

Case Report

Multiple jejunal perforations in dengue

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ABSTRACT

Gastrointestinal perforation is one of the common complications that are associated with high mortality. Stomach, duodenum, ileum and colon are common site of perforation whereas jejunum is an uncommon site for perforation. We report an interesting case of jejunal perforation that occurred in a female patient. To our knowledge, this is the first such isolated case of multiple jejunal perforation in dengue that is being reported in the literature.

Keywords: Jejunum, Perforation, Dengue

INTRODUCTION

Dengue is an acute infectious disease caused by an arbovirus which is transmitted to the man by infected mosquito, *Aedes aegypti*, being the most common vector.^{1,2}

The classical form dengue is an acute self-limiting disease characterized by fever, headache, myalgia, vomiting, nausea and thrombocytopenia.³

The spectrum of illness is known to range from mild disease to a severe and occasionally fatal hemorrhagic fever.¹ Atypical manifestation of dengue which was uncommon earlier appears to present with increase in frequency as the incidence of dengue is increasing globally.²

We hereby report a very rare case of multiple jejunal perforations in a patient with dengue.

CASE REPORT

A 64 year old female patient presented to our hospital with history of diffuse pain abdomen from past 2 weeks.

She was admitted and treated for dengue at another hospital 2 weeks earlier. Since the time of discharge she was suffering from diffuse pain abdomen which worsened since last 5 days for which she was referred to our hospital for further management.

She also complained of abdominal distension and obstipation from last 3 days. There was no history of vomiting or jaundice. Patient gives history of diarrhea 10 days back that was present for 2 days followed by which she was having constipation.

On general examination, patient was hypotensive (blood pressure- 90/50 mmHg) and tachycardic (pulse 112/min) She was afebrile and her respiratory rate was 18/min.

Her abdomen was grossly distended with generalized tenderness in all the quadrants. She had rebound tenderness along with guarding. Her bowel sounds were sluggish and per rectal examination was normal.

Her investigations are as follows: hemoglobin - 13.8 g%, total count - 23000/mm³, platelets - 1.38 lakhs/mm³. Her renal function test, amylase and lipase were normal.

X ray abdomen showed dilated bowel loops with multiple air fluid level. There was no air under diaphragm. Ultrasound abdomen showed moderate ascites with fluid filled dilated bowel loops.

A diagnosis of acute intestinal obstruction was made clinically. Patient was resuscitated and was subjected to exploratory laparotomy. At surgery, it was found that patient had multiple perforations in the mid jejunum over a length of 10 cm (Figure 1). The mesentery of that segment was also necrosed. There was one liter of pus in the abdomen. The small bowel loops were grossly dilated and edematous. Patient underwent resection of the perforated segment of the jejunum. The bowel segments were brought out as stomas. Patient also underwent feeding jejunostomy. Patient was shifted to ICU and was on ventilator. Due to severe financial crisis, the family members did not want to continue her life supports and they took her home against medical advice.

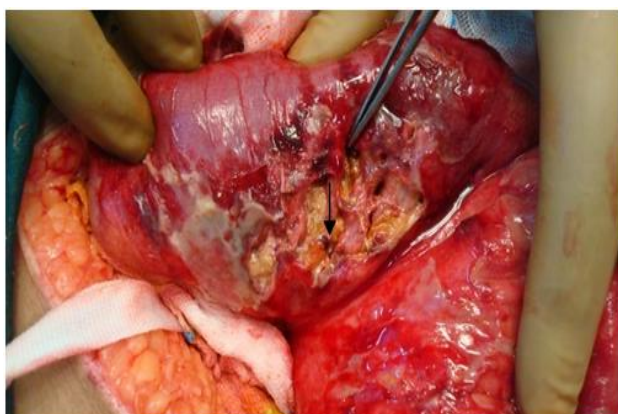


Figure 1: Showing multiple perforations (forceps) in the jejunum. Note the necrosed mesenteric area near the perforations (arrow).

DISCUSSION

In India, epidemics of dengue are becoming more frequent.⁴ In fact, dengue fever and dengue hemorrhagic fever are increasingly important public health problems in both tropics and subtropical region.¹ Around 2.5 billion people live in areas where dengue is endemic.¹

In 1998, 1.2 million cases of dengue were reported by WHO including 3442 deaths.¹ If untreated, mortality from complication of dengue fever is as high as 20%.⁴ The severity of dengue is classified as mild (grade I and II) or severe (grade III and IV), the presence of shock being the main difference.

The gastrointestinal manifestations of dengue are not rare and should not be overlooked.⁵ These manifestations are

increasingly being identified and reported such as hepatitis,³ Acalculus cholecystitis, pancreatitis,^{2,3} etc.

In a series of hollow viscous perforation by Alam et al.,⁶ it was found that there were 2 cases of intestinal perforation due to dengue hemorrhagic shock syndrome. But they did not mention the site and number of perforation.

In our case, there were multiple small and large perforations in the mid jejunum at mesenteric side along with necrosis of the part of the mesentery near that segment. Although the exact mechanism of this is not clear, there is evidence of intestinal mucosal injury occurring in dengue infection.⁷

CONCLUSION

Gastrointestinal manifestations of dengue are increasingly being recognized with increased with frequency of dengue. Multiple perforations in jejunum in dengue have never been reported till date and this is first such case that is being reported.

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