

Adult Jeuno-jejunal Intussusception Caused by Leiomyoma A Case Report

Vorapong Tongdee*

Thirachai Kongiamtrakul**

Abstract: Intussusception is primarily seen among children, most often as idiopathic ileocolic intussusception, and only from 5 to 10¹ % of all intussusception are seen in adults. In contrast to childhood intussusception, and adults underlying, pathologic processes are almost identified.

This is the report on the case of a 26-year-old Thai man who presented to the Emergency Department after one day of severe colicky central abdominal pain and three episodes of watery diarrhea. The definitive diagnosis was jeuno-jejunal intussusception that caused by leiomyoma. It was a rare cause of acute jeuno-jejunal intussusception.

Key word: jejunum, intussusception; leiomyoma.

Introduction

Intussusception typically occurs in infants and young children, most frequently in infants from four to ten months ² of age. It is the most common cause of intestinal obstruction in children and the second leading cause of acute abdominal pain in children after appendicitis ³. In children, classic symptoms include sudden, episodic abdominal pain vomiting, "currant-jelly" stool and a sausage-shaped abdominal mass on examination. ⁴

Adult intussusception is a rare disease without the classic symptoms ⁵. The symptoms are usually suggestive of chronic intermittent and partial intestinal obstruction. The diagnosis may be difficult ⁶. Most cases of adult intussusception have demonstrable underlying causes and surgery will be required. Over all, adults account from only 5 to 10 percents of intussusception cases.

* Pakchong Nana Hospital

** Nakhon Ratchasima Province

Case Report

Patient

On April 5, 1996, a 26-year-old Thai male was admitted to our hospital suffering from one day of history of colicky central abdominal pain with three episodes of watery diarrhea and bilious vomiting. Past history was uneventful.

On physical examination, the patient was afebrile (temperature 36.9 C), blood pressure was 130/80 mmHg, pulse rate was 80/min, respiratory rate was 20/min. He appeared mild dehydrated. The lungs and heart were normal. His abdomen was lightly distended. His liver and spleen were not palpated. A small, soft, mobile, tender mass, shaped like a tennis ball, measuring about 6 X 6 cm, was presented in the left upper quadrant area. Rectal examination revealed no abnormality. The rest of his examination was normal.

Laboratory Data

Laboratory examinations revealed hematocrit 43%, white blood cell count 6,400/mm with PMN 80%, Lymphocyte 17%, Monocyte 3%. Platelets were adequate. Urinalysis was negative. Stool examination showed RBC 10-15 cell/HPF, WBC 20-30 cell/HPF, E.histolytica cyst. Stool culture was no growth, blood urea nitrogen 27 mg/dL; creatinine 1.4 mg/dL; serum amylase 46 IU/dL; total bilirubin 0.7 mg/dL; direct bilirubin 0.1 mg/dL, total protein 6.1 mg/dL; albumin 4.5 gm/L; Aspartate amino transferase 62 IU/dL; Alanine Aminotransferase 16 IU/dL; alkaline phosphatase 31 IU/dL; sodium 133.6 mmol/dL; potassium 5.38 mmol/dL; chloride 94 mmol/dL, CO₂ 19.2 mmol/dL.

Radiological Studies

An x-ray film of the abdomen showed some gaseous distension of the small intestine in the left upper abdomen, but there was no fluid level to suggest acute intestinal obstruction. Chest x-ray films showed unremarkable changes.

Operative Findings

The abdominal operation was performed on the second day after admission. Under general anesthesia, exploratory laparotomy was performed via a midline incision. When the peritoneum was opened, a liter of yellow-reddish peritoneal fluid was seen, but this had no foul smell. A large jejuno-jejunal intussusception, about 30 cm long, was noted with a mass of dimension 6.0 X 5.0 X 4.0 cm acted as the leading point. Manual reduction was rather difficult achieved. After the intussusception had been reduced, the jejunum looked well. The mass was completely removed following by end-to-end anastomosis of the jejunum to the jejunum.

Pathological Findings

Gross examination of the resected specimen showed a brownish mass of dimension 6.0 X 4.5 X 4.0 cm. Cut surface showed an intramural grayish brown mass, 3.8 cm in diameter. Histological examination revealed leiomyoma with acute hemorrhagic infarct.

Postoperative Course

The postoperative course was unsatisfactory. The patient had restless, fever and his abdomen was much distended after 10 hours. He passed a lot of dark stools and looked pale. Symptomatic and supportive treatment were given, but he did not improve. The second operation was performed later on the sixth day. It revealed a liter of foul smell peritoneal fluid. Jejunum, about 90 cm long, showed gray-blackish appearance with many fistulas. That segment was cut following by end-to-end anastomosis of the jejunum. He did not improve and died later. He was admitted for 52 days. The cause of death was *Pseudomonas aeruginosa* sepsis.

Discussion

Adult intussusception is a rare disease and rarely considered in the differential diagnosis of gastrointestinal disease. The presenting symptoms are vague and usually suggestive of chronic intermittent and partial intestinal obstruction. The diagnosis may be mistaken or delayed as this patient. Early diagnosis and treatment are required. Radiological findings assume that the great diagnostic significance in adult intussusception is due to infrequent and non-specific clinical presentation⁷. Regularly, we employed plain abdominal radiograph and barium enema studies or upper gastrointestinal series for diagnosis with variable success rates⁸. The diagnosis has recently been made more accurately by new imaging techniques, including computed tomography and ultrasonography. The typical features of intussusception on ultrasonography are reported to be a "target-like"⁹ lesion, the pseudokidney sign¹⁰, or the double concentric ring sign¹¹. CT scans show a "target"¹² mass of alternating high and low density, the "sausage-shaped" and the "reinforced or bilobed mass" appearance.

Summary

This paper reports our experience with adult jejuno-jejunal intussusception caused by leiomyoma and is the eighth paper since 1966. It is a rare disease. But we had delayed and mistaken in diagnosis, so our patient died. We must have a high index of suspicion and early intervention. It should be considered if the clinician was confronted with clinical features of an acute abdomen, intestinal obstruction, and an abdominal mass.

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