

A Rare Case Of Dengue Fever Presenting With Acute Pancreatitis: A Case Report

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Abstract

Dengue fever is a mosquito-borne viral illness that commonly presents with fever, myalgia, thrombocytopenia, and bleeding manifestations. Acute pancreatitis is a rare but recognized complication of dengue infection. We report a case of a 32-year-old male who presented with fever and severe epigastric pain and was diagnosed with dengue-associated acute pancreatitis. Early diagnosis and supportive management resulted in complete recovery.

Keywords: Dengue fever, Acute pancreatitis, Thrombocytopenia, Case report, Tropical infections

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I. Introduction

Dengue is one of the most common arboviral infections worldwide. Although most cases are self-limiting, atypical manifestations involving the liver, heart, nervous system, and pancreas have increasingly been reported. Acute pancreatitis is an uncommon complication with an incidence of less than 1% in hospitalized patients. Prompt recognition is essential to prevent morbidity.

II. Case Presentation

A 32-year-old previously healthy male presented with:

- High-grade fever for 5 days
- Severe epigastric pain radiating to the back for 2 days
- Recurrent vomiting
- Loss of appetite

There was no history of alcohol intake, gallstones, abdominal trauma, or previous pancreatitis.

Examination

- Temperature: 38.5°C
- Pulse: 108/min
- Blood pressure: 110/70 mmHg
- Mild dehydration
- Epigastric tenderness with guarding
- No jaundice
- No organomegaly

Investigations

- Hemoglobin: 14.2 g/dL
- Total leukocyte count: 3,100/mm³
- Platelet count: 88,000/mm³
- Hematocrit: 46%
- Serum amylase: 120 U/L
- Serum lipase: 1,180 U/L
- AST: 132 U/L
- ALT: 108 U/L

- Total bilirubin: 0.0 mg/dL
- Serum calcium: Normal
- Triglycerides: Normal
- Dengue NS1 antigen: Positive
- Dengue IgM antibody: Positive

Imaging

Ultrasonography revealed a bulky pancreas with mild peripancreatic edema and no gallstones.

Contrast-enhanced CT abdomen demonstrated diffuse pancreatic enlargement with inflammatory changes, consistent with mild acute pancreatitis (Modified CT Severity Index: 2/10).

Diagnosis

Dengue fever complicated by mild acute pancreatitis.

Management

- Hospital admission
- Intravenous isotonic fluids
- Nil per oral initially
- Adequate analgesia
- Antiemetics
- Serial monitoring of hematocrit and platelet count
- Electrolyte correction
- Gradual reintroduction of oral diet after symptom improvement

No antibiotics or invasive interventions were required.

Outcome

The patient's abdominal pain resolved by day 5. Platelet count increased to 150,000/mm³ by day 7. Serum pancreatic enzyme levels normalized gradually. He was discharged on day 8 and remained asymptomatic at one-month follow-up.

III. Discussion

Acute pancreatitis is an uncommon manifestation of dengue infection. Proposed mechanisms include:

- Direct viral injury to pancreatic acinar cells
- Immune-mediated inflammatory response
- Edema causing obstruction of the pancreatic duct

Diagnosis requires a high index of suspicion in dengue patients presenting with severe abdominal pain. Other common causes such as gallstones, alcohol, and hypertriglyceridemia should be excluded.

Management remains supportive with aggressive fluid therapy, pain control, nutritional support, and close monitoring.

IV. Conclusion

Although rare, acute pancreatitis should be considered in patients with dengue fever who develop persistent severe abdominal pain. Early diagnosis and appropriate supportive care usually result in excellent outcomes.

Learning Points

1. Severe abdominal pain in dengue warrants evaluation for atypical complications.
2. Serum amylase and lipase should be measured when pancreatitis is suspected.
3. Imaging confirms the diagnosis and assesses severity.
4. Most cases recover with conservative management.
5. Early recognition significantly reduces morbidity.

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