Hypertriglyceridaemic pancreatitis

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DESCRIPTION

A man in his late 40s presented to the emergency department with epigastric abdominal pain radiating to his back. On examination, he exhibited tenderness and guarding in his epigastrium and right upper quadrant. When blood was drawn, lipaemic serum was detected (figure 1). Subsequent blood work was remarkable for a lipase of 1639 U/L (normal 22–51 U/L) and triglycerides of 14 266 mg/dL (normal <150 mg/dL).

Hypertriglyceridaemic pancreatitis (HTGP) may be the most common cause of pancreatitis in pregnancy, but causes only up to 10% of acute presentations in non-pregnant patients.[1 2] Though HTGP is associated with both genetic and secondary causes (such as poorly controlled diabetes, alcohol misuse, obesity and certain medications), the pathophysiological mechanism leading to pancreatitis remains unclear.[1–3] Triglyceride levels are generally >1000 mg/dL, and HTGP may follow a more severe course than other forms of acute pancreatitis.[1] In addition to standard management, treatment of HTGP typically involves acutely lowering triglyceride levels using insulin, heparin and/or apheresis.[1 2]

The patient was treated with bowel rest, intravenous fluids, analgesics and twice daily bolus insulin therapy. His triglycerides improved, and insulin therapy was stopped after 2 days. With time, his symptoms resolved and he was discharged home with a plan to initiate fibrate therapy as an outpatient. At the time of discharge, his triglycerides were 374 U/L.

The unique appearance of blood work may alert clinicians to this rare form of pancreatitis, which ultimately requires targeted testing and management.

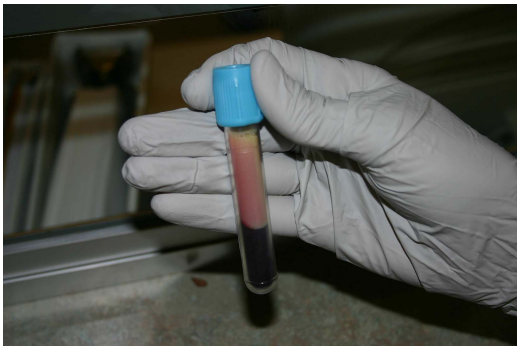

Figure 1 Blood sample exhibiting a lipid fraction.

Learning points

- Hypertriglyceridaemic pancreatitis (HTGP) may be suggested by the appearance of lipaemic serum in blood samples.
- HTGP is a common cause of pancreatitis in pregnancy, but a rare aetiology in non-pregnant patients.
- HTGP should not only be treated as other cases of acute pancreatitis, but also with consideration of insulin, heparin or apheresis.

Contributors JSI obtained the images, and was involved in the management of the patient and reviewing of the manuscript. JET was involved as the primary author and she also performed the literature review.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

1 Ewald N, Hardt PD, Hans-Ulrich K. Severe hypertriglyceridemia and pancreatitis: presentation and management. *Curr Opin Lipidol* 2009;20:497–504.
2 Tsuang W, Navaneethan I, Ruiz L, *et al*. Hypertriglyceridemic pancreatitis: presentation and management. *Am J Gastroenterol* 2009;104:984–91.
3 Fortson MR, Freedman SN, Webster PD. Clinical assessment of hyperlipidemic pancreatitis. *Am J Gastroenterol* 1995;90:2134–40.

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