Case Report

Case of acute abdomen due to acute pancreatitis: a uncommon presentation of leptospirosis

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ABSTRACT

Even though, Leptospiral infection is not rare, it can have different rare presentations. Acute pancreatitis is one such uncommon gastrointestinal manifestation of acute pancreatitis. Apart from the classic clinical features, elevated serum lipase, along with radiological proof and positive leptospiral serology confirms this infrequent association.

Keywords: Amylase, Leptospiral, Lipasepancreatitis

INTRODUCTION

Leptospiral infection is a worldwide zoonotic disease dominant in India, especially during the rainy season.1 The clinical appearances vary from a mild asymptomatic illness to a severe fulminant hepatorenal failure.1 Apart from the usual presentations, Leptospirosis may sometimes present with unusual systemic manifestations. Acute pancreatitis is one such unusual gastrointestinal presentation of Leptospirosis.2 Here, author are reporting one such rare manifestation of Leptospirosis, from our hospital.

CASE REPORT

A sixty year old farmer was admitted with fever, body ache and diarrhea of three days duration. He was a chronic alcoholic and smoker. there was no history of hypertension, diabetes, ischemic heart disease or other chronic ailments.

On admission, the patient looked ill. He had a temperature of 39°C and jaundice there was bilateral conjunctival congestion and pedal edema. the patient had a pulse rate of 120 beats/minute and a BP of 90/60 mmHg in the right upper limb. the examination of the abdomen revealed abdominal distension, diffuse tenderness, guarding of all quadrants, hepatomegaly of 2 cm, and reduced bowel sounds. Respiratory system examination showed normal breath sounds in all lung fields and crepitations in the left infra-axillary region. there was no evidence of hepatic encephalopathy or any cardiovascular complications.

Routine blood investigations exhibited a normal hematocrit, elevated total blood count (12500/mm², P80, L20) and EsR of 40 mm/1st hr. On the day of admittance, the patient had a platelet count of 40,000/mm, blood urea of 162 mg and a serum creatinine of 2.4 mg, the serum bilirubin was 5.9mg. AsI 92Iu, ALT 52Iu, ALP 408 u; the serum amylase was 1176 u/L (normal - up to 122 u/L) and the serum lipase was 412 u/L (normal up to 60 u/L).3 there were high titers of IgM Leptospiral antibody (ELIsA) detected on the tenth day. urine and stool examination were normal (Figure 1).
Alimentary manifestations like acalculous cholecystitis, acute peritonitis, and acute pancreatitis are uncommon. there are few cases of pancreatitis due to Leptospirosis reported in the literature. Other unusual manifestations of Leptospirosis comprise cerebral vasculitis and stroke syndrome, GBs, myocarditis and DIC. Spectrum of acute inflammation of pancreas fluctuates from edematous pancreas to necrotizing pancreatitis, the former one is mild and self-limited, whereas the latter is very severe. Necrosis of the pancreatic tissue relates with the severity of the attack and the clinical manifestations. Auto-digestion of the pancreas, caused by the proteolytic enzymes which are activated by various stimuli like toxins, ischemia, infection, trauma and drugs are liable for acute pancreatitis. Among the causes of acute pancreatitis, the common ones are alcohol, biliary disease, ERCP induced and idiopathic. Infrequently, Leptospirosis is also known to cause acute pancreatitis. The precise mechanism of acute pancreatitis in Leptospirosis is not well understood. The small vessel vasculitis and ischemic injury leading to activation of proteolytic enzymes and auto-digestion is the likely mechanism. Hyperamylasemia in Leptospirosis even without pancreatitis is perceived because of renal failure and inactivation of reticuloendothelial system of liver which hamper the clearance of amylase. Lipase is known to have great specificity (97%-99%) for the diagnosis of pancreatitis and is not significantly affected by modification of glomerular filtration rate. Concomitant rise of lipase, elastase-1, along with radiological evidence of inflammation of pancreas will approve the diagnosis of acute pancreatitis in Leptospirosis.

With every monsoon, there are several cases of Leptospirosis in this locality. Patients with shock, DIC and multi organ failure are having bad prognosis and higher mortality. This experience with pancreatitis in Leptospirosis is limited. Though reviewing literature, the fatal cases with pancreatitis were having hemorrhagic features and multi-organ failure.

**CONCLUSION**

Author present a case of probable leptospirosis with clinical, laboratory and imaging evidence of acute pancreatitis.

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**REFERENCES**


