Lamotrigine Induced Pancreatitis in a Young Female: A Case Report of Rare Occurrence

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INTRODUCTION

Pancreatitis is a rare adverse effect of Lamotrigine. Despite its infrequency, vigilance is crucial due to the severity of pancreatitis, leading to complications such as pancreatic necrosis and systemic inflammation. Timely recognition and discontinuation of Lamotrigine are critical to prevent further damage and ensure safety.

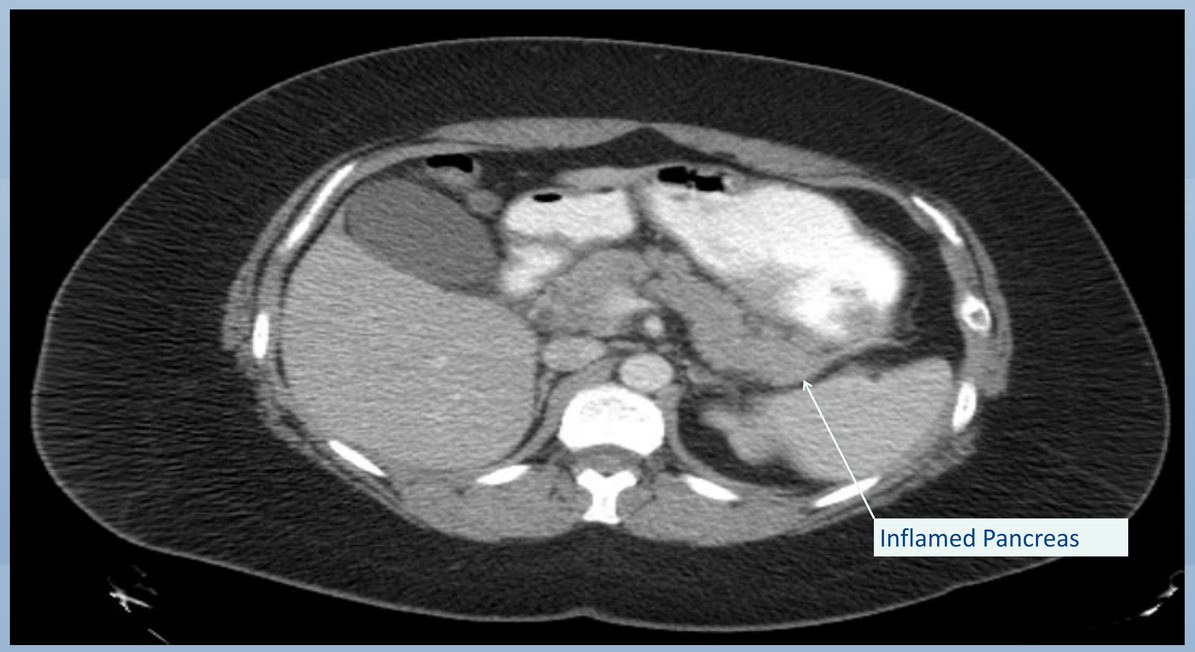
CASE PRESENTATION

34-year-old female presented to the ED with complaints of sharp epigastric abdominal pain radiating to the left upper quadrant and associated with nausea. Past medical history included depression, post-traumatic stress disorder, and anxiety, for which she takes lamotrigine, paroxetine, and venlafaxine. Social history was significant for occasional alcohol use. Vitals showed tachycardia of 101 bpm; otherwise, it was unremarkable. Abdominal examination revealed epigastric tenderness without any guarding or rigidity. Labs were significant for Lipase of 48,935 U/L. Contrast abdominal CT showed fatty inflammatory changes indicative of pancreatitis with no evidence of gallstones or ductal dilatation. She was admitted with a diagnosis of lamotrigine-induced pancreatitis and was kept NPO and managed with fluids and pain control. Lamotrigine was discontinued, and the patient improved in the next 24-48 hours. She was encouraged to follow up with a psychiatrist for an alternative.

RESULTS & DISCUSSION

Drug-induced pancreatitis is rare, accounting for 0.1-2% of cases of pancreatitis. Most of the research on drug-induced pancreatitis is based on isolated case reports and is usually a diagnosis of exclusion[1]. It is classified into definite, probable, and possible. Lamotrigine is classified into the possible category and is regarded as class 4 evidence. The pathophysiology of lamotrigine-induced pancreatitis is not well documented. However, current accepted theories are direct organ damage and angioedema of the pancreatic ducts[2]. Treatment includes removal of the offending drug, preventing re-exposure, and supportive care. Timely intervention can mitigate the risk of morbidity and mortality associated with lamotrigine-induced pancreatitis, highlighting the importance of thorough monitoring and awareness among clinicians[3,4].

Component	Patient value	Normal range
Sodium	137 mEq/L	135-145 mEq/L
Potassium	4.3 mEq/L	3.5-5.0 mEq/L
Creatinine (Cr)	0.87 mg/dL	0.7-1.3 mg/dL
Thyroid-stimulating hormone (TSH)	0.9 uIU/ml	0.4-4.5 uIU/ml
White blood cells (WBCs)	12.6 x 10^3 cells/ul	4000-11000 x 10^3 cells/ul
Hemoglobin (Hgb)	16.4 g/dL	13.5-17.5 g/dL
Platelets	237 10^3/uL	50-450 10^3/uL
Alanine transaminase (ALT)	31 7-56 U/L	7-56 U/L
Aspartate transaminase (AST)	31 U/L	8-33 U/L
Lipase	772 U/L	73-393 U/L



CONCLUSION

Lamotrigine induced pancreatitis underscores a rare but an important effect of a widely used anti-seizure agent. This case highlights the importance of clinicians being vigilant about the potential gastrointestinal side effects associated with lamotrigine, especially in patients presenting with abdominal pain and other relevant symptoms. Further studies are needed to better understand the mechanisms behind lamotrigine induced pancreatitis and to identify potential risk factors that might predispose individuals to this serious condition. Prompt reporting of such cases to medical literature is essential to enhance our understanding and management of drug induced pancreatitis.

References

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