



Case Report

Overlap or coexistence: Zieve syndrome complicating pancreatitis

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Abstract

Background: Zieve syndrome, first described in 1958, is a rare and underdiagnosed complication of chronic alcohol use. It is defined by the triad of hemolytic anemia, jaundice, and hyperlipidemia. While classically associated with alcoholic hepatitis, its occurrence in acute pancreatitis is infrequent and can be easily overlooked.

Key words: : Zieve syndrome; Hemolytic anemia; Hyperlipidemia

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1. Case Presentation

We describe a 37-year-old man with a history of alcohol use who presented with severe epigastric pain and vomiting. Laboratory investigations revealed elevated serum amylase and lipase, and USG abdomen confirmed acute pancreatitis. On day 3 of admission, he developed drop in haemoglobin. Peripheral smear demonstrated features of hemolysis, while further evaluation revealed elevated LDH, reticulocytosis, low haptoglobin, indirect hyperbilirubinemia, and hypertriglyceridemia. Viral hepatitis serology and direct Coombs test were negative. The constellation of findings confirmed Zieve syndrome in association with acute pancreatitis.

2. Discussion

The mechanism of Zieve syndrome involves alcohol-induced alterations in lipid metabolism, production of abnormal lipoproteins, and destabilization of erythrocyte membranes leading to hemolysis. In pancreatitis, the co-existence of anemia and jaundice may mimic sepsis, biliary obstruction, or hepatic decompensation, often resulting in extensive and unnecessary investigations. Recognition of Zieve syndrome is therefore criti-

cal. Management is supportive, focusing on correction of anemia when indicated, nutritional supplementation, and strict alcohol abstinence. Prognosis is generally favorable if alcohol cessation is achieved.

3. Conclusion

This case highlights the importance of considering Zieve syndrome in alcohol-related acute pancreatitis presenting with unexplained hemolytic anemia and jaundice. Early identification helps in avoiding misdiagnosis, preventing unnecessary interventions, and guiding appropriate management.