

Infantile Appendicitis: A Case Report

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ABSTRACT

Infantile appendicitis is an uncommon condition. It often presents with atypical symptoms that mimic other conditions like gastroenteritis, respiratory tract infection, and sometimes sepsis. Delay in diagnosis or fail to diagnose in timely manner can lead to complications with prolong hospitalization. At times mortality can occur. In this study a 4-month old infant is reported who had acute appendicitis but presented with the symptoms of gastroenteritis. Infant underwent appendectomy with smooth postoperative recovery. Clinical vigilance and timely diagnosis can reduce the risk of complications in infants with acute appendicitis.

Key words Infant, Appendicitis, Atypical symptoms, Diagnosis.

INTRODUCTION:

Acute appendicitis commonly occurs in second decade of life. It is less frequently reported in children less than five years of age.¹ However, no age is immune as appendicitis is rarely reported among neonatal and infantile age groups with unusual clinical features. Diagnosis is often missed in such a situation. Number of complications are reported when delay in diagnosis occur. This include perforation, abscess formation, peritonitis and sepsis.² The incidence of infantile appendicitis is only 0.38% but the rate of perforation is reported as 70-80%.^{3,4} Herein, we report a female patient who presented with fever, reluctance to feed, diarrhea, abdominal distention and bilious vomiting. She underwent surgery and found to have acute appendicitis with abscess formation.

CASE REPORT:

A 4-months old baby girl admitted to the Emergency Department with the complaints of fever, reluctance to feed, abdominal distention and loose stools for the last couple of days. She was initially treated by a general practitioner with the diagnosis of gastroenteritis. However, the condition of the patient did not improve. On examination, the girl was irritable, febrile with pallor. Abdomen was

distended and tender to touch. She was admitted and a supportive treatment started with IV fluids and IV antibiotics. Nasogastric tube was also placed. Laboratory investigations showed raised TLC count with neutrophils of 78%, urea 22 mg%, creatinine 0.6mg%, sodium 150 mEq/L, potassium 3.6 mEq/L, and chloride 100 mEq/L. X-ray chest and abdomen erect position showed dilated small bowel loops with multiple air fluid levels suggestive of intestinal obstruction (Fig. I). Ultrasound abdomen was also advised that revealed dilated bowel loops, enlarged mesenteric lymph nodes and fluid in right side of the abdomen.

During the course of illness, bilious aspirate was noted with increase in abdominal distention. Marked tenderness was also found in right iliac region. Due to deterioration of symptoms it was decided to perform laparotomy. On opening the abdomen dilated small bowel loops were found and 20ml frank pus was aspirated from the peritoneal cavity on right side. The appendix was found swollen with pus flakes on its distal part and cecum while the base was normal looking (Fig. II). Mesenteric lymph nodes were also enlarged. Appendectomy was done and abdominal cavity washed with copious amount of warm saline. Postoperative recovery was smooth. She was started orally on 3rd postoperative day, initially clear liquids then breast feeding, which she tolerated. She was discharged on 6th postoperative day in an improved condition. Histopathology of the specimen showed inflamed appendix.

DISCUSSION:

Acute appendicitis has a high complication rate in younger age groups. Few of these are due to the anatomical reasons like under development of the omentum and a higher position of appendix in abdomen with shallow pelvic cavity. The appendicular

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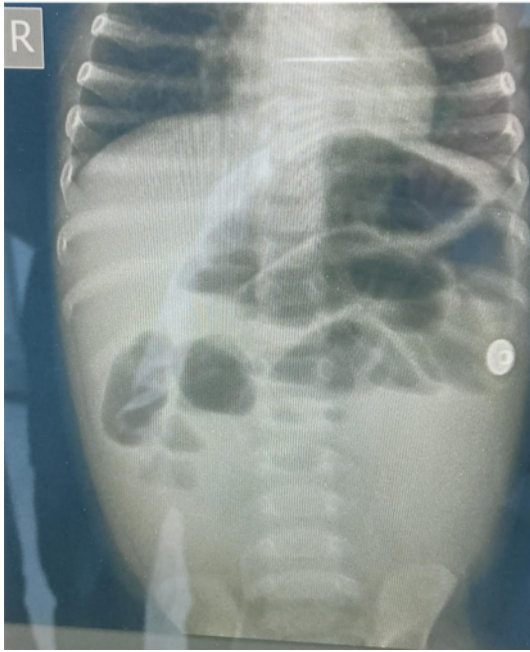


Fig I: Dilated small bowel loops with air fluid levels suggestive of intestinal obstruction.



Fig II: Inflamed appendix.

perforation and peritonitis are more frequently encountered in these age groups.⁵ The atypical presentation as found in our patient delayed the diagnosis. The plan for appendectomy was made on clinical grounds though age of the girl was only four months. The rate of perforation of appendix is about 86% in patients under one year of age.⁶

The usual symptoms and signs are not expected in

preverbal children. Abdominal distension is more frequently reported in this age group followed by early vomiting along with fever. A high index of suspicion is to be exercised in such situations as these clinical features are also found in other surgical conditions in this age. Acute appendicitis is also reported in neonates.⁷ A study has proposed an algorithm for this age group.⁸

Our patient had symptoms suggestive of gastroenteritis which is common in infants in our region. However, bilious vomiting pointed towards surgical pathology. The radiological findings were suggestive of intestinal obstruction. As the disease progressed in our patient, tenderness became more marked on right side of the abdomen. All these alerted us to plan for surgical intervention. Ultrasound was not of much help in our patient. An open surgical procedure was performed in the index case as there was a suspicion of intestinal obstruction as well. Laparoscopy is possible in such patients in this age group and is considered safe in expert hands.⁹ Our patient made quick recovery after surgery and discharged home in a stable condition.

CONCLUSION:

The lack of specific clinical features and equivocal diagnostic tests are the reasons for delay in diagnosis of acute appendicitis in infants. The importance of clinical examination and closed monitoring with early intervention in suspected cases can minimize the morbidity associated with acute appendicitis in this age group.

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