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Case Report

Dengue fever presenting as acute pancreatitis

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ABSTRACT

A 32-year-old non-alcoholic female was admitted with complaints of severe abdominal pain and was diagnosed with acute pancreatitis after blood investigations and USG of the abdomen. She had fever on the initial two days of admission, and serology tested positive for dengue. Treatment for dengue was instituted, leading to a good response and complete resolution of pancreatitis. The patient has been doing well and has had no recurrence of pancreatitis.

Keywords: Amylase, Dengue fever, Pancreatitis

INTRODUCTION

Even in the modern era of medicine, presentation of an acute abdomen remains a challenge for the surgeon. Though acute pancreatitis (AP) is a common cause of acute abdomen, AP of infective etiology is relatively uncommon.[1] Dengue fever (DF) is a common cause of febrile illness in Eurasia and is often accompanied by abdominal symptoms.[2] Here we present a case of DF where the initial presentation was Acute pancreatitis.

CASE REPORT

A 32-year-old non-alcoholic female presented with Complaint of severe abdominal pain for 4 days duration. The pain was continuing and stabbing in nature and radiating to the back. It is associated with multiple episodes of vomiting. Complaint of fever initial 2 days, which is continues in nature. The patients had never experienced similar pain in past.

General examination is unremarkable. Abdominal examination revealed tenderness, guarding in epigastric region with no rebound tenderness.

Liver dullness was not obliterated and there was no palpable mass, organomegaly or free fluid. A provisional diagnosis of acute gastritis or acute pancreatitis was made, and patient was further tested. Her blood investigation showed.

Table 1: Investigations.

Serum amylase	**: 1788.09**
Serum lipase	: 94.56
WBC	: 3000
Hb	: 14.4
Platelet	: 41,000
RBS	: 128
Urea	: 60
Creatinine	: 1.5
SGOT	: 168
SGPT	: 98
Alk-phosphate	: 162

On USG: thick walled gall bladder

- Mild bulky pancreas at body region,

- Tinny uterine fibroid,
- Very minimal fluid in Morrison pouch.

A diagnosis of acute pancreatitis made, and Patient was managed conservatively and on second day routine investigations for pyrexia was done. On that dengue IgM came positive. Rests of the investigations were normal. Patient recovered completely from fever and abdominal pain in 8 days and got discharged.

DISCUSSION

Acute Pancreatitis is an acute inflammatory process of the pancreas with varying involvement of other regional tissues or remote organs. While common causes of AP are gall stones and alcohol, infective agents also cause a small proportion of cases.[3] Pancreatitis in any infectious disease could be (a) definite pancreatitis if there is surgical or radiological evidence of pancreatitis, (b) probable pancreatitis if there is biochemical evidence in the form of more than three-fold elevated serum amylase or lipase and characteristic symptoms, or (c) possible pancreatitis if there is only asymptomatic biochemical evidence.[4]

An infectious agent should be suspected as the cause of AP if the characteristic syndrome due to the infectious agent is present, which is seen in 70% of cases.[5] Criteria suggested for associating pancreatitis with an infective etiology include (a) finding the organism in pancreas or pancreatic duct, which is 'definitive criteria'; (b) culture of the organism from the pancreatic juice or blood or serological evidence combined with characteristic clinical or epidemiological setting, which is 'probable criteria'; and (c) culture of the organism from other body sites or serological evidence of infection, which is 'possible criteria'.[6]

Dengue infections are caused by four antigenically distinct dengue virus serotypes, DEN 1, 2, 3, and 4, and belong to the family Flaviviridae.[6] Dengue virus is transmitted from human to human through bites of *Aedes aegypti* and *Aedes albopictus* mosquitoes, and infections caused by dengue virus can be asymptomatic or symptomatic. Symptomatic infections could be classical DF or dengue hemorrhagic fever (DHF), which may or may not be associated with shock. All ages and both sexes are susceptible to DF, and children usually have a milder course compared than adults.[5] Following an average incubation period of 5-6 days, classical symptoms of DF appear, including sudden onset of high-grade fever with chills, intense headache, muscle and joint pain, retro-orbital pain, anorexia, generalized weakness, abdominal pain, dragging pain in the inguinal region, sore throat and general depression.[3] Fever is typically but not inevitably followed by remission for a few hours to 2 days (biphasic curve). Skin eruptions appear in 80% of cases during remission or during the second febrile phase, which lasts for 1-2 days.

Abdominal pain is a common symptom (40%) in dengue infections and is more commonly associated with DHF. Some of the causes for abdominal pain in dengue infections include hepatitis, acute acalculous cholecystitis, acute pancreatitis, and colitis. Studies have reported the incidence of AP in dengue infections to be 14- 29%.[2]

CONCLUSION

Dengue fever can present with acute pancreatitis as an initial presentation. So, all patients presented with acute pancreatitis must be investigated for dengue. With proper investigations and treatment, it can be treated successfully.

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