743 U/L) and lipase (247 U/L). Finally, TC and TG values were decreased of about 210 and 201 mg/dl, respectively. The patient was discharged from the hospital. The present case indicated the dyslipidaemia-associated pancreatitis as per blood parameters and CT scan, but the management was beneficial to treat this disorder in this case.

KEYWORDS

Acute Pancreatitis, Dyslipidaemia, Efficacious Management

INTRODUCTION

Hyperlipidaemia or dyslipidaemia can be a cause of acute pancreatitis. According to Fredrickson/WHO classification type, dyslipidaemia I and V can induce acute pancreatitis suddenly. On the other hand, secondary hyperlipidaemia also can induce acute pancreatitis due to diabetes mellitus, alcohol, oestrogen, etc. The potential diagnostic markers are higher level of serum amylase and triglyceride.¹ Some reports revealed that the association of lipid concentrations with pancreatic disorders, especially acute pancreatitis, is controversial.^{2,3} In an observational study, increased triglyceride (TG) levels closely related to amplified risk of acute pancreatitis, and hypertriglyceridemia pancreatitis is a common cause of acute pancreatitis in the patients with high TG levels [≥ 500 mg/dL (or ≥ 5.65 mmol/L)].² Some earlier studies have suggested genetically predicted TG levels would be induced the risk of acute pancreatitis.^{4,5,6} In this regard, the present case report was presenting dyslipidaemia associated acute pancreatitis, which was diagnosed and treated accordingly in the eastern part of India.

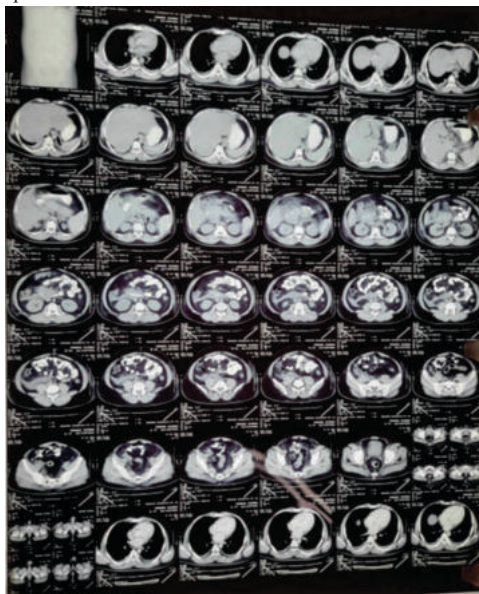


Fig 1: CT Scan Evaluation

Case Diagnosis and Management

A 27-year-old non-hypertensive newly diagnosed male presented with acute onset of severe abdominal pain (epigastric pain) radiating towards back and history of occasional alcohol intake and smoking. The patient admitted in the male medical ward of our hospital. He had a sign of tender abdomen. He found with increased level of serum

amylase (950 U/L) and lipase (420 U/L) and CECT whole abdomen showed the presence of acute pancreatitis. The blood investigations confirmed dyslipidaemia (TG = 2120 and TC = 710 mg/dl) and Saroglitazar 4 mg and Iv insulin was given.

An abdominal CT scan revealed stage E of acute pancreatitis (Fig 1). Then he diagnosed confirmed with dyslipidaemia in an acute pancreatitis.

After treatment, the patient observed decreasing level of serum amylase (743 U/L) and lipase (247 U/L). Finally, TC and TG values were decreased of about 210 and 201 mg/dl, respectively. The patient was discharged from the hospital.

DISCUSSION

The acute pancreatitis has many etiologies along with the increasing trend of serum amylase and lipase. Due to the elevation of TG and TC in the present subject, it was confirmed the dyslipidaemia in acute pancreatitis. This case was also confirmed by CT scan. There are close similarities with previous studies by Ghizlane et al.⁷ and Okura et al.⁸ Interestingly, many studies reported that drug induced significant alterations in TG, which resulted in dyslipidaemia-associated pancreatitis.^{9,10} I.v insulin is a treatment option in DKA (Diabetic Ketoacidosis) and HHS (Hyoerosmolar Hyperglycemic State). But we found I.v insulin also reduces triglyceride level and cholesterol level. But in the present case, there was no history of medications.

CONCLUSION

The present case indicated the dyslipidaemia-associated pancreatitis as per blood parameters and CT scan, but the management was beneficial to treat this disorder in this case.

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