

Case Report on Acute Pancreatitis Triggered by Hypertriglyceridemia in Pregnancy

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Introduction

Acute pancreatitis during pregnancy is a rare but potentially life-threatening condition that poses significant risks to both the mother and the fetus. The incidence of pancreatitis in pregnancy is estimated to range from 1 in 1,000 to 1 in 10,000 pregnancies, with gallstones and hypertriglyceridemia being the most common etiological factors. Hypertriglyceridemia-Induced Acute Pancreatitis (HTG-AP) is particularly concerning because lipid metabolism undergoes physiological changes during pregnancy, especially in the third trimester, leading to elevated serum triglyceride levels. In genetically predisposed individuals or those with secondary metabolic disturbances, this physiological rise may become pathological, resulting in severe pancreatitis. This case report discusses an instance of acute pancreatitis triggered by hypertriglyceridemia in a pregnant woman, emphasizing the importance of early diagnosis, prompt management, and multidisciplinary care to ensure favorable maternal and fetal outcomes [1].

Description

A 28-year-old prim gravida at 32 weeks of gestation presented to the emergency department with severe epigastric pain radiating to the back, accompanied by nausea and vomiting. There was no history of gallstones, alcohol intake, or drug use. Physical examination revealed tenderness in the upper abdomen without peritoneal signs. Laboratory investigations showed markedly elevated serum triglyceride levels of 2,800 mg/dL (normal <150 mg/dL), serum amylase of 820 IU/L, and lipase of 1,200 IU/L. Liver function tests were within normal limits, and abdominal ultrasonography ruled out gallstones or biliary obstruction. A clinical diagnosis of acute pancreatitis secondary to hypertriglyceridemia was established. The patient was admitted to the intensive care unit for close monitoring and supportive management. Aggressive intravenous hydration, insulin infusion, and lipid-lowering therapy were initiated to rapidly reduce triglyceride levels [2].

The patient was admitted to the intensive care unit for close monitoring and supportive management, which included intravenous fluids, analgesics, insulin infusion to lower triglyceride levels, and dietary fat restriction. Over the next few days, the patient's abdominal pain and biochemical parameters improved significantly. Serial monitoring showed a gradual decrease in serum triglycerides to 600 mg/dL.

Fetal well-being was closely monitored with regular ultrasound assessments and non-stress testing, which remained reassuring. The patient was continued on a low-fat, high-protein diet and discharged after 10 days of hospitalization with lipid-lowering therapy and dietary counseling [3].

She subsequently delivered a healthy full-term infant via normal vaginal delivery. Postpartum lipid profile normalized, and follow-up after six months showed no recurrence of symptoms or lipid abnormalities. This case underscores that timely identification and management of hypertriglyceridemia can prevent maternal and fetal complications associated with acute pancreatitis [4,5].

Conclusion

Acute pancreatitis triggered by hypertriglyceridemia in pregnancy, although uncommon, requires high clinical suspicion for early diagnosis and intervention. Physiological lipid changes during pregnancy can exacerbate underlying metabolic predispositions, leading to severe outcomes if not promptly recognized. Early initiation of supportive therapy, triglyceride-lowering measures, and multidisciplinary coordination among obstetricians, gastroenterologists, and nutritionists are essential for successful management. Regular lipid monitoring in high-risk pregnant women and lifestyle modification can help prevent recurrence in future pregnancies. This case highlights the importance of considering hypertriglyceridemia as a potential cause of acute abdominal pain in pregnancy and the need for vigilant metabolic evaluation to ensure maternal and fetal safety.

Acknowledgement

None

Conflicts of Interest

None

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